

Annual Report 1999

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1 Introduction

SOM (Systems, Organisation and Management) is the joint research school of the faculties of Management & Organisation, Economics and Spatial Sciences at the University of Groningen. It combines and stimulates disciplinary and interdisciplinary research, meeting international standards. The school also provides the training and research environment for PhD students. SOM was officially recognised by the Royal Netherlands Academy of Sciences in May 1998. Because of changes in the SOM Bureau during 1998 an annual report of that year has not been published.

1.1 Mission

The mission of SOM is to stimulate fundamental and applied research related to the firm in its economic, spatial and demographic environment and to provide a PhD programme with a high international standard. The research area of SOM exceeds the traditional boundaries of business economics and management & organisation as it also explicitly includes the various environments in which firms operate.

to stimulate research related to the firm & to provide a PhD programme

1.2 Fellows and associate fellows

Fellows and associate fellows can, in principle, spend 40% of their time on research. The status of associate fellow is a temporary one: after three years the associate fellow is required to have enough credit points to become a fellow (see the box for the criteria). SOM fellows also have a higher budget for travelling.

The number of fellows and associate fellows has increased remarkably in 1999. The table below shows the number of fellows and associate fellows per faculty.

Faculty	Number of fellows	Number of associate fellows
Management & Organisation	19	12
Economics	38	13
Spatial Sciences	4	2
Policy Sciences (Nijmegen)	6	7

In 1999 every (associate) fellow was informed about his/her number of credit points. This stimulated a discussion about the appropriateness of the criteria. Basically the following suggestions were made:

- grant credit points to (a limited number of) Dutch journals
- grant credit points to supervision of (successfully defended) PhD theses
- grant credit points to a number of scientifically very relevant activities (e.g. the editorship of a journal)
- grant more credit points to outstanding publications.

After an intense debate, SOM's Governing Board decided to adhere to the present rules for at least one more year. In 2000 the appropriateness of the criteria will be evaluated.

Criteria for (associate) fellowship of SOM

To hold a PhD Degree.

To do research that fits into one of SOM's research areas.

To have a minimum number of credit points, measured over a (moving) period of four years. The following rules apply:

- One credit point is granted for a dissertation, a scientific monograph and for a paper in an international and refereed journal;
- For a publication in a refereed book published by a highly reputable international publisher 0.5 credit point is granted;
- For a SOM research report 0.25 credit point is granted;
- In case of n authors, each author is granted $2/(n+1)$ of the points.

Fellows need 4 credit points, associate fellows 2 credit points.

1.3 Postdocs

For various reasons, SOM has followed a policy to increase the number of postdocs. First, until recently there were hardly any postdoc positions for full-time research within the SOM faculties. Over the last couple of years their number has increased somewhat, but there is still a need for additional postdoc positions. Second, by creating more postdoc positions SOM aims to create a pool of researchers who may in the future apply for other research positions, such as KNAW-fellowships or funds from

increasing the number of postdocs

the so-called Vernieuwingsimpuls (Innovation stimulus program). Finally, investing in postdocs may in general be expected to be more productive in terms of output in the short run, than investments in PhD positions for example. This may be relevant as SOM has to apply for KNAW re-recognition and the research of the faculties will be evaluated in 2000 (Faculty of Spatial Sciences) and in 2001 (Faculty of Management & Organisation and Faculty of Economics), respectively. For these reasons, the SOM proposal for the so-called Breedtestrategie (see below) consists of postdoc projects only.

The procedure for approval of proposals is the same as for PhD projects. That is, the scientific committee of SOM has to approve the project after which the Governing Board of SOM decides and prioritises when the number of approved proposals exceeds the number of places available. Approved projects are, in principle, also submitted to NWO.

In 1998 a KNAW-fellowship was granted to M.H. van der Vlerk. He has been appointed at the Department of Econometrics of the Faculty of Economics and his research interests are in the field of stochastic (integer) programming.

In 1999 G. Péli applied for such a position. Unfortunately he ended as the number one on the reserve list. In the meantime, Péli – who had a temporary position at the Faculty of Management & Organisation – has become assistant professor at the Department of International Economics & Business of the Faculty of Economics. His research interests are in the field of organisation, organisation ecology, market partitioning, formal models and logical formalisation.

1.4 Financial affairs

SOM has its own budget for activities like seminars, visitors and workshops, to which all the faculties participating in SOM contribute. The faculties of Management & Organisation and Economics both contribute 45%, and the remaining 10% is financed by the Faculty of Spatial Sciences. Also the personnel costs of the SOM bureau are financed in this way.

Various other research activities, however, are financed through the budgets of the participating faculties. SOM tries to harmonise these policies as much as possible. An important step forward was the decision of the Faculty of Economics to delegate the administration of the remaining research budget of the Faculty (mainly travel funds) to SOM.

own budget for seminars, visitors and workshops

1.5 Participation from Nijmegen University

co-operation Nijmegen Business School further intensified

The co-operation with the Faculty of Policy Sciences (in particular the Nijmegen Business School) of Nijmegen University has been further intensified in 1999. The Faculty of Policy Sciences and SOM aim at joint research projects and more collaboration leading to joint publications. For this purpose it was decided that in 2000 a seminar will take place to investigate joint research possibilities. Several SOM-fellows have already worked together with the colleagues in Nijmegen, so there seems to be enough common ground to further intensify the co-operation.

1.6 Breedtestrategie

proposal for the Breedtestrategie contains eight projects

In 1999, SOM started working on a proposal for the Breedtestrategie. Under this heading the University provides funds to stimulate research schools. The current research proposal aims at:

- 1 Furthering the coherence of SOM by stimulating co-operation of researchers from the participating faculties;
- 2 Further improving the quality and quantity of SOM research.

It contains eight projects, which all deal with firms' ability to adapt to changes in the environment, and brings together well-established researchers having various backgrounds. The following post-doc proposals (with the names of the senior researchers involved) are included:

- The sources of innovation in services: reconciling the macroeconomic and firm-level evidence: B.van Ark/L. Broersma/E. Dietzenbacher/B. Los/R. Vossen
- Partnership management in high technology networks (i.e. joint ventures and co-development): O. Omta/D. Kamann/T. Postma
- Demographic variables in marketing research: conceptual and modeling issues: M. Wedel/F. Willekens
- Multinational enterprises as learning organisations: A. van Witteloostuijn/A. Sorge
- The dynamics of interfirm relationships in a changing world: P. Ghauri/C. Jepma
- Entrepreneurial human and knowledge capital, and organisational change: R. Jorna/A. Van Witteloostuijn
- The customer concept and its impact on market structure: W. Biemans/J. Hoekstra/P. Leeflang/D. Wittink
- The economics and econometrics of sales promotions: P. Kooreman/P. Leeflang/T. Wansbeek

three postdoc positions in advance of the final assignment in 2000

In 1999, the University Board granted SOM three postdoc positions in advance of the final assignment in 2000.

1.7 Network Institutional Economics

The Dutch Network Institutional Economics was founded in 1997 and has been part of SOM since then. Researchers in the field of institutional economics are not only employed at the University of Groningen, but also at other universities in the Netherlands and at public and private enterprises participating in this network.

During 1999, the number of researchers associated with the Dutch Network Institutional Economics has stabilised. At the end of the year the total number of members stood at around 150. With respect to the 'management team' of the Network there have been some changes during 1999. The team started the year with B. Gales, N. Hermes, D. Maccow and T. Postma. Unfortunately, D. Maccow left the team in the summer, due to his heavy duties elsewhere. He was replaced by G. Péli, who was added to the team in October. The Network published four newsletters in February, May, September and November. The Network organised two workshops (see chapter 5) and four seminars.

**around 150
associated
researchers**

**two workshops
four seminars**

2 Organisation

is responsible for the daily management

2.1 Bureau

The SOM bureau is responsible for the daily management of the research school and the PhD school. At the end of 1999 the bureau was composed as follows:

Scientific director: Prof.dr. J. de Haan

Director of graduate studies: Dr. E. Schoorl

Office manager: Mrs. R. Koning

Secretaries:

Mrs. A. Huisman

Mrs. A. Huizenga

The total size of the bureau in terms of full-time equivalents was 3.1.

takes general policy decisions

2.2 Governing Board

The board makes all decisions on the basis of advice from the scientific director and various committees and meets every six weeks. According to the SOM rules, each participating faculty is represented by one member. At the end of 1999 the board was composed as follows:

Faculty of Spatial Sciences: Prof.dr. F. Willekens, chairman

Faculty of Economics: Prof.dr. T. Wansbeek

Faculty of Management and Organisation:

Prof.dr. J. Wijngaard (until September Prof.dr. P. Ghauri)

The scientific director and the director of graduate studies as well as the managing director of the coordinating Faculty, Mrs. N. Schouten (until October Mr. J. Middelberg) are advisory members. Secretary of the board is Mrs. R. Koning.

2.3 Advisory Board

In 1999, SOM's international scientific Advisory Board was renewed and the number of members was increased to fifteen. Its members are:

**gives general
policy advice**

Prof. dr. P. Vanden Abeele, Catholic University Leuven, Belgium
Prof. dr. A.W.A. Boot, University of Amsterdam, The Netherlands
Prof. dr. Ir. R. van Dierdonck, University of Ghent, Belgium
Prof. dr. B. Goodall, University of Reading, United Kingdom
Prof. dr. P. de Grauwe, Catholic University of Leuven, Belgium
Prof. dr. M. T. Hannan, Stanford University, USA
Prof. dr. P. Hooimeijer, University of Utrecht, The Netherlands
Prof. dr. T. Kloek, Erasmus University Rotterdam, The Netherlands
Prof. dr. D. Laidler, University of Western Ontario, Canada
Prof. dr. J.K. Lenstra, Technical University of Eindhoven,
The Netherlands
Prof. dr. R. Lesthaeghe, Free University of Brussels, Belgium
Prof. dr. G. Pyatt, Institute of Social Studies, The Hague,
The Netherlands
Prof. dr. J. van Sinderen, Erasmus University Rotterdam,
The Netherlands
Prof. dr. K.F. Wallis, University of Warwick, United Kingdom

At the end of 1999, Professor Pettigrew withdrew from the Advisory Board.

On November 10, an Advisory Board meeting was held. The most important item on the agenda was SOM's application for the Breedte-strategie.

2.4 Scientific committee

SOM's scientific committee is responsible for approving individual projects (mostly PhD and postdoc projects) and gives advice about research in general. Its members are the scientific director, the coordinators of the various research groups in SOM (see chapter 3) and five other SOM fellows. At the end of 1999 these members were:

**approves research
proposals**

Scientific director: Prof.dr. J. de Haan

Themeleaders:

Prof.dr. R. Jorna (theme A)

Dr. R. Vossen (theme B) (until September: Prof.dr. M. Wedel)

Prof.dr. B. van Ark (theme C)
Prof.dr. F.Willekens (theme D)
Prof.dr. E. Sterken (theme E)
Prof.dr. P. Kooreman (theme F)

Fellows:

Prof.dr. P. Bekker
Dr. W. Biemans
Dr. E. Dietzenbacher
Prof.dr. J. van Dijk
Dr. J. Slomp

Advisory member: Dr. E. Schoorl

Secretary of the committee is Mrs. R. Koning.

2.5 PhD Education Committee

advices about PhD education

The PhD Education Committee is responsible for the PhD education programme. It advises about the proportion of compulsory SOM courses in relation to the courses of the national networks of PhD education, about the contents of the courses and about PhD matters in general. Its members are the scientific director, the director of graduate studies, and one staff member and one PhD candidate from each participating faculty. At the end of 1999 the members were:

Scientific director: Prof.dr. J. de Haan

Director of graduate studies: Dr. E. Schoorl

Fellows:

Prof.dr. J. van Dijk
Dr. E. Molleman
Dr. B. Schoonbeek (until November: Prof.dr. E. Sterken)

PhD candidates

Drs. T. Knaap
Drs. C.-J. Pen
Drs. L. Sjarbaini

2.6 PhD Committee

The role of this committee is to facilitate communications from SOM to the PhD students and vice versa. The committee will act as an independent source of information for PhD students, keeping them up-to-date on decisions that are taken and plans that are under discussion.

This information can be found through a link to the PhD committee on the SOM homepage.

The communication from the PhD population to SOM is also an important part of the committee's task. The director of SOM can ask for the committee's opinion about plans and current matters. Also, the committee can initiate plans for a better use of the advantages of SOM. PhD students can submit plans or opinions to the committee, either by seeing one of the members or through e-mail. For this reason, the composition of the committee is such that there is always a member a few doors away. The members were:

Drs. M. Kornelis

Drs. E. Leertouwer

Drs. S. Rispen

Drs. B. Smid

**facilitates
communications
between SOM
and PhD students**

3 Research

number of themes increased to six

Researchers in SOM participate in one or more research groups (themes). In 1999 the number of themes was increased from five to six. The former theme B 'Markets and interactions between firms' was split up into two new themes: the new theme B 'Innovation and Interaction' and theme F 'Interactions between Consumers and Firms'. A short description of each theme's research areas is provided below. Appendix 1 provides a list of (associate) fellows of SOM and two of their international publications in 1999.

3.1 Theme A: Primary Processes within Firms

Coordinator: **R. Jorna**

Within this theme research is directed towards interactions between different levels of aggregation within an organisation. The emphasis is mainly on various primary process in organisations, but so-called secondary or supporting processes are also taken into account.

The various subgroups that participate in theme A are working on the following research issues:

- Coordination and lay-out organisation and production systems.
- Work organisation and human resource management, including socio-technics.
- Planning and scheduling, including an Operations Research and a Cognitive Science perspective.
- Decision making, ranging from organisational analysis and redesign to mathematical analysis and decision support systems.

Fellows

J. Benders, B. Dankbaar, G. Gaalman, P. Hendriks, R. Jorna, W. Klein Haneveld, M. Mobach, E. Molleman, E. Nijssen, O. Omta, R. Scapens, G. Sierksma, J. Slomp, A. Sorge, M. van der Vlerk, H. van de Water, J. Wijngaard, A. van Witteloostuijn, A. van der Zwaan.

Associate fellows

E. Bax, Y. Benschop, M. ter Bogt, E. de Brock, J. Bruggeman, D. van Donk, J. Doorewaard, H. Gazendam, G. van Helden, L. Karsten, W. Martens, A. Nauta, W. de Nijs, M. van Offenbeek, J. Teelken, J. van der Werf, M. de Witte.

PhD Candidates

S. van As, A. van den Beukel, G. Blaauw, J. Bokhorst, A. Budihardjo Surijah, S. Drijver, F. Grotenhuis, A. Hellenthal, M. Hummel, F. ten Kleij, F. Koster, B. Oosterman, A. van Rheede, S. Rispens, R. Schouteten, J. Singels, L. Sjarbaini, E. Talens, H. Wanders, G. Xiang, Z. Zhang, K. Zoethout

3.2 Theme B: Innovation and Interaction

Coordinator: **R. Vossen**

Topics studied include the economics of innovation and diffusion, innovation management, entrepreneurship, joint product development, strategy formation in innovative firms, international technological cooperation, technology policy, learning in and between firms, knowledge management, buyer-supplier relations, management of alliances, network analysis, computer simulations representing processes of interaction and mutual adjustment, conditions for competition vs. cooperation.

Theoretically, the theme is rooted in economics (transaction cost economics, evolutionary and institutional theory, growth theory), as well as in social exchange theory, theories of learning and adaptation, and sociometric network analysis. The research methodology is theoretical (e.g. models of innovation and diffusion, organisational learning, computer simulations), as well as empirical (including quantitative research on the basis of survey data, and qualitative research oriented to processes in individual cases).

Fellows

B. van Ark, W. Biemans, L. Broersma, P. Buckley, E. Dietzenbacher, P. Ghauri, R. Jorna, P. Leeftang, R. Leenders, I. Maignan, S. Marinova, O. Omta, G. Péli, R. Vossen.

Associate fellows

G. Gemser, D. Kamann, B. Los, Th. Postma, J. Smits, M. Timmer.

PhD candidates

A. Ali Hamid, R. Kok, B. Smid, S. Wahyuni Wibisono.

3.3 Theme C: Coordination and Growth in Economies

Coordinator: **B. van Ark**

This theme incorporates SOM-research on economic growth and related coordination issues. Part of the research programme focuses on the analysis of the determinants of economic growth, including trade, migration, technological change and investment in human, physical and infrastructural capital. There is much emphasis on spatial (both international and regional) and sectoral patterns of growth. Interdependency in terms of comparative analysis and system analysis is the key to many of the projects. The other part of the research concentrates on coordination issues in product-, labour- and capital markets and their impact on growth. It is related to recent research in institutional economics, and to research on static and dynamic efficiency. The link between the two pillars of this theme provides a perspective on the functioning of the environment in which firms operate and how this environment affects the relation between firm behaviour and macroeconomic growth performance of economies. The research is mainly rooted in macroeconomics, international economics and business, regional economics, applied econometrics and economic history. It uses major research tools, such as general equilibrium models, stochastic modelling, structural growth models, input-output analysis, growth accounting techniques and quantitative economic history.

Close links exist with other SOM research, such as research on corporate governance and banks (themes B and E), labour market (theme D) and technology (theme B).

Fellows

B. van Ark, S. Brakman, L. Broersma, L. Delsen, E. Dietzenbacher, R. Fremdling, H. Garretsen, J. de Haan, B. Heijdra, N. Hermes, C. Jepma, T. van de Klundert, S. Kuipers, G. Kuper, R. Lensink, J. Oosterhaven, J.E. Sturm, Z. Zhang.

Associate fellows

P. Elhorst, J. Jacobs, E. de Jong, B. Los, W. Salverda, J. Smits, M. Timmer, A. de Vaal.

PhD candidates

T. Knaap, V. Linderhof, P. van Mulligen, M. Rensman, A. Ruijs, J. Sleifer, B. Smid, B. Volkerink, I. Hakan Yetkiner, A. Zeilstra.

3.4 Theme D: Demographic and Geographic Environment

Coordinator: **F. Willekens**

This research group focusses on the demographic and geographic environment in which firms operate. In modern demography, the population composition is studied in terms of personal attributes, which change during the life course. The modelling of patterns in this life course, as outcomes of underlying causal mechanisms, and resulting in population change, is a major challenge to basic demographic research. Particularly important is the context in which people live (family, community, nation, international setting) and which imposes rules of behaviour. Demography is relevant to insurance, social security and public finance, labour economics, human resources management, and marketing. Thus, it connects to themes B, F, and E. A major advance in applied demography occurred when it was realized that the unit of analysis does not have to be the individual or household, but could be any entity or organisation that has a life of its own; i.e. that originates, ages, and matures while going through various stages, and eventually dies or dissolves. Thus, the life cycle of firms and even regions, comes within the scope of demographic analysis.

The other focal point of this research group is the study of the spatial organisation of economic activities, which constitutes the key objective of economic geography. The location problem is a central issue, both viewed from the side of the firm (investment decisions, location choice processes, objective and subjective location factors), from the side of the region (regional development and policy, regional labour markets, regional images) and from the side of the individual (employment opportunities, migration). The factors of transport, infrastructure and especially labour receive special attention. Government policies regarding these subjects naturally belong to the study field as well. Efforts are made to reach a new methodological focus in the so-called demography-of-firms approach, which will link the research activities more closely to demographic research.

Fellows

J. van Dijk, I. Hutter, T. Immink, L. Nusse, S. Scherbov, F. Willekens.

Associate fellows

P. Groote, P. Pellenbarg.

PhD candidates

M. den Draak, T. Haartsen, G. Hoogstra, R. Jennissen, Z. Liang, S. Mills, S. Muhidin, S. Padmadas, C.-J. Pen, C. Simon, J. Spijker.

3.5 Theme E: Financial Markets and Institutions

Coordinator: **E. Sterken**

This field of research encompasses both financial and monetary economics. The common interest is the analysis of both financial structures and financial products. The nature of the research varies from theoretical to applied (econometric) work.

The group studies financial behaviour of the firm. Both the financial decisions taken by the firm and the behaviour of financial stakeholders in the firm are analysed. From the firm perspective the following non-comprehensive list of questions is addressed. How are real and financial decisions of the firm aligned? What kind of financial instruments should the firm use? How can we model the firm's decision to demand external funds (IPO's)? What is the optimal design of bank-firm relationships? How do capital market imperfections affect firm behaviour? How should the firm signal its stakeholders using accounting data (market-based accounting)? From the financial capital supplier's perspective, issues in corporate governance are studied. What is the role of banks and institutional investors as supplier of funds?

A second field is the analysis of the financial structure. The nature of the research here is both micro- and macroeconomic. Microeconomic issues are the following. How can financial intermediation be explained? What determines the private bank behaviour? How competitive is the banking sector? The macroeconomic studies of financial structure start from the theory of market imperfections. How should we design monetary policy (central bank independence)? What are the macroeconomic consequences of the design of the financial structure? How is monetary policy transmitted? Is the financial system stable? What are the long-run determinants of interest rates? What explains merger and acquisition behaviour?

A third topic is the study of financial products. The group studies issues in valuation and design of products. Valuation is studied from the perspective of mathematical finance. Products are priced in full equilibrium assuming perfect information using the no-arbitrage assumption. How should we price derivatives, model the term structure and model instruments that hedge financial risk? How can we manage assets and liabilities (ALM)? Both theoretical work and econometric studies are performed. For instance: how can we use the linear regression model to price derivatives? The design of financial products is analysed using contract theory.

Fellows

S. Benninga, J. Bouma, T. Dijkstra, H. van Ees, H. Garretsen, J. de Haan, G. Jiang, R. Lensink, H. Nieuwenhuis, B. Schoonbeek, E. Sterken, B. Scholtens.

Associate fellows

R. van der Meer.

PhD candidates

H. Bo, L. Chen, M. Helmantel, E. Leertouwer, P. Maier, R. van der Molen, E. Nijse, C. Oosterhof, L. Toolsema-Veldman, A. Hua Wang, Y. Yao.

3.6 Theme F: Interactions between Consumers and Firms

Coordinator: **P. Kooreman**

While the firm is the central entity in SOM's research themes, it is of crucial importance in any analysis related to firms to understand the incentives and the behaviour of all individual actors involved. In the end, it is the behaviour of these individuals and their mutual interactions that define the more abstract concept of 'firm behaviour'. The actors involved in firm behaviour include owners, shareholders, managers, employees, and consumers. The interaction between consumer behaviour and the behaviour of firms is the central topic in this theme.

The current research in this area includes:

- Eliciting consumer preferences, in particular by means of (conjoint) choice experiments.
- Bounded consumer rationality (labelling effects of different income components, time inconsistent behaviour) and social interactions (peer group and reference group effects)
- Optimal firm response to consumers and rivals (temporary price cuts, degree and channels of advertising)
- Market structure and concentration (banking, internet access, tobacco, cars)

Fellows

P. Bekker, J. Hoekstra, E. Huizingh, P. Kooreman, P. Leeflang, B. Schoonbeek, T. Wansbeek, M. Wedel, D. Wittink.

Associate fellows

M. Haan, E. Meijer, P. Otter.

PhD candidates

B. Boon, A. van Dijk, P. Ebbes, C. Horvath, D. Knaap, M. Kornelis, E. Leertouwer, Z. Sandor, A. Soetevent, K. Vlagsma-Brangule, J. Woltman Elpers, E. Zengerink.

4 The Graduate School and PhD Education

4.1 SOM's PhD programme

**abolishment of own
methodology course**

**300 hrs of SOM
courses**

**remaining 900 hrs
tailor-made package**

In 1999 a full-blown PhD programme was taught in the reorganised curriculum. The most important change was the abolishment of SOM's own methodology course. As a consequence of the evaluations of the earlier courses the decision was made to let the PhD candidates take these courses in their respective PhD education networks. The 300 hrs of SOM courses – in a total of 1200 hrs – are now filled by the SOM Introductory Course and interdisciplinary Essay Competition, the English publishing and presentation courses and by participation in the annual PhD conference. For the remaining 900 hrs a tailor-made package is composed from the supply of the national and European networks by the candidate and his/her supervisor, in consultation with the director of graduate studies. Insofar as the PhD education budget permits, it is also possible to choose special courses outside the network programmes, for example with a view to certain professional perspectives after obtaining the PhD.

In 1999 for the first time a considerable amount of money was spent from the so-called CBR Internationalisation programme, funded from the central university budget. SOM strongly encourages its PhD candidates to spend one or more months abroad at a foreign university or research institute. To that end the existing relations and networks of the SOM fellows are intensified.

4.2 Introductory Course and Essay Competition

**large class for
1999 course**

For various reasons the Introductory Course had not been taught in 1998, so a large class attended the one of 1999. Previous evaluations had not yet resulted in an ideal format, and accordingly the theme leaders were given a free hand to fill an afternoon with presentations of their own, or by their fellows and PhD candidates. In the 1999 evaluation the theme B (M. Wedel) and D (F.J. Willekens) afternoons were liked best. Consequently their format was prescribed for a more compact course in 2000.

Twelve essays were submitted for the interdisciplinary Essay Competition, in which pairs of PhD candidates from different themes write an essay on a practical or methodological problem bridging or embracing their respective themes. SOM is unique with this item in its

PhD programme. The standard manner of doing scientific research still follows the traditional pattern of monodisciplinarity, and only after obtaining their PhD scholars may undertake interdisciplinary ventures. In practice however, most problems are of an interdisciplinary character, so SOM claims that its PhD candidates are better prepared for research as well as for policy or business practice and advice by this competition. From the 1999 jury report we quote the following remarks on the two ex aequo prize winning essays.

two prize winning essays

Csilla Horv ath & Hakan Yetkiner, *Back to the Future: an inquiry into the implications of virtual shopping*.

This essay, or rather paper, investigates the economic implications of Internet shopping in a general equilibrium framework. The jury believes that their claim of being the first theoretical study in the field is a bit exaggerated. But otherwise the self-confident, even enthusiastic manner in which the authors state their findings makes for good reading. The essay further meets the competition requirements in nicely bridging SOM themes B and C.

Tialda Haartsen & Kristine Vlagsma-Brangule, *Value formation and transmission within several social contexts*.

This is clearly a highly relevant subject to the two dissertation subjects of the authors (in theme D and B, respectively), although to the uninformed reader it may be less clear what is the interdisciplinary value added. The problem of value formation and transmission, in the family and in society, is an intriguing one. The authors study the available literature and come forward with a logit model of an individual's unobservable value system. Being disappointed with their first results, the authors announce an expansion of their model in order to 'perform segmentation on the basis of value system similarity [and] to find significant influences of societal characteristics on the process of value formation.'

Like many of their colleagues in the earlier Essay Competition, a number of authors successfully submitted revised versions of their papers to international conferences and journals. Six revised 1999 essays have been printed in a SOM booklet which can be ordered from the SOM office.

essays have been printed in booklet

4.3 SOM PhD Conference

Strictly speaking, no PhD conference was held in 1999 as the date was switched from December (1998) to January (2000). In 1998 the conference of 40 presentations in four parallel sessions was held for the last time in the rather gloomy surroundings of a community centre near SOM's university building. This did not prevent the PhD candidates and

40 presentations in four parallel sessions

their discussants from engaging in lively discussions. For the first time a number of foreign SOM guests were present, who thoroughly enjoyed the opportunity to get a condensed view of what's going on in SOM PhD research. As a result of the conference evaluation it was decided to organise the next conference in more stylish surroundings, with better catering. The success of the January 2000 conference will be described in the next annual report.

4.4 PhD candidates

The 1999 stock-taking of PhD progress showed that – contrary to earlier suspicions – there is life in the pipeline of PhD candidates who terminated their contract after 4 years without completing a first version of their manuscript. In 2000 and 2001 a substantial number of these candidates are expected to complete and defend their dissertations. By closer monitoring of individual projects SOM aims at reducing the number of early drop-outs and of long-delayed PhD projects.

In the present booming labour market (especially booming for graduates of the SOM faculties) it is increasingly difficult to recruit promising PhD candidates. This situation is partly but not completely compensated by a growing percentage of foreign PhD candidates (now about one in four). Their influx is unevenly distributed in the SOM themes, with Demography as a front runner. In 1999 a third Ubbo Emmius grant holder joined the ranks of the PhD candidates.

**growing percentage
of foreign
PhD candidates**

4.5 SOM PhD Theses

Faculty of Economics

Berg, M.M. van den, Location and international trade. In theory and practice, Promotors: C.J. Jepma, J. Oosterhaven

Haaijer, M.E. , Modeling conjoint choice experiments with the probit model, Promotor: M. Wedel

Heerde, H.J. van, Models for sales promotion effects based on store-level scanner data, Promotors: P.S.H. Leeflang, D.R. Wittink.

Kakes, J. , Monetary transmission: the credit view, Promotors: H. van Ees, S.K. Kuipers.

Linden, J. van der, Interdependence and specialization in the European Union: intercountry input-output analysis and economic integration, Promotors: J. Oosterhaven, H.W.A. Dietzenbacher.

Mulder, J.H. , The economic performance of the service. Sector in Brazil, Mexico and the USA, Promotor: A. Maddison.

Wieringa, J.E. , Statistical process control for serially correlated data, Promotor: A.G.M. Steerneman.

Faculty of Management & Organisation

Boersma, M.F. , Developing trust in international joint ventures, Promotors: P.N. Ghauri, W. van Rossum.

Homburg, V. , The political economy of information management. A theoretical and empirical analysis of decision making regarding inter-organizational information systems, Promotors: J.L. Simons, H.W.M. Gazendam.

Jong, G. de, Causal loops in long-term supply relationships: theory and evidence from the United States, Japan and Europe, Promotor: B. Nooteboom.

Mobach, M.P. , Thought and action. Change to the customer in community pharmacy practice, Promotors: J.J. van der Werf, T.F.J. Tromp.

Muller, P.C. , Team-based conceptualization of new products. Creating shared realities using information technological supports, Promotors: J.M.L. van Engelen, P. Terlouw.

Reekum, A.H. van, Intellectual property and pharmaceutical innovation. A model for managing the creation of knowledge under proprietary conditions, Promotors: E.M. Kneppers-Heijnert, J.J. van der Werf.

Faculty of Spatial Sciences

Bruijn, B.J. de, Foundations of demographic theory. Choice, process context, Promotor: F. Willekens.

Dorenbos, R.J. , Labour market adjustments in Hungary and Poland, Promotors: P. Pellenbarg, J. van Dijk.

Lautenbach, H., Demographic survey research in Irian Jaya. Population dynamics in the Teminabuan area of the Bird's Head Peninsula of Irian Jaya, Promotor: F. Willekens.

Meester, W.J., Subjectieve waardering van vestigingsplaatsen door ondernemers, Promotor: P. Pellenbarg.

Riemers, C. , Functionele en ruimtelijke dynamiek in de groothandel, Promotor: P. Pellenbarg.

Spaan, E., Labour circulation and socioeconomic transformation: the case of East Java, Indonesia, Promotores: F. Willekens, G. Hugo.

5 Other Activities

5.1 Information dissemination

SOM has its own newsletter, which was published nine times in 1999. It contains practical information about seminars and other activities, conferences, vacancies and publications. Besides that there are several human interest items, for instance the diary of one of SOM's researchers, a contribution by one of SOM's alumni and travel reports. The newsletter has an edition of over 700 and is sent to all personnel of the SOM faculties, the alumni, the advisory board and other research schools in Groningen and the Netherlands.

**newsletter
published nine times**

Much effort was spent on upgrading the SOM homepage which has been completely renewed. Also a database has been designed, containing all relevant information about the researchers and PhD candidates and it facilitates the presentation of information on the homepage. SOM can be visited on the web at: som.rug.nl

upgraded homepage

5.2 Research Reports

The SOM research report series serves two objectives. First, it provides researchers the possibility to disseminate the first results of their research. Second, it offers less experienced researchers an outlet. As submitted manuscripts are commented upon by SOM fellows before the scientific director decides upon publication, SOM also strives to increase the quality of the papers.

The number of papers submitted to the series was almost doubled in 1999. The 71 reports are listed in Appendix 3. They can be downloaded via the SOM homepage at som.rug.nl.

**number of papers
almost doubled**

5.3 Seminars, workshops and conferences

One of the most successful seminar series was that of theme C, not only in 1999 but also over the last couple of years. In organising seminars, the other themes made considerable progress as becomes apparent in Appendix 4, which contains a list of almost all external seminar speakers. In 1999 SOM organised (or participated in the organisation of) the following six workshops.

**successful seminar
series**

six workshops

papers in MAB

Workshop on Corporate Governance

In January the Network Institutional Economics organised a workshop on Corporate Governance. The aim of the workshop was to present an overview of empirical research on corporate governance in the Netherlands. The papers dealt with issues like the specific role of the typical Dutch structural regime, the influence of concentration/disclosure of shares and voting rights, the extent and determinants of short term orientation of managers, and the role of administrative offices and bank control in corporate governance. About 60 persons from various universities, ministries, banks, and other institutions participated in this workshop. A selected number of papers presented at this workshop were published in the Dutch academic journal *Maandblad voor Accountancy en Bedrijfseconomie* (in October). The workshop also intended to establish a network of Dutch researchers in this specific field, aiming at increased co-operative research.

booklet on Forecasting

Workshop in honour of Ken Wallis

On 18 June Prof. Kenneth F. Wallis (University of Warwick, UK) received an honorary doctorate from the University of Groningen. To celebrate this event, SOM organised a workshop on Forecasting on 9 November. Ken Wallis gave a presentation about Density Forecasts of Inflation. Further contributions were from Prof. Martin Fase (Forecasting at the Central Bank: Still à la Mode?) of the Nederlandsche Bank and Prof. Henk Don (Forecasting in Macroeconomics: A Practitioner's View) of the Netherlands Bureau for Economic Policy Analysis (CPB). SOM has published a booklet containing these contributions.

Workshop on Development Aid

On 6 October, an international workshop entitled 'Changing the Conditions for Development Aid: A New Paradigm?' was held in Groningen. This workshop was organised by the Centre for Development Studies of the University of Groningen, in co-operation with SOM. The aim of the workshop was to contribute to the ongoing discussion about the future of development aid as it has been set out in a recently published World Bank (1998) report 'Assessing Aid: What Works, What Doesn't, and Why'. The main message of this report is that development aid helps, but only when there is a good policy environment in the recipient countries. The conclusions of the report were used by the Dutch government when it reformed its development aid policy recently. The report has led to heated debates, both among academics and policy makers, about development aid and aid policies. At the workshop papers were presented that provided a critical assessment of the view of the World Bank. The programme contained a mix of both academic and policy relevant papers. One of the speakers was David Dollar (World Bank), one of the leading authors of the 'Assessing Aid' report.

Other speakers were Howard White (Institute of Development Studies, University of Sussex), Martin Doornbos (Institute of Social Studies, The Hague), Lau Schulp (University of Nijmegen), Rolph van der Hoeven (International Labour Organisation, Geneva), Bertil Oden (Swedish Ministry of Development Cooperation), Conny Heemskerck (NOVIB) and Johan Boer (Dutch Ministry of Development Cooperation). Some 50 people attended the workshop, coming from both academic and policy making circles. The organisers of the workshop aim to publish the proceedings of the workshop as a special issue in the *Journal of Development Studies*.

**proceedings in
Journal of
Development
Studies**

Workshop on Organisational Ecology

In November, the Network Institutional Economics organised a workshop on Organisational Ecology, in co-operation with the Rotterdam School of Management. The subtitle of this workshop was 'Selection and/or adaptation.' The workshop brought together researchers from various fields to discuss recent trends in the theoretical and empirical research on organisational ecology. Among the participants were the founding fathers of this area of research: Michael Hannan (Stanford University) and Glenn Carroll (University of California at Berkeley). Some 40 people attended this workshop, which was held in Rotterdam.

Workshop on Productivity and Efficiency Analysis

Professor Prasada Rao (University of New England, Armidale, Australia) concluded his three-month visit to SOM and the Groningen Growth and Development Centre (GGDC) by giving a four-day workshop on the analysis of productivity and efficiency from November 15-18. The workshop was attended by nine researchers affiliated with SOM faculties (actually, all three faculties were represented). The workshop also attracted researchers from elsewhere, including several PhD students, who could enter the workshop as a course for their NAKE education program.

Professor Rao structured his workshop around the three topics which are covered in a textbook he recently wrote with two of his research group members. These topics are index number theory, data envelopment analysis and stochastic frontier analysis. Each topic was introduced at a basic level and subsequently pushed to state-of-the-art theory. Empirical applications were also discussed and the participants were offered opportunities to get familiar with the (free) software packages written by one of Rao's close collaborators.

On the final morning of the workshop, some of the participants presented their research. This session showed that a broad range of topics can be tackled by the three above-mentioned methods. The presentations included subjects like the analysis of wage rates under various labor mobility regimes, the measurement of the stringency of environmental

regulations, the analysis of the efficiency of audit services production by units in an accounting firm, index number analysis in the presence of several qualities of a commodity and explanations of interregional productivity differences in the Netherlands.

Workshop on the Web as an Economic Phenomenon

On December 21, SOM organised a workshop focusing on the macroeconomic effects of the Internet. In macroeconomics, it is useful to look at the Web as a substantial reduction in transport costs for a large number of goods and services, opening up new markets and trade possibilities. Judging by the hype that has surrounded the Web in the last few years, one would think that its effects are profound and that the economy as we know it soon will come to its end. During the workshop, several macroeconomists assessed the situation and tried to predict future developments.

Danny Quah (London School of Economics) thinks that when distance becomes less important, the level of economic activity in a particular location will depend on the time zone it is in. One of the possibilities is that clusters of activity will form around the globe. Huub Meijers (MERIT, University of Maastricht) reviewed how exactly the Net contributes to low inflation, as New Economists have us think. His conclusion was that it is indeed quite possible that a decrease in inflation and a more stable economy are about. Wilfred Dolfsma (Universität Bonn) challenged many of the ideas of the other speakers, stressing that trust is required for transactions. Once it becomes hard to deal through the Net, most of the previous results fall apart. Finally, Csilla Horváth and Hakan Yetkiner of SOM presented their prize-winning essay about the effects of Internet-shopping. They predict that, because of the time-saving effect of online-ordering, welfare will increase.

Appendix 1 Fellows and Associate Fellows and their Publications

This appendix provides a list of fellows and associate fellows per theme and two of their international publications in 1999.

Theme A

Fellows

Benders, J. (Nijmegen Business School)

Benders, J., Hootegeem, G. van, Teams and their Context; Moving the Team Discussion Beyond Existing Dichotomies, *Journal of Management Studies*, 36, nr. 5, 609-628.

Benders, J., Tricks and Trucks; A Case Study of Organization Concepts at Work, *International Journal of Human Resource Management*, 10, nr. 4, 624-637.

Dankbaar, B. (Nijmegen Business School)

Dankbaar, B., Training issues for the European automotive industry, *Industrial And Commercial Training*, *Monthly Journal On Training For Industry, Business And Commerce Including Further Education*. 31, nr. 4-5, 174-181.

Gaalman, G. (Faculty of Management and Organisation)

Dam, P. van, Gaalman, G., Sierksma, G., Production scheduling across multi-machine packaging lines for the pre-scheduling level, *International Journal of Production Research*, 37, nr. 16, pp. 3619-3641.

Gaalman, G., Slomp, J., Suresh, N., Towards an integration of process planning and production planning and control for flexible manufacturing systems, *The International Journal of Flexible Manufacturing Systems*, 11, nr. 1, pp. 5-17.

Hendriks, P. (Nijmegen Business School)

Hendriks, P., Do smarter systems make for smarter organizations?, *Decision Support Systems*, 27, nr. 1/2, 199-213.

Hendriks, P., Why share knowledge? The influence of ICT on the motivation for knowledge sharing, *Knowledge and Process Management*, 6, nr. 2, 91-100.

Jorna, R. (Faculty of Management and Organisation)

Wezel, W. van, Jorna, R., The SEC-system: reuse support for scheduling system development, *Decision Support Systems*, 26, nr. 1, pp. 67-87.

Heusden, B. van, Jorna, R., Organizational semiotics or: (how) do organizations know?, *The Semiotic Review of Books*, 10, 1, pp. 2-5.

Klein Haneveld, W. (Faculty of Economics)

Evstigneev, I.V. , Klein Haneveld, W., Mirman, L.J., Robust insurance mechanisms and the shadow prices of information constraints, *Journal of Applied Mathematics and Decision Sciences*, 3, nr. 1, pp. 85-128.

Klein Haneveld, W., Vlerk, M. van der, Stochastic integer programming: general models and algorithms, *Annals of Operations Research*, 85, pp. 39-57.

Mobach, M. (Faculty of Management and Organisation)

Mobach, M., Werf, J. van der, Tromp, T.F.J, Utopia unravelled with soft systems methodology – towards a futuristic pharmacy at the community pharmacists' section, *International Pharmacy Journal*, 13, nr. 3, pp. 71-73.

Mobach, M., Werf, J. van der, Tromp, T.F.J, APOM-project: managing organizational change to the customer, *Pharmacy World & Science*, 21, nr. 5, pp. 201-209.

Molleman, E. (Faculty of Management and Organisation)

Balkema, A., E. Molleman, Barriers in the development of self-organizing teams, *The Journal of Managerial Psychology*, 14, pp. 134-149.

Molleman, E., Slomp, J., Functional flexibility and team performance, *International Journal of Production Research*, 37, nr. 8, pp. 1837-1858.

Nijssen, E. (Nijmegen Business School)

Langerak, F., Peelen, E., Nijssen, E. A Laddering Approach tot the Use of Methods and Techniques to Reduce the Cycle Time of New-to-the-Firm Products, *Journal of Product Innovation Management*, 16, nr. 2, 173-182.

Nijssen, E., More on the Success of Line Extensions, *European Journal of Marketing*, 33, nr. 5/6, 450-469.

Omta, O. (Faculty of Management and Organisation)

Omta, O., Rossum, W. van, The management of social capital in R&D collaborations, *Corporate Social Capital and Liability*, pp. 356-376.

Sierksma, G. (Faculty of Economics)

Sierksma, G., Limiting polytopes and periodic Markov chains, *Linear and Multilinear Algebra*, 46, pp. 281-298.

Sierksma, G., Sierksma, W., The great leap to infinitely small. Johann Bernouilli: mathematician and philosopher, *Annals of Science*, 56, pp. 433-449.

Slomp, J. (Faculty of Management and Organisation)

Slomp, J., Suresh, N., Formation of teams in a multi-shift situation, In: Ashayeri, J., Sullivan, W.G., Ahmad, M.M. (eds.), *Flexible Automation*

and Intelligent Manufacturing, Begell House Inc., pp. 525-538.

Molleman, E., Slomp, J., Functional flexibility and team performance, *International Journal of Production Research*, 37, nr. 8, pp. 1837-1858.

Sorge, A. (Faculty of Management and Organisation)

Sorge, A., Maurice, M., Societal analysis in comparative research. Interdependencies between actors, organizations and socio-economic contexts, Aldine de Gruyter, New York.

Sorge, A., La construction sociale de l'innovation et des innovateurs en Allemagne et en Grande-Bretagne, in: Lanciano, C., Maurice, M., Silvestre, J.-J., Nohara, H. (eds.), *Les acteurs de l'innovation et l'entreprise*, L'Harmattan, Paris, pp. 125-144.

Vlerk, M. van der (Faculty of Economics)

Klein Haneveld, W., Vlerk, M. van der, Stochastic integer programming: general models and algorithms, *Annals of Operations Research*, 85, pp. 39-57.

Zwaan, A. van der (Faculty of Management and Organisation)

Zwaan, A. van der, Organising work processes: engineering work and managing people, Van Gorcum, Assen.

Associate fellows

Bogt, M.J. ter (Faculty of Economics)

Bogt, H. ter, Financial and economic management in autonomized Dutch public organisations, *Financial Accountability and Management*, 7, nr. 3-4, pp. 329-351.

Doorewaard, J. (Nijmegen Business School)

Doorewaard, J. & Bijsterveld, M. van, Making Ideas Work: Obstacles for Successful Translation of the Integrated Approach of IT Management.

Failure & Lessons Learned in Information Technology Management, 3, nr. 2, 45-57.

Nijs, W. de, Poutsma, F., Doorewaard, J., Promotion of Employee Ownership and Profit Sharing in Europe, Economic and Industrial Democracy, 20, nr. 2, 171-197.

Gazendam, H. (Faculty of Management and Organisation)

Gazendam, H., Information system metaphors, Journal of Management and Economics, 3, 2, pp. 1-20.

Karsten, L. (Faculty of Management and Organisation)

Karsten, L., Innovation and employees participation, New Zealand Journal of Industrial Relations, pp. 91-95.

Martens, W. (Nijmegen Business School)

Martens, W., Die eine Struktur ist die andere nicht. Über die Strukturen unterschiedlicher Systeme. In Greshoff, R., Kneer, G. (eds.), Struktur und Ereignis, Opladen/Wiesbaden: Westdeutscher Verlag, pp. 263-278.

Martens, W., Die kulturelle und soziale Ordnung des Handelns. Eine Analyse der Beiträge Parsons' und Luhmanns, In Greshoff, R. & Kneer, G. (eds.), Struktur und Ereignis, Opladen/Wiesbaden: Westdeutscher Verlag, pp. 71-117.

Nijs, W. de (Nijmegen Business School)

Nijs, W. de, Poutsma, F., Doorewaard, J., Promotion of employee ownership and profit sharing in Europe, Economic and Industrial Democracy, 20, 2, pp. 171-197.

Poutsma, F., Nijs, W. de, Financial participation in the 1990's; dissemination and challenges, Economic and Industrial Democracy, 20, 2, pp. 163-171.

Teelken, J. (Nijmegen Business School)

Teelken, J., Market Mechanisms in Education: School choice in the Netherlands, England and Scotland in a comparative perspective, Comparative Education, 35, nr. 3, 283-302.

Werf, J. van der (Faculty of Management and Organisation)

Mobach, M., Werf, J. van der, Tromp, T.F.J., Utopia unravelled with soft systems methodology – towards a futuristic pharmacy at the community pharmacists' section, International Pharmacy Journal, 13, nr. 3, pp. 71-73.

Mobach, M., Werf, J. van der, Tromp, T.F.J., APOM-project: managing organizational change to the customer, Pharmacy World & Science, 21, nr. 5, pp. 201-209.

Theme B

Fellows

Buckley, P. (Faculty of Management and Organisation)

Buckley, P., Ghauri, P. (eds.), The challenge for multinational enterprises: managing increasing inter-dependence, Elsevier Science, Oxford.

Buckley, P., Glaister, K., Performance relationships in UK international alliances, Management International Review, 39, 2, pp. 123-147.

Ghauri, P. (Faculty of Management and Organisation)

Cateora, P., Ghauri, P., International marketing: European edition, McGraw-Hill, London.

Ghauri, P. (ed.), Advances in international marketing: from mass marketing to relationships and networks, Pergamon/Elsevier Science, Oxford.

Leenders, R.. (Faculty of Management and Organisation)

Kratzer, J., Engelen, J. van, Leenders, R., Structuring the communication infrastructure of innovations teams for succes, *Journal of Product Innovation Management*, nr. 9, pp. 43-56.

Leenders, R., Gabbay, S. (eds.), *Corporate Social Capital and Liability*, Kluwer Academic Publishers, Dordrecht/Boston/London.

Maignan, I. (Faculty of Management and Organisation)

Maignan, I., Ferrell, O., Hult, G., Corporate citizenship: cultural antecedents and business benefits, *Journal of the Academy of Marketing Science*, 27, nr. 4, pp. 455-469.

Maignan, I., La citoyenneté d'entreprise en tant qu'outil de gestion: observations en France et aux Etats-Unis, *Entreprise Ethique*, 11, pp. 57-67.

Marinova, S. (Faculty of Management and Organisation)

Marinov, M., Marinova, S., Foreign direct investment motives and marketing strategies in Central and Eastern Europe (Issue 1), *Journal of East West Business*.

Marinov, M., Cox, A., Marinova, S., Efficiency benefits from privatization in Eastern Europe, *Russian & East European Finance and Trade*.

Péli, G. (Faculty of Economics)

Péli, G., Nooteboom, B., Market positioning and the geometry of the resource space, *American Journal of Sociology*, 104, nr. 4, pp. 1132-1153.

Vossen, R. (Faculty of Management and Organisation)

Vossen, R., Market power, industrial concentration and innovative activity, *Review of Industrial Organization*, 15, nr. 4, pp. 367-378.

Associate fellows

Gemser, G. (Faculty of Management and Organisation)

Gemser, G., Wijnberg, N., Appropriability of design innovations: a case analysis of the design furniture in Italy and the Netherlands, *The Design Journal*, 2, nr. 1, pp. 39-57.

Kamann, D. (Faculty of Management and Organisation & Faculty of Economics)

Kamann, D., Karasek, E., The Dutch railway system: what is wrong with it and why infrastructural networks from the systems perspective, in: Reggiani, A., Fabbri, D. (eds.), *Network Developments in Economic Spatial Systems: New Perspectives*, Ashgate, Aldershot, pp. 171-192.

Postma, Th. (Faculty of Economics)

Postma, T., Oenema, D., Terpstra, S., Bouma, J., Kuipers-Upmeyer, H., Staal, M., Middel, L., Cost analysis of the treatment of severe spinal spasticity with a continuous intrathecal baclofen infusion system, *Pharmacoconomics*, 15, nr. 4, pp. 395-404.

Postma, T., Kok, R., Organizational diagnosis in practice: a cross-classification analysis using the DEL-technique, *European Management Journal*, 17, nr. 6, pp. 584-597.

Theme C

Fellows

Ark, B. van (Faculty of Economics)

Ark, B. van, McGuckin, R., International comparisons of labor productivity and per capita income, *Monthly Labor Review*, 21, nr. 7, pp. 33-41.

Ark, B. van, Monnikhof, E.J., Mulder, N., Productivity in services: an international compar-

ative perspective, *Canadian Journal of Economics*, 32, nr. 2, pp. 471-499.

Brakman, S. (Faculty of Economics)

Brakman, S., Garretsen, H., Marrewijk, C. van, Berg, M.M. van den, The return of Zipf: towards a further understanding of the Rank-Size Rule, *Journal of Regional Science*, 39, pp. 183-213.

Broersma, L. (Faculty of Economics)

Broersma, L., Ours, J.C. van, Job searcher, job matches and the elasticity of matching, *Labour Economics*, 6, pp. 77-93.

Delsen, L. (Nijmegen Business School)

Delsen, L., Changing work relations in the European Union, In: I.U. Zeytinogly (eds.), *Changing Work Relationships in Industrialized Economies*, John Benjamins Publishing Company, Amsterdam / Philadelphia, pp. 99-114.

Delsen, L., Jacobs, A., The management of redundancies in Europe: The case of the Netherlands, *Labour*, 13, nr. 1, pp. 123-182.

Dietzenbacher, E. (Faculty of Economics)

Dietzenbacher, E., Wagener, H.J., Prices in the two Germanies, *Journal of Comparative Economics*, 27, nr. 1, pp. 131-149.

Dietzenbacher, E., Hoen, A.R., Double deflation and aggregation, *Environment and Planning A*, 31, nr. 9, pp. 1695-1704.

Fremdling, R. (Faculty of Economics)

Fremdling, R., The Prussian and Dutch railway regulations in the 19th Century, In: Andersson-Skog, L., Krantz, O. (eds.), *Institutions in the Transport and Communications Industries*, Science History Publications, Canton, Mass., pp. 61-92.

Fremdling, R., Discussions prussiennes et hollandaises, solutions pour la réglementation des chemins de fer et nationalisation au XIXe siècle,

Revue d'Histoire des Chemins de Fer, nr. 16/17, pp. 230-264.

Garretsen, H. (Nijmegen Business School)

Brakman, S., Garretsen, H., Marrewijk, C. van, Berg, M.M. van den, The return of Zipf: towards a further understanding of the Rank-Size Rule, *Journal of Regional Science*, 39, pp. 183-213.

Ees, H. van, Garretsen, H., Sterken, E., Some evidence on the relevance of bank behaviour for the lending channel in the Netherlands, *De Economist*, 147, 1, 19-37.

Hermes, N. (Faculty of Management and Organisation)

Hermes, N., Lensink, R., Murinde, V., The magnitude and determinants of capital: determinants of capital flight in Eastern Europe, In: Millineux, A., Green, C. (eds.), *Economic Performance and Financial Sector Reform in Central and Eastern Europe: Capital Flows, Bank and Enterprise Restructuring*, Edward Elgar, London, pp. 243-255.

Jepma, C. (Faculty of Economics)

Jepma, C., Foreign aid and global environmental policies, In: Gupta, K.L. (eds.), *Foreign Aid New Perspectives*, Kluwer Academic Publishers, Dordrecht/Boston/London, pp. 51-65.

Jepma, C., Gaast, W.P. van der (eds.), *On the compatibility of flexible instruments*, Kluwer Academic Publishers, Dordrecht/Boston/London.

Kuipers, S. (Faculty of Economics)

Kuipers, S., Kuper, G., Coordination, technological progress and economic growth, In: Fase, M.M.G. (eds.), *Economics, Welfare Policy and the History of Economic Thought: Essays in Honour of Arnold Heertje*, Edward Elgar, London, pp. 149-168.

Kuper, G. (Faculty of Economics)

Sturm, J.E., Haan, J. de, Kuper, G., Modelling government investment and economic growth: a review and some new evidence, In: Shibata, H., Ihuri, T. (eds.), *The welfare state, public investment, and growth*, Springer Verlag, Berlin-New York, pp. 61-83.

Bors, L., Jacobs, J., Kuper, G., Kvetan, V., The composite leading indicator of the Slovak Republic Business cycle: construction and forecast, *Journal of Economics*, 47, nr. 1, pp. 3-19.

Lensink, R.. (Faculty of Economics)

Lensink, R., Financial reforms in Poland: an analysis with a computable general equilibrium model, In: Millineux, A., Green, C. (eds.), *Economic Performance and Financial Sector Reform in Central and Eastern Europe: Capital Flows, Bank and Enterprise Restructuring*, Edward Elgar, London, pp. 164-182.

Lensink, R., Bo, H., Sterken, E., Does uncertainty affect economic growth? An empirical analysis, *Weltwirtschaftliches Archiv*, 135, pp. 379-396.

Oosterhaven, J. (Faculty of Economics)

Elhorst, P., Oosterhaven, J., Sijtsma, F., Stelder, D., Welfare effects of spatial deconcentration: a scenario for the Netherlands, *Tijdschrift voor Economische en Sociale Geografie*, 90, pp. 17-31.

Eding, G., Oosterhaven, J., Vet, B. de, Nijmeijer, H., Constructing regional supply and use tables: Dutch experiences, in: Hewings, G.J.D., Sonis, M., Madden, M., Kimura, Y. (eds.), *Understanding and interpreting economic structure*, Springer Verlag, Berlin/New York, pp. 237-263.

Sturm, J.E. (Faculty of Economics)

Sturm, J.E., Jacobs, J., Groote, P., Output effects of infrastructure investment in the Netherlands: 1853-1913, *Journal of Macroeconomics*, 21, nr. 2, pp. 355-380.

Knot, K.H.W., Sturm, J.E., Virtual and composite fundamentals in the ERM, *Scandinavian Journal of Economics*, 101, nr. 2, pp. 277-296.

Zhang, Z. (Faculty of Economics)

Zhang, Z., Should the rules of allocating emissions permits be harmonised?, *Ecological Economics*, nr. 1, pp. 11-18.

Zhang, Z., International greenhouse gas emissions trading, who should be held liable for non-compliance by sellers?, *Ecological Economics*, nr. 3, pp. 323-329.

Associate Fellows

Elhorst, P. (Faculty of Economics)

Elhorst, P., Oosterhaven, J., Sijtsma, F.J., Stelder, D., Welfare effects of spatial deconcentration: a scenario for the Netherlands, *Tijdschrift voor Economische en Sociale Geografie*, 90, pp. 17-31.

Jacobs, J. (Faculty of Economics)

Bors, L., Jacobs, J., Kuper, G., Kvetan, V., The composite leading indicator of the Slovak Republic Business cycle: construction and forecast, *Journal of Economics*, 47, nr. 1, pp. 3-19.

Sturm, J.E., Jacobs, J., Groote, P., Output effects of infrastructure investment in the Netherlands: 1853-1913, *Journal of Macroeconomics*, 21, nr. 2, pp. 355-380.

Jong, E. de (Nijmegen Business School)

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Los, B. (Faculty of Economics)

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Salverda, W. (*Faculty of Economics*)

Salverda, W., Jobcreation: the role of labour market institutions, *International Journal of Manpower*, 20, nr. 5, pp. 334-337.

Timmer, M. (*Faculty of Economics*)

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Vaal, A. de (*Nijmegen Business School*)

Berg, M. van den, A. de Vaal, Economic geography and services tradeability, *Journal of Regional Science*, 39, 3, pp. 539-572.

Theme D

Fellows

Dijk, J. van (*Faculty of Spatial Sciences*)

Dijk, J. van, Folmer, H., Wage effects of unemployment duration and frequency, *Journal of Regional Science*, 39, nr. 2, pp. 319-337.

Immink, T. (*Faculty of Economics*)

Immink, T., On the relation between linear difference and differential equations with polynomial coefficients, *Mathematische Nachrichten*, 200, pp. 59-76.

Braaksmā, B.L.J., Immink, T., Sibuya, Y., The Stokes phenomenon in exact asymptotics, *Pacific Journal of Mathematics*, 187, nr. 1, pp. 13-50.

Nusse, L. (*Faculty of Economics*)

Dutta, M., Nusse, L., Ott, E., Yorke, J.A., Yuan, G., Multiple attractor bifurcations: a source of unpredictability in piecewise smooth systems, *Physical Review Letters*, 83, pp. 4281-4284.

Scherbov, S. (*Faculty of Spatial Sciences*)

O'Neill, B., Scherbov, S., Lutz, W., The long-term effect on population size of the timing of fertility decline, *Population and Development Review*, 25, nr. 4, 749-756.

Scherbov, S., Vianen, H.A.W. van, Marital and fertility careers of Russian women born between 1910 and 1935, *Population and Development Review*, 25, nr. 1, pp. 129-143.

Willekens, F. (*Faculty of Spatial Sciences*)

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Willekens, F., Modeling approaches to the indirect estimation of migration flows: from entropy to EM, *Mathematical Population Studies*, 7, nr. 3, pp. 239-278.

Associate fellows

Groote, P. (*Faculty of Spatial Sciences*)

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Pellenburg, P. (*Faculty of Spatial Sciences*)
Ottens, H.F.L., Pellenburg, P., Rietbergen, T. van, Cities in perspective: an introduction, In: Wever, E. (ed.), *Cities in Perspective I; Economy, Planning and the Environment*, Van Gorcum, Assen, pp. 1-9.

Pellenburg, P., Steen, P.J.M. van, The dynamics of the international economic and demographic exchange relationships of the Netherlands, *Tijdschrift voor Sociale Gezondheidszorg*, 90, nr. 4, pp. 442-448.

Theme E

Fellows

Benninga, S. (*Faculty of Economics*)

Benninga, S., Wiener, Z., An investigation of cheapest to deliver on treasury bond futures contracts, *Journal of Computational Finance*, 2, nr. 3, pp. 35-55.

Dijkstra, T. (*Faculty of Economics*)

Knot, K.H.W., Dijkstra, T., Haan, J. de, Empirical features of the second-generation target zone models: mean reverting fundamentals and endogenous devaluation risk, *Economic Inquiry*, 37, nr. 3, pp. 489-509.

Krijnen, W.P., Dijkstra, T., Gill, R.D., Conditions for factor (in)determinacy in factor analysis, *Psychometrika*, 63, pp. 359-367.

Ees, H. van (*Faculty of Economics*)

Ees, H. van, Garretsen, H., Sterken, E., Some evidence on the relevance of bank behaviour for the lending channel in the Netherlands, *De Economist*, 147, 1, 19-37.

Haan, J. de (*Faculty of Economics*)

Haan, J. de, W. Moessen and B. Volkerink, Budgetary procedures – aspects and changes: New evidence for some European countries, in:

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Jiang, G. (*Faculty of Economics*)

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Jiang, G., Stochastic volatility and jump diffusion. Implication on option pricing?, *International Journal of Theoretical and Applied Finance*, 2, nr. 4, pp. 409-440.

Nieuwenhuis, H. (*Faculty of Economics*)

Dam, T. den, Nieuwenhuis, H., On behavioural inequalities, In: Polderman, J.W., Trentelman, H.L. (eds.), *The Mathematics of Systems and Control*, from Intelligent Control to Behavioral Systems, pp. 165-176.

Sterken, E. (*Faculty of Economics*)

Hoogeveen, V., E. Sterken, Parametrisation of model-consistent expectations in monetary policy models, *Applied Financial Economics*, 9, pp. 193-200.

Lensink, R., Bo, H., Sterken, E., Does uncertainty affect economic growth? An empirical analysis, *Weltwirtschaftliches Archiv*, 135, pp. 379-396.

Scholtens, B. (*Faculty of Economics*)

Scholtens, B., On the comovement of bond yield spreads and country risk ratings, *Journal of Fixed Income*, 8, nr. 4, pp. 99-103.

Scholtens, B., Analytical issues in external financing alternatives for SBEs, *Small Business Economics*, 12, nr. 2, pp. 137-148.

Associate fellow

Meer, R. van der (Faculty of Economics)

Meer, R. van der, Smink, M., Discounted downside risk: the time dimension of asset-liability management, *Geneva Papers on Risk and Insurance*, pp. 182-188.

Sortino, F., Meer, R. van der, Plantinga, A., The Dutch triangle: a framework to measure upside potential relative to downside risk, *Journal of Portfolio Management*, pp. 50-58.

Theme F

Fellows

Hoekstra, J.C. (Faculty of Economics)

Hoekstra, J., Leeflang, P., Wittink, D., The customer concept: the basis for a new marketing paradigm, *Journal of Market-Focused Management*, 4, nr. 1, pp. 43-76.

Verhoef, P.C., Hoekstra, J., Status of database marketing in the Dutch fast moving consumer goods industry, *Journal of Market-Focused Management*, 3, nr. 3/4, pp. 313-331.

Huizingh, E. (Faculty of Economics)

Hoekstra, J., Huizingh, E., The lifetime value concept in customer-based marketing, *Journal of Market-Focused Management*, 3, nr. 3/4, pp. 257-274.

Kooreman, P. (Faculty of Economics)

Kooreman, P., Dobbelsteen, S., Financial management, bargaining and efficiency within the household; an empirical analysis, In: Merz, J., Ehling, M. (eds.), *Time Use – Research, Data and Policy*, Nomos Verlagsgesellschaft, Baden-Baden.

Leeflang, P. (Faculty of Economics)

Foekens, E.W., Leeflang, P., Wittink, D., Varying parameter models to accommodate dynamic promotion effects, *Journal of Econometrics*, 89, nr. 1-2, pp. 249-268.

Spring, P., Leeflang, P.S.H., Wansbeek, T.J., The combination strategy to optimal target selection and offer segmentation in Direct Mail, *Journal of Market-Focused Management*, 4, pp. 187-203.

Wansbeek, T. (Faculty of Economics)

Wansbeek, T., Knaap, T., Estimating a dynamic panel data model with heterogeneous trends, *Annales d'Economie et de Statistique*, nr. 55-56, pp. 331-349.

Wansbeek, T., Meijer, E., Quadratic prediction of factors scores, *Psychometrika*, 64, nr. 4, pp. 495-508.

Wedel, M. (Faculty of Economics)

Hofstede, F. ter, Steenkamp, J.B.E.M., Wedel, M., International market segmentation based on consumer-product relations, *Journal of Marketing Research*, 36, pp. 1-17.

Steenkamp, J.B.E.M., Hofstede, F. ter, Wedel, M., A cross-national investigation into the individual and national cultural antecedents of consumer innovativeness, *Journal of Marketing*, 63, 2, 55-69.

Wittink, D. (Faculty of Economics)

Foekens, E.W., Leeflang, P., Wittink, D., Varying parameter models to accommodate dynamic promotion effects, *Journal of Econometrics*, 89, nr. 1-2, pp. 249-268.

Hoekstra, J., Leeflang, P., Wittink, D., The customer concept: the basis for a new marketing paradigm, *Journal of Market-Focused Management*, 4, nr. 1, pp. 43-76.

Associate fellows

Meijer, E. (Faculty of Economics)

Busing, F., Meijer, E., Leeden, R. van der, Deletion Jackknife for unequal m, *Statistics and Computing*, nr. 9, pp. 3-8.

Wansbeek, T., Meijer, E., Quadratic prediction of factors scores, *Psychometrika*, 64, nr. 4, pp. 495-508.

Otter, P. (Faculty of Economics)

Otter, P., Scheer, H.R. van der, Wansbeek, T., Direct Mail selection by joint modelling of the probability and quantity of response, In: Chen, H.F., Cheng, D.Z. (eds.), *Proceedings of the 14th World Congress of IFAC*, Beijing, Elsevier Science, Oxford, pp. 459-464.

Appendix 2 PhD Candidates

This appendix provides a list of all PhD candidates at the end of 1999 per theme and the title of their research project. More information can be found at the SOM website: som.rug.nl/

Theme A

As, S. van

Research Project: Characteristics of the work organisation and accidents.

Beukel, A. van den

Research Project: Multifunctionality and team performance: a multi-disciplinary perspective.

Blaauw, G.

Research Project: Het beheer van cruciale kennis.

Bokhorst, J.

Research Project: Naar een efficiënte en effectieve inzet van operators en machines in een flexibele geautomatiseerde omgeving.

Budihardjo Surijas, A.

Research Project: Planning and values research project: The values congruence and the planning process.

Drijver, S.

Research Project: Mix geheeltallig stochastisch programmeren.

Grotenhuis, F.

Research Project: The impact of cultural (mis)fit on the success of technology acquisitions.

Hellenthal, A.

Research Project: Banners to the development of self-divided work-teams.

Hummel, M.

Research Project: The Analytic Hierarchy Process: a group decision-making tool supporting inter-organisational communication in new product development networks.

Kamminga, P.

Research Project: Management control aspects of joint ventures.

Kleij, F. ten

Research Project: Retrieving knowledge from textual data using external numeric information.

Koster, F.

Research Project: Functional flexibility of labour.

Oosterman, B.

Research Project: Finding structures in product development.

Rheede, A. van

Research Project: Collective learning in workflow-system supported, process-oriented teams.

Rispens, S.

Research Project: The influence of organisational characteristics.

Schouteten, R.

Research Project: Worstelen met welzijn.

Singels, J.

Research Project: Centralisatie-decentralisatie bij het besturen van concerns: schipperen met speelruimte en besturingsvermogen.

Sjarbaini, L.

Research Project: Dynamics in the context dependency of knowledge: the conversion of knowledge in innovation.

Talens, E.

Research Project: Statistical sampling in auditing and accounting.

Wanders, H.

Research Project: Developing a better planning support system for a solid board factory using cognitive science and operations research techniques.

Xiang, G.

Research Project: Complexity of Cell Formation Problem.

Zhang, Z.

Research Project: Measures for improving product quality in China.

Zoethout, K.

Research Project: Variety and the requisite of self-organisation.

Theme B

Ali Hamid, A.

Research Project: The intercultural adaptation and adjustment of the expatriate's family member and the affect(s) on the expatriate's work performance.

Kok, R.

Research Project: The implementation of market oriented product-development.

Wahyuni Wibisono, S.

Research Project: Managing international strategic alliances: a development of evolutionary approach.

Theme C

Knaap, T.

Research Project: Lasting gaps: theories of economic growth and localisation of industrial production.

Linderhof, V.

Research Project: Household metabolism.

Mulligen, P. van

Research Project: The effect of product quality on international productivity comparisons.

Rensman, M.

Research Project: Innovation, diffusion and productivity differentials. International comparisons, 1870-1990.

Ruijs, A.

Research Project: Price formation processes on interrelated, imperfect markets for agricultural products: the case of Burkina Faso.

Sleifer, J.

Research Project: The structure of the East and West German economies from 1936 to 2000.

Smid, B.

Research Project: The construction and evaluation of an econometric input-output model for the Netherlands.

Völkerink, B.

Research Project: The political economy of fiscal policy.

Yetkiner, H.

Research Project: The impact of internationalisation of the economy on productivity and growth.

Zeilstra, A.

Research Project: Regional labour markets in a cross-country perspective.

Theme D

Begum, L.

Research Project: Adolescents' reproductive health in rural Bangladesh.

Draak, M. den

Research Project: Pregnancy outcomes and child survival in transition.

Haartsen, T.

Research Project: The countryside: from production to consumption?

Hoogstra, G.

Research Project: Economische ontwikkelingen in het Noorden.

Jennissen, R.

Research Project: Economic determinants of international migration in Europe.

Liang, Z.

Research Project: Probability models of reproductive life histories.

Medina, S.

Research Project: Mexico at the edge of the 21st century: a new social and demographic view.

Mills, M.

Research Project: Changing lives of women in Europe and North America.

Muhidin, S.

Research Project: Regional demographic scenario's for Indonesia.

Padmadas, S.

Research Project: Reproductive health in Kerala: an analysis of the National Family Health Survey (NFHS).

Pen, C.-J.

Research Project: The impact of business internal and external factors during the strategic decision making process regarding firm relocations.

Simon, C.

Research Project: Verstreking en Ontstreking: de dynamiek van toekenning van regionale identiteit.

Spijker, J.

Research Project: Economic determinants of differences in mortality in Europe.

Theme E

Bo, H.

Research Project: Corporate investment, uncertainty, and capital market imperfections.

Chen, L.

Research Project: The impact of institutional differences on the capital structure of firms.

Helmantel, M.

Research Project: Financial contracting: the interaction between banks and corporations.

Leertouwer, E.

Research Project: An analysis of central bank independence using dynamic panel data models.

Maier, P.

Research Project: The Bundesbank in international perspective.

Molen, R. van der

Research Project: Industrial group formation and corporate finance: the case of India.

Nijssse, E.

Research Project: The micro-structure and dynamics of the Brent Crude oil market.

Oosterhof, C.

Research Project: Corporate risk management in the Netherlands using financial derivatives.

Toolsenaar-Veldman, L.

Research Project: Oligopoly models of the banking firm.

Wang, A.

Research Project: Accounting, business performance and the valuation of firms.

Yao, Y.

Research Project: Factor Analysis of domestic and foreign term structure.

Theme F

Boon, B.

Research Project: Nonparametric inference in econometrics.

Dijk, A. van

Research Project: Models for micro marketing.

Ebbes, P.

Research Project: Modelling non-classical dependencies in mixed generalised linear models.

Horváth, C.

Research Project: A (game) theoretical and empirical analysis of dynamical competitive reaction strategies and consumer response functions; towards an integrated approach.

Knaap, D.

Research Project: The W.A. Scholtens company, the first modern Dutch multinational (1840-1940).

Kornelis, M.

Research Project: De werking van reclamemarkten en het leergedrag van adverteerders.

Sándor, Z.

Research Project: Instrumental variables and panel data description: A microeconomic analysis of market equilibrium and competition for differentiated products using macro data and micro conjoint choice data.

Soetevent, A.

Research Project: Interdependent preferences: behavioural, welfare and policy implications.

Vlagsma-Brangule, K.

Research Project: Micro-level dynamic analysis of determinants of consumer behaviour towards sustainable use of the environment.

Woltman Elpers, J.

Research Project: Measurement and analysis of attention for tv-commercials.

Zengerink, E.

Research Project: The influence of direct marketing and information and communication technology on business performance

Appendix 3

Research Reports 1999

99C01

Thissen, M., Two decades of CGE modelling. Lessons from models for Egypt, 18 pp.

99C02

Thissen, M. A classification of empirical CGE modelling, 18 pp.

99C03

Rensman, M. and G. Kuper, The role of R&D and patent activity in economic growth: some empirical evidence, 43 pp.

99B04

Koning, R.H., Competitive balance in Dutch soccer, 22 pp.

99E05

Volkerink, B. and J. de Haan, Political and institutional determinants of the taxmix: an empirical investigation for OECD countries, 43 pp

99A06

Oosterman, B.J., G.J.C. Gaalman and F.P.J. Kuijpers, Finding structures in product development, 15 pp.

99E07

Bo, H. The Q. theory of investment: does uncertainty matter?, 37 pp.

99C08

Dijkstra, B.R. and M. Haan, Sellers' hedging incentives at EPA's emission trading auction, 20 pp

99E09

Lensink, R., E. Sterken, Asymmetric information, irreversible investment and the optimal level of investment, 17 pp.

99C10

Dijk, M. van, The impact of budget emphasis on job satisfaction and performance of sales managers; a research note, 20 pp

99C11

Heijdra, B.J. and L. Meijdam, Public investment and intergenerational distribution, 36 pp.

99A12

Bogt, H.J. ter and G.J. van Helden, Management control and performance measurement in Dutch local government, 38 pp

99E13

Lensink, R., V. Murinde and C.J. Green, Are Polish firms risk-averting or risk-loving? Evidence on demand uncertainty and the capital-labour ratio in a transition economy, 12 pp

99E14

Chen, L.H., R. Lensink and E. Sterken, The determinants of capital structure: Evidence from Dutch panel data, 32 pp

99B15

P.N. Ghauri and T. Fang, The Chinese business negotiation process: a socio-cultural analysis, 28 pp.

99A16

Helden, G.J. van, J. van der Meer-Kooistra and R.W. Scapens, Coordination of international transactions at Hoogovens steel. Struggling with the tension between performance-oriented business units and the concept of an integrated company, 48 pp

99A17

Goldengorin, B., G.A. Tijssen, M. Tso, The maximization of sub-modular functions: old and new proofs for the correctness of the dichotomy algorithm, 19 pp.

99A18

Broersma, A.L.A., G. Sierksma, J. Wijngaard, Decomposed versus integrated control of a one-stage production system, 24 pp.

99C19

Bettendorf, L.J.H., B.J. Heijdra, Intergenerational, and international welfare leakages of a tariff in a small open economy, 37 pp., + 10 pp.

99E20

Postma Th., H. van Ees, H. Garretsen, E. Sterken, Top management team and board attributes and firm performance in the Netherlands, 26pp.

99C21

Kuper, G.H., D.P. van Soest, Asymmetric adaptations to energy price changes, 26 pp.

99C22

Haan, M., B. Volkerink, A runoff system restores the principle of minimum differentiation, 7 pp.

99 E23

Lensink R., Hong Bo, E. Sterken, Does uncer-

tainty affect economic growth? An empirical analysis, 20 pp.

99B24

Wedel, M., Concomitant variables in mixture model, 23 pp.

99B25

Haan, M., Cartel prohibition may increase prices, 15 pp.

99C26

Thissen, M., Financial CGE models. Two decades of research, 29 pp.

99B27

Jong, G. de, B. Nooteboom, R.W. Vossen, S. Helper and M. Sako, How long-term supply relationships work, 42 pp.

99A28

Meer-Kooistra, J. van der, and E.G.J. Vosselman, Management control of inter-firm transactional relationships: the case of industrial renovation and maintenance, 37 pp.

99C29

Tokutsu, I., Short-run Inter-country Price Formation: an Analysis of International Market Dependence by Price-endogenised Input-output Model, 21 pp. + 18 pp.

99B30

Gemser, G., N.M. Wijnberg, Appropriability: the Influence of Reputational Sanctions and Inter-firm Linkages, 41 pp.

99B31

Kamakura, W. and M. Wedel, A simulated likelihood latent variable approach for incomplete mixed outcome data, 36 pp.

99B32

Kemp, R., The Effect of Bargaining Power on Joint Venture Performance, 28 pp.

99B33

Kemp, R., Co-operation and Conflict in International Joint Venture Relationship, 20 pp.

99D34

Pellenburg, P.H., N.J. Kemper, Industrial Mobility in the Netherlands, 23 pp.

99B35

Van Heerde, H.J., P.S.H. Leeflang, D.R. Wittink, Semiparametric Analysis to Estimate the Deal

Effect Curve, 39 pp.

99B36

Van Heerde, H.J., P.S.H. Leeflang, D.R. Wittink, The Estimation of Pre- and Post-promotion Dips with Store-Level Scanner Data, 27 pp.

99E37

Lensink, R., Uncertainty, Financial Development and Economic Growth: an Empirical Analysis, 9 pp + 10 pp.

99E38

Huijgen, C., A. Plantinga, Analysts' Earnings Forecasts and International Asset Allocation, 19 pp.

99B39

Wijnberg, N.M., G. Gemser, Groups, Experts and Innovation: the Selection System of Modern Visual Art, 26 pp.

99E40

Chirinko, B., H. Van Ees, H. Garretsen, E. Sterken, Firm Performance, Financial Institutions and Corporate Governance in the Netherlands, 27 pp.

99B41

Klos, T.B., Governance and Matching, 34 pp.

99B42

Schoonbeek, L., P. Kooreman, The impact of advertising in a duopoly model, 19 pp.

99E43

Bouma, J.L., D.W. Feenstra and C.A. Huijgen, Accounting and business economics traditions in the Netherlands, 32 pp.

99A44

Batenburg, R. and M. de Witte, Underemployment in the Netherlands: How the Dutch 'Poldermodel' failed to close the education-jobs gap, 25 pp.

99B45

Huizingh, K.R.E., Towards successful electronic commerce strategies: a hierarchy of three management models, 29 pp.

99C46

Salverda, W., Is there more to the Dutch miracle than a lot of part-time jobs? 56 pp.

99B47

Schoonbeek, L., A delegated agent in a winner-take-all contest, 15 pp.

99A48

Zhang, Z., Developing an instrument for measuring TQM implementation in a Chinese context, 34 pp.

99E49

Toolema, L.A and L. Schoonbeek, Bank behaviour and the inter-bank rate in an oligopolistic market, 15 pp.

99A50

Goldengorin, B. and M. de Vink, Solving large instances of the quadratic cost partition problem on dense graphs by data-correcting algorithms: a computational study, 37 pp.

99 E51

Lensink, R. and E. Sterken, Capital market imperfections, uncertainty and corporate investment in the Czech Republic, 22 pp

99A52

Zee, D.J. van der, A. van Harten and P.C. Schuur, On-line scheduling of multi-server batch operations, 37 pp.

99A53

Haar, J.W. van der, R.G.M. Kemp, and S.W.F. Omta, Creating value that can't be copied. The use of conjoint analysis to assess customer value in new service creation, 24 pp.

99E54

Dijk, M. van and A.J.E. Jansman, The impact of contextual factors on auditors' ability to resist management pressure, 17 pp.

99E55

Feenstra, D.W. and G.J. van Helden, Appropriate reserves in the health care sector, 20 pp.

99E56

Leertouwer, E. and Ph. Maier, Who creates political business cycles? (Should central banks be blamed?), 25 pp.

99D57

Rao Sahib, P. and X. Gu, 'Living in sin' and marriage: a matching model, 21 pp.

99A58

Offenbeek, M.A.G. van, The influence of workflow systems on team learning, 21 pp.

99A59

Engelen, J. van, P. Terlouw, D.J. Kiewiet and S.

Omta, Towards a polarity strategy in managing product development teams, 23 pp.

99E60

Lensink, R. and H. White, Are there negative returns to aid? 40 pp.

99A61

Schouteten, R.L.J. and M.C. de Witte, The quality of working life revisited: the changing interface between work and family, 27 pp.

99C62

Zuidema, Th. and A. Nentjes, Health damage of air pollution and benefits and costs of ammonia control in the Netherlands, 32 pp.

99C63

Bovenberg, A.L. and B.J. Heijdra, Environmental abatement and intergenerational distribution, 39 pp.

99C64

Heijdra, B.J. and J.E. Ligthart, Deposit-refund on labour: a solution to equilibrium unemployment? 16 pp.

99A65

Bruggeman, J. and B.Ó Nualláin, A niche width model of optimal specialisation, 13 pp.

99E66

Nijssse, E. and E. Sterken, Shortage, black markets, and household money demand in Poland, 22 pp.

99D67

Sweeney, S.H., Analysis of incomplete data in a log-linear/GLM framework: Theory, examples, and computer programs, 62 pp

99A68

Nauta, A., Interdepartmental negotiation behaviour in manufacturing organisations, 38 pp.

99C69

Oosterhaven, J., G.J. Eding and D. Stelder, Clusters, forward and backward linkages, and bi-regional spillovers: policy implications for the two Dutch mainport regions and the rural North, 14 pp.

99E70

Wang, H., Valuation: accounting and economic approaches, 25 pp.

99B71

Kooreman, P and M. Haan, Veblen effects when license plates signal car age, 14 pp.

Appendix 4

Seminars 1999

January

H. Blossfeld (University of Bremen), Life history modelling with TDA

February

I. Tokutsu (Kobe Business School, Japan)

G. Hewings (University of Illinois at Urbana)

H. Hilderink (Population Research Centre RUG en RIVM Bilthoven),
Population and health in global change

G. van den Berg (Free University Amsterdam), Estimating measures of
labour market imperfection for five OECD countries, using aggregate
data in an equilibrium search framework

March

L. Bertola (Univerdidad de la Republica Montevideo), Southern cone
real wages compared: a purchasing power parity approach to conver-
gence and divergence trends

H. Berger (University of Munich), Does conservatism matter? A time
series approach to central banking

T. Osang (Southern Methodist University, Dallas), Growth and welfare
effects of tariffs and tariff reform in a small open economy

L. Blessing (Cambridge University), Design process capture and support

H. Huizinga (University of Tilburg), Does partial tax coordination make
sense?

I. Kotowska (Warsaw School of Economics), Demographic changes in
Poland in the 1990s – an attempt at some interpretations

F. Gönül (Carnegie Mellon, Pittsburgh), Competitive strategies in the
healthcare industry

O. Swank (Erasmus University, Rotterdam), A theory of policy advise

April

D. Jorgenson (Harvard University), Educational policies to stimulate eco-
nomic growth

C. Keuschnigg (University of Saarland), Capital market effects of pension
reform

J. Pinkse (University College London), Structural estimation of auction
models

P. McCann (University of Reading), Logistics-costs and industrial loca-
tion

N. Stoughton (University of California at Irvine), Optimal capital allocation using RAROC and EVA

J. Pinkse (University College London), Feasible multivariate non-parametric regression estimation using weak separability

S. Moitra, How to base innovation forecasts on R&D factors

J. Luis Moraga-Gonzalez (Tinbergen Institute Rotterdam), 'We sold a million copies' – The role of advertising past sales

May

H. Degryse (Catholic University Leuven), Bank relationships and firm profitability

S. Dixon (Open University Heerlen), Endogenising Stackelberg behaviour when firms set quantities

L. Schon (Lund University), Industrial crisis in a long-cyclical perspective

June

M. Fouquin (CEPII, Paris), Competitiveness of nations

X. Yang (Harvard University), Specialisation and division of labour: a survey

G. Ridder (John Hopkins University, Baltimore), Combining panel data sets with attrition and refreshment samples

S. Lundberg (University of Washington, Seattle), The determinants of specialisation within marriage

September

D. Ma (Hitsubashi University, Tokyo), Divergence and convergence, Chinese and Japanese ericulture 1860–1940

P. Rao (University of New England, Armidale, Australia), Economic growth, productivity change and inequality: methodology for the assessment of economic performance of nations

October

J. Sonnemans (University of Amsterdam), Promotion rules and skill acquisition: an experimental study

L. de Haan (de Nederlandsche Bank), Debt or equity? An empirical study of security

S. Smulders (Tilburg University), The trade off between sclerosis and hold up problems: Rhenish vs. Anglosaxon economies

L. van der Geest (Nyfer), Sporen van vooruitgang

November

C. Teulings (Erasmus University, Rotterdam), A structural model of tenure and specific investments

G. de Bondt (De Nederlandsche Bank), Credit channels and consumption in Europe: empirical evidence

K. Burdett (University of Essex), Divorce and trust

J. Boone (University of Tilburg), Measuring product market competition

C. Kool (University of Maastricht), Exchange rate accommodation and inflation persistence in Europe: 1970-1988

M. Funke (University of Hamburg), Product variety and economic growth: empirical evidence for the OECD countries

December

R. Florax (Free University Amsterdam), Meta-analysis of research synthesis in economics and geography: tackling the staggering pile of empirical evidence

B.V. Chowdary (Nagarjuna University, Andhra Pradesh), Flexibility and related issues in evaluation and selection of manufacturing systems

B. Visser (Shell), On correctly allocating error-prone agents in binary decision structures

G. Duysters (Technical University of Eindhoven), The effect of mergers and acquisitions on the innovative performance of companies in a high-tech environment