



Hora Est! and Beyond

100 PhD

Alumni Careers

Erasmus Doctoral Programme in
Business and Management



ERASMUS RESEARCH
INSTITUTE OF MANAGEMENT



The Erasmus Research Institute of Management (ERIM) is the Research School (Onderzoekschool) in the field of management of the Erasmus University Rotterdam. The founding participants of ERIM are RSM Erasmus University and the Erasmus School of Economics. ERIM was founded in 1999 and is officially accredited by the Royal Netherlands Academy of Arts and Sciences (KNAW). The research undertaken by ERIM is focussed on the management of the firm in its environment, its intra- and inter-firm relations, and its business processes in their interdependent connections.

The objective of ERIM is to carry out first rate research in management, and to offer an advanced doctoral programme in Research in Management. Within ERIM, over two hundred senior researchers and PhD candidates are active in the different research programmes. From a variety of academic backgrounds and expertises, the ERIM community is united in striving for excellence and working at the forefront of creating new business knowledge.



HORA EST! AND BEYOND
100 PHD ALUMNI CAREERS

ERIM PHD SERIES
RESEARCH IN MANAGEMENT

HORA EST!
AND BEYOND

100 PHD
ALUMNI CAREERS

Erasmus Research Institute of Management (ERIM)
RSM Erasmus University / Erasmus School of Economics
Erasmus University Rotterdam

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Foreword



Prof. dr ir Eric van Heck

ERIM Director
of Doctoral Education

We are very proud to present you with our book of the first 100 ERIM PhD Series alumni. ERIM PhD candidates are facilitated in publishing their dissertation in the ERIM PhD Series. The first ERIM PhD Series alumnus was Robert van der Meer, in 2000. Seven years later, we have passed the “Hora Est!” moment more than one hundred times. For each of the alumni in this book, the abstract and front page of the PhD thesis are presented, and each PhD alumnus provides his or her thoughts on doing a PhD and its role in their career in academia or business.

It is impressive to read how proud our PhD alumni are of their PhD project, their supervisors, and their having conducted research at ERIM. It is great to read how many PhD awards and excellent articles are distilled from these dissertations. It is also noteworthy how fast PhD research in management is maturing. There are more PhD dissertations now than ever before that use multiple research methods, combine different theoretical perspectives, and result in high-quality publications and results that are used in practice.

The key word is “inspiration”. PhD researchers are inspired by theoretical and practical opportunities and are looking for innovative ways to create scientific knowledge. PhD researchers are also inspired by their supervisors (in Dutch, ‘promotors’). We are fortunate that in each of our five research streams, we have excellent supervisors who inspire PhD students to go the extra mile.

It turns out that going the extra mile is rewarding as much from an intellectual, as from a career perspective. The career developments that our PhD alumni present are impressive, and a strong indicator that the doctoral programme provides as much value for our alumni as for their employers.

We are thankful to the predecessors of the position of ERIM Director of Doctoral Education – Professors Gerrit van Bruggen (1999-2001), Rudy Wielers (2001-2002), and Marno Verbeek (2003-2006) – for their efforts to set up and improve the doctoral programme. These improvements have clearly paid off.

We would also like to thank all those who contributed to this book: most notably, our alumni and their supervisors.

A special thanks to Professor Ale Smidts, ERIM Scientific Director, and Wilfred Mijnhardt, ERIM Executive Director. Ale provided extensive feedback and advice. Wilfred initiated the ERIM PhD Series, and guided this book (and most of the PhD theses) through the publication process.

We thank Professors Frans van den Bosch, Berend Wierenga, and Albert Wagelmans for sharing their insights on supervising our PhD students. We thank Professor Marno Verbeek for his insights into further extending the doctoral programme.

Many thanks to the EUR Head of University Ceremonies Ton Molendijk and the ERIM PhD Council members Remco Prins, Patrick Verwijmeren, and Oliver Weidenmuller for their contribution to this book. And, of course, thank you Rebecca Morris, Olga Novikova, and Wietske Uneken for editing this volume.

I wish you all enjoyable reading!

Prof. dr ir Eric van Heck
ERIM Director of Doctoral Education

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PhD at ERIM: An Overview

The way to the PhD is a long one; an adventurous journey that is not always easy. While everyone has a different point of departure, doing research demands a certain mindset, curiosity and passion. Some discover this very early on, and dream of becoming an academic from childhood. Most make this decision during their studies, and often during their work on their master's thesis, when their fascination with a particular research topic grows so strong that they choose to seek out another few years gaining and creating knowledge on that subject. And so the academic career starts.

A great thing about management research is that it allows the individual to combine intellectual challenge with practical relevance. It is not surprising, therefore, that a number of people choose to do a PhD after several years in business. They do so to gain a more profound knowledge of a particular topic, frequently at a time when their practical knowledge has reached a critical point that urges reflection and the sharing of their insights with the scientific community.

This is how the journey may start. But as with any serious expedition, it requires a qualified guide who can provide expertise and advice along the way. Good supervision is vital in the quest for new knowledge. Inspired, supported and challenged by experienced professors and peers, one is able to explore new horizons, learn more about one's field, and learn more about oneself.

New knowledge also has a certain life-cycle, with new ideas being discussed and presented at various levels and points before being published. Publications are a pivotal means of disseminating knowledge – a vehicle for academic and practical impact. It is also rewarding to see one's insights getting recognition in publications. Obtaining the doctoral degree, however, is the ultimate recognition. A PhD title opens the way

to an academic career, and often adds momentum to one's career in business. It is proof of one's intellectual strength, expertise, discipline, and persistence. And it has a brand.

Erasmus Research Institute of Management (ERIM) founded in 1999 by RSM Erasmus University and Erasmus School of Economics, and accredited by the Royal Netherlands Academy of Arts and Sciences has become one of the recognised brands of the Erasmus University Rotterdam.

The Mission of ERIM is to contribute to scientific research that enables organisations to assess and improve their business processes in order to perform in a more profitable and responsible way. The research focus of ERIM is on the firm in its environment, its intra- and inter-firm relations, its business processes in their interdependent connections, and the management of these as an exclusive and distinctive scientific domain. A firm is best described as an organisation, dedicated to the production of goods and services. This domain is called Research in Management.

The ERIM research programme contains five research (sub)programmes:

1. Business Processes, Logistics & Information Systems (LIS);
2. Organisation (ORG);
3. Marketing (MKT);
4. Finance & Accounting (F&A);
5. Strategy (STR).

All five programmes have proven very productive in terms of research, of which PhD study plays an important part.

Business Processes, Logistics & Information Systems (LIS)

The LIS research programme focuses on logistics and supply chain management in interaction with information and communication systems. Supply chain optimisation and management is a broad theme that addresses design, management, optimisation, coordination, and planning issues in supply chains. Closed-loop supply chains can play an important role in making supply chains more sustainable and constitute a separate topic. Transportation management research aims to improve the performance of passenger and cargo transportation systems, while Terminal optimisation deals with the design, planning and control of terminal processes. Research on Smart Business Networks endeavours to understand how business organisations could create value by applying advanced communication networks.

LIS	Promotor(s)	PhD Defense	No.
Heidi Alwarez	Prof.dr. K. Kumar	02-06-2006	80
Marcel van Assen	Prof.dr. S.L. van de Velde & Prof.dr. W.H.M. Zijm	12-05-2005	56
Floortje Blindenbach-Driessen	Prof.dr. S.L. van de Velde	22-06-2006	82
Niels-Ingvar Boer	Prof.dr. K. Kumar	17-06-2005	60
Csaba Attila Boer	Prof.dr. A. de Bruin & Prof.dr.ir. A. Verbraeck	21-10-2005	65
Marisa P. de Brito	Prof.dr.ir. R. Dekker & Prof.dr. M.B.M. de Koster	12-02-2004	35
Dominique Delporte-Vermeijeren	Prof.mr.dr. P.H.M. Vervest & Prof.dr.ir. H.W.G.M. van Heck	09-05-2003	20
Paul C. van Fenema	Prof.dr. K. Kumar	10-10-2002	19
Moritz Fleischmann	Prof.dr.ir. J.A.E.E. van Nunen & Prof.dr.ir. R. Dekker	05-10-2000	2
Andrea Ganzaroli	Prof.dr. K. Kumar & Prof.dr. R.M. Lee	10-10-2002	18
Wilco van den Heuvel	Prof.dr. A.P.L. Wagelmans	07-12-2006	93
Ksenia Iastrebova	Prof.dr. H.G. van Dissel	02-03-2006	77
Otto Koppius	Prof.dr. P.H.M. Vervest & Prof.dr.ir. H.W.G.M. van Heck	16-05-2002	13
Julia Kotlarsky	Prof.dr. K. Kumar	16-06-2005	59
Peter de Langen	Prof.dr. B. Nooteboom & Prof.drs. H.W.H. Welters	22-01-2004	34
Tuan Le Anh	Prof.dr. M.B.M. de Koster & Prof.dr.ir. R. Dekker	21-04-2005	51
Tho Le-Duc	Prof.dr. M.B.M. de Koster	23-09-2005	64
Ramon Lentink	Prof.dr. L.G. Kroon & Prof.dr.ir. J.A.E.E. van Nunen	10-02-2006	73
Maria del Pilar Londoño	Prof.dr. H.E. Haralambides & Prof.dr. J.F. Francois	30-03-2006	78
Robert van der Meer	Prof.dr. M.B.M. de Koster & Prof.dr.ir. Dekker	28-09-2000	1
Kevin Pak	Prof.dr.ir. R. Dekker	24-06-2005	61
Leon Peeters	Prof.dr. L.G. Kroon & Prof.dr.ir. J.A.E.E. van Nunen	06-06-2003	22
Viara Popova	Prof.dr. A. de Bruin	01-04-2004	37
Pauline Ratnasingam	Prof.dr. K. Kumar & Prof.dr. H.G. van Dissel	22-11-2001	9
Dolores Romero Morales	Prof.dr.ir. J.A.E.E. van Nunen	12-10-2000	3
Kees Jan Roodbergen	Prof.dr. M.B.M. de Koster & Prof.dr.ir. J.A.E.E. van Nunen	10-05-2001	4
Iris Vis	Prof.dr. M.B.M. de Koster & Prof.dr.ir. R. Dekker	17-05-2002	14
Michiel Vromans	Prof.dr. L.G. Kroon & Prof.dr.ir. R. Dekker	06-07-2005	62
Ton de Waal	Prof.dr.ir. R. Dekker	19-06-2003	24
Matthijs Wolters	Prof.mr.dr. P.H.M. Vervest & Prof.dr.ir. H.W.G.M. van Heck	08-02-2002	11

Organisation (ORG)

The ORG research programme employs economic, psychological and sociological methodologies for dealing with a vast range of issues, analysing them on micro and macro levels. Research in Organisational Development and Change, Organisational Behavior and Human Resource Management, and Comparative Studies in Managing across Cultures involves many topics. These include group processes and team performance, innovation, leadership, cultural due diligence and cross-cultural competence, relationships between individuals, networks and organisations. Corporate social responsibility and sustainability, governance and organisational dynamics, entrepreneurship and innovation management are among many problem clusters dealt with.

ORG	Promotor(s)	PhD Defense	No.
Guido Berens	Prof.dr. C.B.M. van Riel	04-06-2004	39
Douglas van den Berghe	Prof.dr. R.J.M. van Tulder & Prof.dr. E.J.J. Schenk	28-11-2003	29
Jos Bijman	Prof.dr. G.W.J. Hendrikse	13-06-2002	15
René Brohm	Prof.dr. G.W.J. Hendrikse & Prof.dr. H.K. Letiche	01-09-2005	63
Yongping Chen	Prof.dr. A. Buitendam & Prof.dr. B. Krug	04-10-2001	6
Victor Gilsing	Prof.dr. B. Nootboom & Prof.dr. J.P.M. Groenewegen	04-12-2003	32
Wendy van Ginkel	Prof.dr. D. van Knippenberg	25-01-2007	97
Gjalt de Graaf	Prof.dr. F. Leijnse & Prof.dr. T. van Willigenburg	12-12-2003	31
Rouven Hagemeijer	Prof.dr. S.J. Magala & Prof.dr. H.K. Letiche	27-10-2005	68
Janneke Hermans	Prof.dr.drs. F.H.A. Janszen	12-11-2004	46
Jos van Iwaarden	Prof.dr. B.G. Dale & Prof.dr. A.R.T. Williams	28-09-2006	84
Arjan Keizer	Prof.dr. J.A. Stam & Prof.dr. J.P.M. Groenewegen	09-06-2005	57
Sabine Knapp	Prof.dr. Ph.H.B.F. Franses	25-01-2007	96
Jeroen Kuilman	Prof.dr. B. Krug	13-10-2005	66
Guoyang Liang	Prof.dr. R.J.M. van Tulder	18-11-2004	47
Peter Miltenburg	Prof.dr. J. Paauwe & Prof.dr. H.R. Commandeur	28-11-2003	30
Michael J. Mol	Prof.dr. R.J.M. van Tulder	13-12-2001	10
Arjen Mulder	Prof.dr. R.J.M. van Tulder	14-10-2004	45
Alan Muller	Prof.dr. R.J.M. van Tulder	03-06-2004	38
Hans van Oosterhout	Prof.dr. T. van Willigenburg & Prof.mr. H.R. van Gunsteren	02-05-2002	12
Tanja Sophie Schweizer	Prof.dr. R.J.M. van Tulder	10-12-2004	48
Frederique Six	Prof.dr. B. Nootboom & Prof.dr. A.M. Sorge	24-06-2004	40
Alfred Slager	Prof. dr. R.J.M. van Tulder & Prof. dr. D.M.N. van Wensveen	01-07-2004	41
Marielle Sonnenberg	Prof.dr. J. Paauwe	12-10-2006	86
Ingrid Verheul	Prof.dr. A.R. Thurik	02-06-2005	54
Sander Wennekers	Prof.dr. A.R. Thurik	15-09-2006	81

Marketing (MKT)

The main areas of the MKT research programme are Behavioural Marketing, Marketing Management & Strategy and Marketing Modelling. Behavioural Marketing focuses on consumer decision-making and persuasive communication. Neuromarketing explores how neuroscience can inform consumer behaviour. Technology and life science marketing addresses problems like diffusion of new technologies and life science therapies, consumer of physician behaviour in life science markets, and consumer behaviour in technology choice. Marketing Channels, Online marketing and Customer Relationship Management investigate new interactive paradigms in marketing practice and theory. Another important research area concerns the development and application of advanced econometric models in marketing.

MKT	Promotor(s)	PhD Defense	No.
Niek Althuisen	Prof.dr.ir. B. Wierenga	15-12-2006	95
Jaco Appelman	Prof.dr. F.M. Go & Prof.dr. B. Nooteboom	21-03-2004	36
Liselore Berghman	Prof.dr. P. Matthyssens	19-10-2006	87
Dennis Fok	Prof.dr. Ph.H.B.F. Franses	06-11-2003	27
Robert Govers	Prof.dr. F.M. Go & Prof.dr. K. Kumar	24-11-2005	69
Bert de Groot	Prof.dr. Ph.H.B.F. Franses & Prof.dr. H.R. Commandeur	15-05-2006	91
Joost Loef	Prof.dr. W.F. van Raaij & Prof.dr. G. Antonides	26-09-2002	17
Laurens M. Slood	Prof.dr. H.R. Commandeur,		
	Prof.dr. E. Peelen & Prof.dr. P.C. Verhoef	16-02-2006	74
Willem Smit	Prof.dr.ir. G.H. van Bruggen & Prof.dr.ir. B. Wierenga	23-02-2006	76
Linda Teunter	Prof.dr.ir. B. Wierenga & Prof.dr. T. Kloek	19-09-2002	16
Kristine de Valck	Prof.dr.ir. G.H. van Bruggen & Prof.dr.ir. B. Wierenga	29-04-2005	50
Eline de Vries-van Ketel	Prof.dr.ir. G.H. van Bruggen & Prof.dr.ir. A. Smidts	20-01-2006	72
Björn Vroomen	Prof.dr. Ph.H.B.F. Franses	06-11-2006	90

Finance and Accounting (F&A)

The focus of the FIN research programme is on financial decision-making and uncertainty, and its main areas are Financial Markets, Asset Pricing, Risk Management and Corporate Finance. In these areas, particular attention is paid to behavioural biases in asset prices, socially responsible investments, real estate, mutual funds and hedge funds, risk modelling, forecasting returns and volatility, behaviour of investors, financial structure and financing decisions, exchange rate and inflation risk, pension funds, corporate governance, financial reporting, IPOs, and economic and organisational governance structures. There is a relatively strong focus on methodological and empirical studies, paying particular attention to European and international issues.

F&A	Promotor(s)	PhD Defense	No.
Guillermo Baquero	Prof.dr. M.J.C.M. Verbeek	07-12-2006	94
Rachel Campbell	Prof.dr. C.G. Koedijk	07-09-2001	5
Petra Daniševská	Prof.dr. C.G. Koedijk	13-09-2004	44
Jeroen Derwall	Prof.dr. C.G. Koedijk	01-03-2007	101
Anna Barbara Gutkowska	Prof.dr. A.C.F. Vorst	06-10-2006	85
Reggy Hooghiemstra	Prof.dr. L.G. van der Tas	25-09-2003	25
Joop Huij	Prof.dr. M.J.C.M. Verbeek	08-03-2007	99
Christian Huurman	Prof.dr. C.G. Koedijk	22-03-2007	98
Cyriel de Jong	Prof.dr. C.G. Koedijk	19-06-2003	23
Jeanine Kippers	Prof.dr. Ph.H.B.F. Franses	09-09-2004	43
Erik Kole	Prof.dr. C.G. Koedijk & Prof.dr. M.J.C.M. Verbeek	23-06-2006	83
Wouter de Maeseneire	Prof.dr. J.T.J. Smit	19-05-2005	53
Albert Mentink	Prof.dr. A.C.F. Vorst	01-12-2005	70
Gerard Moerman	Prof.dr. C.G. Koedijk	16-06-2005	58
Raoul Pietersz	Prof.dr. A.A.J. Pelsser	08-12-2005	71
Igor Pouchkarev	Prof.dr. J. Spronk	28-04-2005	52
Marcel van Rinsum	Prof.dr. F.G.H. Hartmann	20-10-2006	88
Willem Schramade	Prof. dr. A. De Jong	23-11-2006	92
Roland Speklé	Prof.dr. M.A. van Hoepen	25-10-2001	8
Ben Tims	Prof.dr. C.G. Koedijk	26-10-2006	89
Pim van Vliet	Prof.dr. G.T. Post	16-12-2004	49

Strategy (STR)

The key theme of the STR research programme is strategic renewal. Our research aims to develop multilevel frameworks of strategic renewal, taking into account the contribution of corporate entrepreneurship, strategic innovations, and corporate governance. The research is structured along the following thematic lines: new competitive and cooperative challenges in the changing international business environment like strategic alliances and offshoring; new intra- and interorganisational forms like ambidextrous organisations, new requirements of knowledge absorption and innovation; and changing managerial roles in strategy formulation, implementation and leadership. These themes contribute to the integrative theme on trajectories of strategic renewal.

STR	Promotor(s)	PhD Defense	No.
Marjolijn Dijksterhuis	Prof.dr.ing. F.A.J. van den Bosch & Prof.dr. H.W. Volberda	18-09-2003	26
Bert Flier	Prof.dr.ing. F.A.J. van den Bosch & Prof.dr. H.W. Volberda	11-12-2003	33
Erik den Hartigh	Prof.dr. H.R. Commandeur	20-10-2005	67
Purseij Heugens	Prof.dr.ing. F.A.J. van den Bosch & Prof.dr. C.B.M. van Riel	19-10-2001	7
Justin Jansen	Prof.dr.ing. F.A.J. van den Bosch & Prof.dr. H.W. Volberda	29-04-2005	55
Martijn van der Mandele	Prof.dr. H.W. Volberda & Prof.dr. H.R. Commandeur	14-06-2004	42
Tom Mom	Prof.dr.ing. F.A.J. van den Bosch & Prof.dr. H.W. Volberda	31-08-2006	79
Paul Vlaar	Prof.dr.ing. F.A.J. van den Bosch & Prof.dr. H.W. Volberda	16-02-2006	75
Martin Wielemaker	Prof.dr. H.W. Volberda & Prof.dr. C.W.F. Baden-Fuller	30-10-2003	28
Raymond van Wijk	Prof.dr.ing. F.A.J. van den Bosch	22-05-2003	21

Cum Laude

Eight of the PhD dissertations within the ERIM PhD Series received the highest distinction, *cum laude*:

Roland Speklé	Beyond Generics: A Closer Look at Hybrid and Hierarchical Governance.
Paul C. van Fenema	Coordination and Control of Globally Distributed Software Projects.
Dennis Fok	Advanced Econometric Marketing Models.
Alan Muller	The Rise of Regionalism: Core Company Strategies under the Second Wave of Integration.
Alfred Slager	Banking across Borders.
Justin Jansen	Ambidextrous Organizations: A Multiple-Level Study of Absorptive Capacity, Exploratory and Exploitative Innovations and Performance.
Paul Vlaar	Making Sense of Formalization in Interorganizational Relationships: Beyond Coordination and Control.
Wendy van Ginkel	The Use of Distributed Information in Decision Making Groups; The role of shared task representations.

Our PhD Series alumni's contribution to the reputation of ERIM cannot be underestimated. Research conducted as part of PhD projects generated not only dissertations, but some 250 articles in international journals. In many cases, this research received a quick response from the corporate world, and was applied by large and small companies to improve their performance in areas ranging from logistics and IT, to marketing and banking. National and international organisations from Australian government and Dutch National Railways, to the World Bank and the UN, have also shown profound interest in our alumni's research. Conducting research that has both academic and practical impact has become an ever more important strategic goal for ERIM.

PhD Alumni Careers

Approximately one half of the ERIM Series alumni we honour in this book have conducted their PhD research within the ERIM Doctoral Programme on a full-time basis. About one quarter of the Series alumni started their PhD at RSM Erasmus University – full-time – before the foundation of ERIM. Another quarter followed a part-time PhD trajectory, combining research with their professional career.

There exists a wide range of careers. Here is an overview of the current placement of the ERIM PhD Series alumni.

	Abs. and %
Academic career	66
Inside the Netherlands	49
Outside the Netherlands	17
Business career	34
Inside the Netherlands	26
Outside the Netherlands	8
TOTAL	100

The academic career is the most popular amongst PhD graduates as a whole (66%), while for the former part-time candidates, the division between academic and business careers is approximately 50/50. There are several alumni who have remained working at Erasmus University. At the time of writing, 32 of the 100 ERIM PhD Series alumni are still working – mostly full-time – at RSM Erasmus University or Erasmus School of Economics. We have alumni teaching at every Dutch university, of which Free University of Amsterdam (VU) and Delft University of Technology (TU Delft) are particularly popular, with respectively eight and three alumni.

Approximately one quarter (22) of the ERIM PhD Series alumni are working outside the Netherlands, both in business and academia. Fourteen percent of the Series alumni are active at international universities and business schools. Most of them are located within Europe, at HEC, ESSEC, Warwick Business School, Bocconi, University of Antwerp Management School, Saïd Business School of the Oxford University, Catholic University of Leuven, Business School of the University of

Reading, Bradford University, IMD Business School, and Warsaw Schools of Economics. Outside of Europe, our alumni are working at the University of New Brunswick, Florida International University, Robert H. Smith School of Business of the University of Maryland, University of Central Missouri, and Hanoi University of Technology.

Another 34% are working in business, both in public institutions like CPB (Netherlands Bureau for Economic Policy Analysis), CBS (Statistics Netherlands) and the UN, and in the corporate world, in companies like Shell, AEGON, or Unilever, banks like ABN AMRO, London Bank or Rabobank, and consultancies such as Deloitte, PWC, or Ernst & Young. Some of our alumni have a consulting firm of their own. Business functions held by ERIM alumni are typically related to research: senior researchers and consultants, business analysts, but also department heads, team leaders and directors. In the future, steady growth in the number of international careers is expected, partly due to the increasingly international character of the Erasmus Doctoral Programme in Business and Management.

Among the one hundred ERIM PhD Series alumni there are 26 women. After obtaining their PhD, the majority of them (16) proceeded with an academic career, while the rest hold research-related positions in business.

Erasmus Doctoral Programme in Business and Management

Since its foundation, ERIM has provided a PhD programme meant as a vehicle for the early academic careers of new, excellent scholars in the field of management. With the launch of ERIM's research master in 2004, the Doctoral Programme at ERIM has since been redesigned. In the current situation, the Erasmus Doctoral Programme in Business and Management offered by ERIM integrates the two-year Master of Philosophy in Business Research and the PhD Programme in Business and Management. The programme is an integral part of ERIM's strategy. In line with the targets of the Bologna process, it aims to provide a high-quality doctoral programme and better career opportunities for young researchers, encouraging interest in research as a possible career path. The strong link between education and research, the focus on students' individual needs and skills as required for research-oriented work, the international outlook of the programme, and the investment in research facilities, make the "early career" of the programme alumni highly feasible.

The ERIM Doctoral Programme involves five years of full-time study: the first two years associated with MPhil are devoted to course work, and the dissertation phase covers three years. One can enter the Doctoral Programme at three points in time: the first year on the basis of a bachelor diploma, the second year on the basis of an MSc diploma, and the third year on the basis of a relevant MPhil diploma. Selection criteria are always in place so that only top students can enter the programme. The amount and composition of the course work depend on the candidate's specific educational background and individual profile.

Having studied over a two-year period, the first "cohort" of MPhil students graduated successfully in the fall of 2006. Seven out of eleven graduates are now pursuing a PhD, six of them within ERIM. Transition from an MPhil to a PhD does not occur automatically: selection is still carried out on a competitive basis. It is assumed that in the future, MPhils who have already received a thorough training in research methods and skills will become an important source of inflow of PhD candidates within ERIM.

The majority of current PhD candidates and approximately half of all ERIM PhD alumni entered the PhD programme directly and received a four-year doctoral student contract. It is expected that the four-year stream will remain open for a relevant number of candidates. In the initial stage of their programme such candidates, together with their supervisors and ERIM, will develop an individual study plan, which includes substantial course work.

Since the introduction of the MPhil programme, the variety and number of doctoral courses provided by ERIM has increased. Advanced specialisation and methodology courses provided by ERIM are open to PhD students, and some methodology and skills courses are compulsory. ERIM also reimburses the costs of the external courses and workshops included in the student's study plan.

Within 10 months of the start of the appointment, PhD students have to submit a detailed research proposal for external evaluation. After its approval and a thorough evaluation of their first year, PhD candidates continue their research and are stimulated to present their work at workshops and conferences, to write discussion papers, and submit articles to international journals. ERIM's Support Programme covers the costs of the conference visits and provides special budget for field research data collection and scientific literature. Erasmus University and ERIM offer doctoral students a wide range of facilities, such as sophisticated IT facilities, databases, software packages and the Erasmus Behavioural Lab (EBL) for experiments involving human subjects and their behaviour.

ERIM PhD candidates are facilitated in publishing their dissertation in the ERIM PhD Series. All dissertations in the Series have the ERIM house-style cover, which leaves room for an individual touch, dependent on subject and the preferences of the PhD candidate. ERIM covers all costs, based on an overall arrangement with a designer of the cover, an English editor for the final language check, and a publisher for the actual printing of the book. Copyrights remain with the authors. ERIM is permitted to archive the dissertation in the Digital Academic Repository and to disclose it through the ERIM website and international academic repositories like REPEC and SSRN.

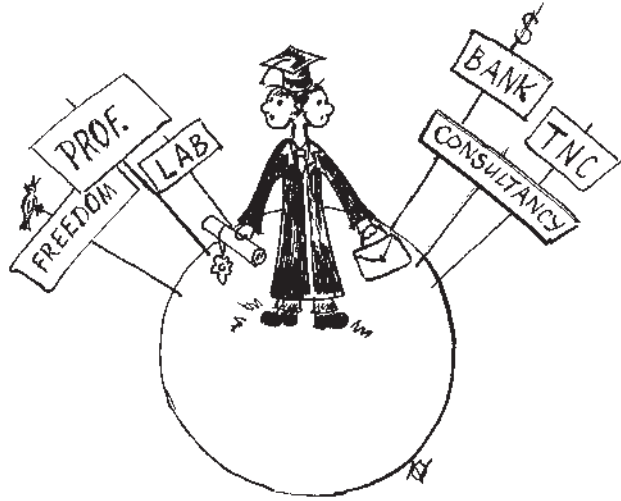
Electronic versions of the ERIM PhD Series dissertations can be downloaded via: <http://hdl.handle.net/1765/1>.

Since the foundation of ERIM some clear trends within its PhD programme can be observed:

- Increase in the overall inflow of PhD candidates per year (so called PhD “cohorts”). The average number of PhD admissions in 1999-2002 was 19. In 2003-2006 it has grown to 28.
- Strong internationalisation. The number of international candidates has grown dramatically, from approximately one quarter of the total inflow in 1999-2002 to one half in 2003-2006. In 2005-2006 ca. two-thirds of ERIM PhD candidates came from outside the Netherlands. It is expected that in the future the number of international PhD candidates will remain high.
- Inflow of women has increased as well. The average number of women entering the PhD programme per year has grown from seven in 1999-2002 to nine in 2003-2006.
- Reduction of drop-out rate. The average drop-out rate (that is exclusive to the early leavers who stop within the first year) over the period of seven years at RSM Erasmus University between 1992 and 1998 was ca. 29%. Since the foundation of ERIM in 1999 it decreased to an average of 9%.
- A shorter time to the PhD defense. The median duration from starting until the PhD defense for RSM Erasmus University was 67 months in 1987-1990, 66 months in 1991-1994, and 65 months in 1995-1998. Since the foundation of ERIM it decreased further to an overall 59 months. The percentage of PhD theses completed within six years has increased from ca. 45% for 1986-1998 to 70% for 1999-2001. ERIM expects that the important changes that have occurred during 2003-2006 (introduction of the MPhil Programme, additional evaluation meetings and monitoring) will help further improve the completion rates.

Overall, there have been many positive developments and ERIM is working on further improvements to our doctoral programme and within the institute.

Currently, about 125 doctoral students from more than 15 countries are enrolled in the programme. They bring ever more cultural backgrounds, professional experiences, and cross-boarder networks with them.



One hundred PhD defenses is an important milestone for the institute. But this book is about people. What did a PhD research mean to our alumni and what career path did they follow? In this book, you will find stories of our one hundred ERIM PhD Series alumni, their supervisors, the Beadle at Erasmus University, and the PhD Council.

The PhD Experience: Up Close with four PhD Candidates

A doctoral degree is the highest level of education an individual in our society can attain. It is hardly surprising then, that it should be the most challenging. Many doctoral students can attest for the grind of labour required to successfully produce their doctoral thesis. Yet many will also attest for the thrill of discovery, the profound sense of achievement, and the recognition it has given them in both academia and the corporate world.

We interviewed four ERIM PhD candidates who recently acquired their doctoral degrees. They discussed their experience of the trajectory, the trials and tribulations of academia, and their plans for the future.



DENNIS FOK

Advanced Econometric Marketing Models



Dennis Fok: The Multidisciplinary Path

Dennis Fok is an assistant professor at the Econometric Institute of Erasmus University. His dissertation entitled: 'Advanced Econometric Marketing Models' was one of the first to combine the fields of econometrics and marketing and received the appellation cum laude.

"I did all my studies at Erasmus University. I started in 1995 as an undergraduate student and later enrolled in my PhD at the econometrics department. Afterwards, I stayed on as an assistant professor. Back then and still now, I feel there is still so much more to learn. As a student you learn a great deal, but it is only when you take a really in-depth look at something that you discover what it is all about, and how many things you still have to learn.

Marketing and Econometrics

In my research I apply econometric techniques to marketing problems. The research I conducted for my PhD cannot really be captured in one sentence. The whole process was about several quantitative models for marketing applications. In my dissertation I studied different topics, and each topic had one central marketing problem that was solved by an econometric model. In other words, the dissertation could be divided into two parts: one about aggregated measures, like market shares, and the other about the behaviour of individuals. Why does someone choose a particular brand? What's the time between purchases? My goal was to model and understand this behaviour.

The econometric models that contributed most to marketing theory, were probably those designed to find out how individuals choose. In the field of marketing, there is a lot of data available. In that sense it was quite easy to find out what someone buys, finding the explanation, however, is much more difficult. The technical, quantitative models were what initially interested us most. At a later stage, the marketing knowledge itself became more important, and we tried to solve these marketing questions.

Today, I try to contribute to models and techniques in econometrics, and for marketing I apply these methods to get

"For econometrics I offer new models and techniques which people can use; for marketing I try to solve problems that are relevant to marketing managers or other academics."

"The big advantage I have here is the option to work on other fields outside of marketing."

insight into serious marketing questions. I try to make a lasting contribution in both areas: for econometrics I offer new models and techniques which people can use, and for marketing I try to solve problems that are relevant to marketing managers or academics.

A *cum laude* dissertation

I was actually one of the first PhD students to graduate from ERIM, and found it an essential part of my experience. My promotor Franses is one of the founders of the institute. One of the benefits of ERIM is you have the opportunity to emphasise the practical part of your research – I think that is important.

My dissertation was awarded *cum laude*. I defended my PhD within four years and a couple of months. Even before the actual defense, I started working as an assistant professor at the econometric department. I began considering an academic career by the third year of my PhD, and by my fourth year I had made the decision. One factor was that it had become clear that there would be a place available at the Econometric Institute. This is not a luxury everybody has, so I decided to take the opportunity.

The future

My plans and hopes are to take the steps that may come after obtaining a PhD: work as an associate professor, and (one day) go from this to a full professor. One thing is for sure, I will stay here for some time to come. The big advantage that I have here is the option to work on other fields outside of marketing. The econometrics department at Erasmus University is the biggest in the Netherlands, which also makes it possible to teach on specialised topic, such as, marketing econometrics.

The one result I am most proud of is the recent acceptance of my articles. Maybe it is luck, but getting my papers into the journals seems to be going quite well. That is a very rewarding result.

If I had to say which of the two fields – econometrics, or marketing – I like the most, I would have to say that, secretly it is econometrics. In all my research in the field of marketing, most of my attention goes to the technical aspects. I usually search for someone to work with me in regards to the marketing aspect, and they are often from the marketing department of RSM Erasmus University or Erasmus School of Economics. You try to do what you do best, and I am better in econometrics than in marketing science. Working together on an article is what I really like, because you get to know people with a different background, who offer a different perspective and input.”

FLOORTJE BLINDENBACH-DRIESSEN

Innovation Management in Project-Based Firms



INNOVATION AVE



Floortje Blindenbach: Business meets Academia

Floortje Blindenbach-Driessen was a chemical engineer and working at the engineering firm Fluor when she decided to join ERIM's doctoral programme. Before finishing her dissertation she moved to the US and now has a part-time position with RSM Erasmus University and a visiting scholar position with the Robert H. Smith School of Business at the University of Maryland. Starting in September 2007 she will work as visiting assistant professor at George Washington University School of Business. Floortje defended her dissertation on "Innovation Management in Project-Based Firms" on June 22, 2006.

"I am very grateful to ERIM for giving me the opportunity and freedom to pursue my PhD, since I did not have a typical educational background. Prior to doing my PhD I was a chemical engineer. While working in the industry, I developed a fascination with the idea of innovation in engineering firms. 'Innovation in project-based firms' became the formal title of the problem I wanted to research.

"As a researcher, you need to think twice about what managers' motives are for not behaving according to your model. It is more likely that your model is incorrect than that managers have really overlooked something. Managers are not stupid."

The first thing I did was to conduct an exploratory study to better understand the issue. I then tested the outcomes with a quantitative survey. In many of the methodology courses I took, the teachers said to focus on one methodology. But if you have something that intrigues you, answering all your questions with just one methodology is impossible. In the end I had both an exploratory case study analysed by means of qualitative analysis, and a survey with multiple respondents that was analysed by means of structural equation models. Because of the ERIM courses, help and collaboration, I was able to grasp and use all these methodologies.

Practice to theory

Coming into a PhD project with a background in business is a big advantage. At Fluor, I got a lot of training on how to collaborate, present, and get organised. I was accountable for every six minutes of my time. Of course, in a PhD you are accountable as well, but only after four years. My background had a big influence on the way I worked, and each week I asked myself 'what did I do?' I was probably much more focused on not wasting time than your average PhD candidate. When you have experience in practice, you are aware that

there is not one fixed solution that fits all. Managers are not stupid: if they do something, they probably have good reasons for doing so. As a researcher, you need to think twice about what their motives are: it is more likely that your model is incorrect than that these managers have really overlooked something.

Weighing up business and academia

As a PhD student you need to have a back-up plan in case your research does not turn out, because there is a realistic chance it will not. When I began my PhD I decided to give myself one year to see if I really liked it, otherwise I would go back to practice.

“Especially in the US,
the competition is
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which may have a high
chance of failure.”

After three years, I again did my own evaluation. I think that is a wise approach: you should not be so consumed in your research that there is no way out. You should ask yourself what your options are if you do not reach your goal. Especially if you go to the US, the competition is fierce. You need to aim high and do challenging research which may have a high risk of failure, and know how to respond to that failure.

I have often pondered if I want to go back to business. The nice thing about working in academia is that you have time to think and very flexible office hours. You work with enthusiastic students and in a collaborative environment. I have children and find that, especially in an engineering firm due to the high interdependence of the work, your presence is very important. In academia, only your output counts, so if you want to do your work in the middle of the night, it does not matter. At the same time I worked really hard during my PhD period, much harder than I had thought when I started. Overall, academia is a very nice place to work.

Women in business schools

Business schools may be predominantly a 'man's world', but I come from the engineering world and by comparison, it is a reasonably women-friendly environment. For example, I recently presented my work at an engineering firm to twenty men and one woman.

From a management perspective, I think it is very important to stimulate diversity. In the current academic system working part-time is especially visible in your research results and publications. Taking time off to take care of your children rarely translates into a significant reduction of your teaching load. I hope that there is some way to accommodate working part-time better in the future, for both women and men."

JUSTIN JANSEN

Ambidextrous Organizations

A Multiple-level Study of Absorptive Capacity,
Exploratory and Exploitative Innovation,
and Performance





Justin Jansen: An ambidextrous academic

Justin Jansen is an assistant professor at the Department of Strategy and Business Environment at RSM Erasmus University and closely involved in the social innovation research being conducted by ERIM. Justin obtained his PhD cum laude in April 2005. His dissertation was based on a research project at the Rabobank Group on balancing innovation and efficiency within organisations. He was awarded the SAP Best Strategy Paper Award and acknowledged with an EUR-Fellowship.

"As a researcher, sometimes you come up with an idea for a new research project that seems almost impossible to achieve, but that is important for your development as a professional scholar. If you pursue this project, one of two things can happen: either you succeed, in which case you learn a great deal. Or you fail, but in the process learn so much that you greatly improve your chances of succeeding the next time you take an ambitious step.

"Some of our important research findings can be found as headlines in newspapers and the term 'social innovation' has been adopted by politicians and opinion leaders."

I had exactly this experience when I submitted one of my first papers to the *Academy of Management Journal* in the second year of my PhD research. It took two years to get the manuscript accepted, but in the end, we succeeded.

Our ambitions for the Dutch Innovation Monitor were also very high. The Dutch Innovation Monitor is a large scale survey among 9000 Dutch companies. We wanted to create a high impact project, and I am very happy to say that we reached that goal. Some of our most important research findings can be found as headlines in newspapers and the term 'social innovation' has been adopted by politicians and opinion leaders. In the spring of 2007, we will start with the second Innovation Monitor and at the end of the year we are organising a conference with business leaders, politicians and researchers to discuss the importance of social innovation for the Dutch economy.

RSM Erasmus University and ERIM have allowed me to pursue these ambitious projects. I think they provide young researchers with great opportunities.

“In regards to the decision of whether to pursue a career in business or in academia, I simply choose both.”

The EUR-Fellowship-grant

I see the EUR-Fellowship as a chance to broaden my scope – it will allow me to conduct research for the next four years. Initially, my research will be focused on the subjects related to my dissertation, but I also plan to explore surrounding topics such as entrepreneurship and innovation.

My other main goal for this period is to meet many more well-known scholars and extend my network worldwide. This will help me determine what research is most relevant, assist me in writing better papers, and show me how to get valuable research findings published. I have learnt that well-executed research findings are not enough: you must also be able to persuade companies and people to participate in your research.

Research in the ‘eredivisie’

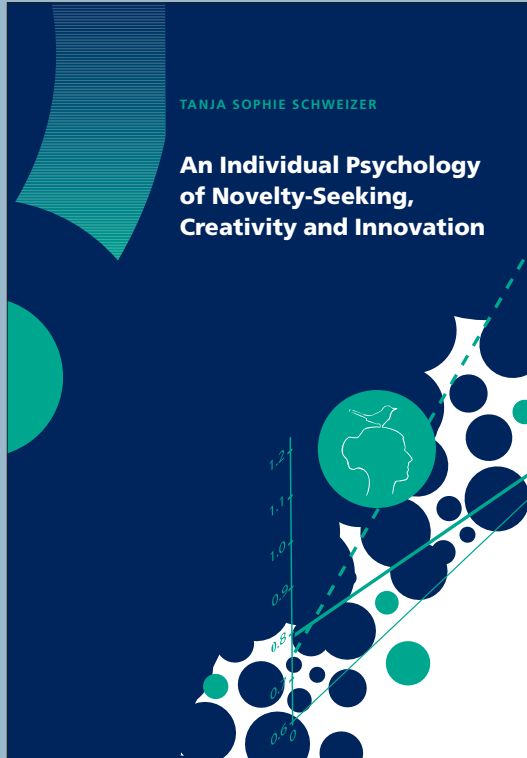
In regards to the decision of whether to pursue a career in business or in academia, I simply choose both. I have never considered myself one-hundred-percent an academic, which is related to my belief that research should be closely related to business practice. The best researchers are ambidextrous: they combine scientific rigor with business relevance, and the two are not mutually exclusive. If I was asked to choose between getting a paper accepted in AMJ or national attention with the innovation monitor I would say that a publication in a primary journal does lay down a long-term foundation for national attention – you can achieve both, like we have with the innovation monitor.

If you want to compete in the ‘eredivisie’ (Dutch first division of national soccer league) of business research however, you must work hard. It is a challenging arena on an international level, but that is what drives me. I start early in the morning to develop my ideas and write papers. My afternoons are mostly dedicated to folding questionnaires in envelopes and sticking stamps to envelopes. Of course, that is an exaggeration, but I do believe that people should not be scared of doing hands-on work.

Working is important to me, but an active private life is even more important. I like surfing and sailing. Once a year I make a long trip with my girlfriend somewhere outside of Europe. I can spend a full year reading about the country we will be travelling to. We both love learning about new cultures, getting in touch with local people and experiencing their way of life. We also try to leave the 'Lonely Planet trail' and find our own way through a country. In the last few years we have been to Cuba, Vietnam and Nicaragua. Like business innovation and scientific exploration, it is great to visit places that most people have not discovered yet."

TANJA SOPHIE SCHWEIZER

**An Individual Psychology
of Novelty-Seeking,
Creativity and Innovation**





Tanja Sophie Schweizer: **The freedom to find your own path**

Sophie Schweizer studied linguistics, economics, philosophy, and psychology at the Universities of Stuttgart, London, Amsterdam, Madrid, Rotterdam and Milan, before joining ERIM's doctoral programme. She received her ERIM PhD degree in December 2004 for her thesis entitled, "An Individual Psychology of Novelty-Seeking, Creativity and Innovation". Since January 2005 she has been an assistant professor at the Department of Clinical Neuropsychology, Free University of Amsterdam. Sophie made a remarkable move from the realm of management science to brain research and the field of neuropsychology.

"My PhD research was a process of transformation, which illustrates how free I was during my trajectory to develop my own ideas. My PhD thesis was about the process of generating something 'new' – I was curious about what it is that makes people search for 'the new'.

"The moment in my PhD trajectory that I began listening to my own voice, was the moment I began to feel I was pursuing something worthwhile. It was also the moment I felt my work accelerate."

It was during my trajectory that I discovered my fascination for brain research. Usually when I find something interesting, I get absorbed in it very quickly. It was this same drive that caused me to join ERIM for my PhD and which later, caused me to move from management research to clinical neuropsychology.

There are many PhD programmes where you are far less free than in the ERIM programme. I felt ERIM was supportive where I needed support, but gave me space where I needed space. This also made it possible for me to move from management science to clinical neuropsychology. After all, this is exactly what science lives on: the space to develop in the necessary direction. It is a compliment to the ERIM PhD programme that an individual is allowed to move in whichever direction has the most promising questions.

Finding your own path

The moment in my PhD trajectory that I began really listening to my own voice was the moment I began to feel I was pursuing something worthwhile. It was also the moment I felt my work accelerate: all of a sudden things developed faster and more easily. This should probably happen in any PhD

project – the emergence of that foolhardy conviction that your thoughts are more important than what anybody else thinks; that kind of egocentric ‘I know better’. One can smile about that later, but it still remains the moment that a new scientist is born. This can also be the most difficult moment, since you are forced to separate yourself in a sense from your PhD supervisor. But if people keep on walking in other people’s footsteps, then their time of deserving a PhD has not yet come.

“It is a compliment to the ERIM PhD programme that an individual is allowed to move in whichever direction has the most promising questions.”

I believe the hardest part about finding your own way is developing confidence in your own ideas and capabilities, and having the willpower to fight for these ideas. This also means that you are becoming more and more competent in a particular field. A nice result of this is that, at some point, people begin to contact you for advice or invite you to join them in research projects. After I had finished my PhD for instance, I was contacted by the University of Sydney who had found my ERIM dissertation in their library. They had seen the model I had developed and invited me to travel to Australia to help them build an Australia-wide project on the basis of my model. It was such a reward that people had found my work useful. These are the moments when I feel I have chosen the right path, and feel so grateful for all the support I have had.

I think that in this virtual world, a successful PhD does not depend so much on where you are physically, as to whether or not you find your own path. And this depends a lot on your ability to get in touch with inspiring people. If you find them in your own university then that is great, but sometimes you need to look further a field.

ERIM was very supportive of me. I saw many universities before I started my PhD research at ERIM, and I would not have changed environment after finishing my PhD if it had not been for my drastic switch to brain research in neuropsychology.”

The Role of Supervisor – Nurturer of Young Talent

Inside the worlds of three PhD supervisors

How important is the role of the supervisor in the success of a PhD dissertation? As any PhD student will tell you – it is instrumental. A great supervisor will play the role of coach and teacher, mentor and guide; he or she will provide their students with support and direction, challenge and inspire them to reach their potential, help them to establish broad and fertile networks in the academic and/or business world, and finally, help them to make a successful transition into the next stage of their academic or corporate career. So influential is the role of the supervisor that it can help set the tone for the rest of the student's career.

As many supervisors point out, however, the relationship between doctoral student and doctoral supervisor is also a two-way street, with the supervisor often learning as much during the trajectory, as the student themselves. It is therefore a unique relationship that lives on cooperation and collaboration, and ultimately leads to the creation of a unique product – that of new ideas or knowledge.

Three of ERIM's supervisors were interviewed for this book on their experiences of supervising the completion of a PhD trajectory. They share their own experiences of studying for a PhD, their views on the role of the supervisor, and what they see as the value of the ERIM PhD programme.



Frans A.J. Van Den Bosch

Frans van den Bosch was previously affiliated with the Schools of Economics of the Erasmus University Rotterdam, where he graduated *cum laude* in economics. In 1988, he was appointed professor of management of organisation-environment interactions at RSM Erasmus University. He is an ERIM Fellow and chairman of the programme advisory committee of ERIM. Van den Bosch obtained his PhD degree in law at Leiden University.

Recently, Van den Bosch was asked to be treasurer of the board of the Foundation Erasmus House Rotterdam, which promotes the vision of Erasmus on education and tolerance.

“[Today’s programme] is a complete contrast to my own PhD, where I was writing the thesis in isolation and with no more feedback than some question marks and a line through a piece of text.”

“In the beginning of the nineties (and during my own trajectory), a structured PhD programme did not exist. My own experience of this made me especially eager to make improvements to the context in which PhD research takes place.

I was chairman of the PhD committee of the school for about ten years before the ERIM PhD programme. Developing the PhD programme was an interesting experience that I shared with Jo van Nunen and Berend Wierenga.

During this time, we tried to redefine the context from an undefined trajectory to a business-like definition of a research project. Projects would have a start and a finish, and discernable enabling and inhibiting factors that would influence the success of a project.

We implemented several innovations to the PhD process, like improving the quality of a research proposal by engaging peers at other schools. We also created mechanisms that incorporate discipline into the programme, stimulating people to finish their thesis on time. With the start of ERIM in 1999, this improvement process accelerated. I am very happy with the current ERIM PhD programme.

The role of the supervisor

The best PhD projects are the ones that you would like to do yourself. One of the success factors of our department is that we (Henk Volberda and myself), jointly supervise the PhD projects and always work alongside our students. Our

department can be seen as the metaphor for a carpenter's workshop. This is a complete contrast to my own PhD where I was writing the thesis in isolation and with no more feedback than some question marks and a line through a piece of text.

For us, the PhD projects are explorations of new knowledge that has to be found and harvested. We try to manage our candidates intelligently to ensure their research questions are tackled within the four-year period, that interesting journal publications are written, and that the research is relevant for management.

A people business

The thesis is the baby of the PhD candidate – our role is to ensure the baby will be born and looks attractive. Allowing for freedom is an important ingredient, but ensuring our PhD candidates obtain critical and independent minds through high-quality training is also a part of this.

Coaching PhD candidates is a people business. If there is no chemistry between the people involved, then the project is doomed. In our department, we would not enter a PhD project with a pure 'einzeltanger', because teamwork is required.

"Most PhD candidates develop into two distinct types: either typical scholars, or those who are attracted by putting managerial research into practice."

At ERIM, many departments and research groups implement parts of the PhD programme differently according to their own ideas and 'business models'. I think this is a valuable thing, as there are many paths to success. I, of course, believe in our approach, as it is close to our own way of doing research and we are able to publish ERIM P-star publications with our own PhD candidates, within four years. That is a result we are proud of."

The PhD Candidate

A PhD project looks like a cooperation model, with each party bringing in his or her own motivation, expectations, skills and experience. It is not a one-way street, knowledge flows in both directions. The candidate is usually less aware of that, but a PhD thesis can be very insightful for a us as professor.

PhD candidates often develop into two distinct types. Let me illustrate with two examples. Peter Boone obtained his degree in 1997 with innovative, qualitative research on knowledge flows in multinational businesses. In this project we did

comparative research in three large multi-unit companies located in Japan, America, and Europe. The European company was Unilever. Boone caught the eye of executives and before he had defended his thesis, he was offered a high-flying management position at Unilever. He entered the business world, very well-qualified.

Purseij Heugens represents the other type. Together with Cees van Riel, I supervised him in a challenging research project of great practical relevance using innovative quantitative methods. After his defense in 2001, Pursey moved to two other universities and is now back within ERIM's walls. Most PhD students are like Heugens or Boone: either typical scholars, or attracted by putting managerial research into practice.

Desiderius Erasmus and ERIM

I have studied Erasmus' promotion trajectory. He obtained his PhD in Italy, and there are accounts of his promotion ceremony. In the ceremony, the promotor asks: 'Where did this man obtain all that knowledge?' Placing Erasmus in the context of ERIM, the ERIM PhD programme is open for anyone prepared to use his or her talents to contribute to new scientific knowledge that can eventually 'better' the world. That is the spirit of Erasmus alive today at Erasmus University.

Moreover, Erasmus is a key example of a cooperating researcher. His whole life was spent cooperating with scholars in Europe. This Erasmian value is reflected at ERIM in the international orientation of the programmes and the large number of international students we have at the university."



Berend Wierenga

Berend Wierenga joined Erasmus University in 1983. He was Dean of RSM Erasmus University from 1986 until 1989 and ERIM's first Scientific Director (1999 – 2004). He was also Chairman of the Marketing Department (1983-1993, and 1997-2001). Berend Wierenga has been a visiting scholar at several international business schools, including the Stanford Graduate School of Business, INSEAD, and the Wharton School.

"If a school has excellent PhD candidates, they will pull up the quality level of research for the entire school. If they pose provocative questions, our faculty must run harder to answer those questions. I think the ERIM PhD students are increasingly playing this role."

"I obtained my PhD degree in Economics at Wageningen University. This was a time when you would typically work on your dissertation on top of being an assistant professor, and you were almost entirely on your own. There were no courses – it was a purely individual process and a typical example of the master-apprentice model. Moreover, it was an extra activity, because a PhD degree at that time was not required for an assistant professorship.

After obtaining my PhD degree, I became a visiting scholar at Stanford University for a full year. This was the first time I came into contact with a 'real' business school, as we did not yet have any business schools in the Netherlands. During this time, I became familiarised with the American system, and I took a number of PhD courses. My first international publication originated from that visit, making me the first Dutch academic to publish in the *Journal of Marketing Research*. I was certainly proud of that achievement.

Studying for a Doctoral Degree in the 1970s

I had to put a lot of effort into collecting and processing data for my PhD research. My research was on the subject of brand purchasing decisions by consumers and right before the time of the broad availability of computers. This meant dealing with handwritten records of a consumer panel containing the purchases of each panel member.

I had to encode the records and put them on over thousands punch cards, which then had to be fed into a mainframe computer. And there was only one computer on the entire university campus! I would reserve the computer for the evenings, and spend hours entering punch cards. In my memory, there is something romantic about that now.

Sometimes the machine would stop and I would have to remove a distorted card and start from the beginning. As you can imagine, I did not feel like doing that too often, so I wrote a small computer programme so that when an error occurred the computer could retrace which punch card it had already read.

When the analyses were done I sat down to write my thesis. After each chapter my promotor looked at it and I processed the feedback. Writing was a process that took about a month per chapter, followed by a couple of months of reading by others.

American Programmes and Best Practices

I was the Dean of RSM at the end of the 1980s. In 1990, I returned to the US, this time as a visiting professor at the Wharton School. This gave a new pulse to my research. Ten years later, after my term as scientific director of ERIM, I again spent a period of six months at the Wharton School. These long stays abroad, the conferences, and the visits to other business schools, gave me a good picture of what different business schools look like and how their PhD programmes are organised.

The ERIM programme is gaining in resemblance to American best practice models. However, there are still many differences. In America, the programme must have a set of good courses – ERIM has good courses and is still working on more. But in the US, a PhD programme is more a training trajectory; at ERIM it is a research trajectory with training alongside. At ERIM a professor develops a project and will start looking for a PhD candidate. In America, a candidate applies for a school and once accepted will start taking courses without committing to a research subject. Gradually a subject comes into focus and the PhD candidate finds a promotor (supervisor) later in the project.

The core difference is that we have a project and then search for a student; in America there is a student and she/he must try to interest a professor. Our model holds a danger: when a professor has a pet-project he can be tempted to quickly hire a student so as to get the project started. Fortunately, ERIM plays a strong role in the screening of the candidates to prevent that.

“For my PhD research, I had to encode these records and put them on over thousands punch cards, which then had to be fed into a mainframe computer. And there was only one computer on the entire university campus.”

The ERIM PhD programme

An excellent research environment, inspiring promoters, and a sound research infrastructure are the main conditions needed for a good-quality PhD. At ERIM PhD students usually share an office with another PhD candidate which is very nice; in American schools, students are usually housed in relatively small cubicles. In that sense we treat our PhD candidates very well. More important of course, is the intellectual environment, and in very good schools students are frequently willing to accept a small and crowded spot, if they are in an inspiring environment. I like to see that spirit in ERIM PhD students – the drive and energy to get the most out of the four-year programme.

The quality of the PhD programme is not only important for the students; it also has an important function for the school. Top scientists expect a school to have an excellent PhD programme. The ERIM Doctoral programme therefore makes Erasmus University attractive for talented faculty. If a school has excellent PhD candidates, they will pull up the quality level of research for the entire school. If they pose provocative questions, our faculty must run harder to answer those questions. I think the ERIM PhD students are increasingly playing this role.

Ultimately for a business school, a high-quality PhD programme is very important in order to stay competitive with international peers.”



Albert Wagelmans

Albert Wagelmans is a professor of management science at the Econometric Institute of the Erasmus School of Economics. Professor Wagelmans was associate director of ERIM from 1999 to 2003, and appointed ERIM Fellow in 2006. Since September 2006, he has been the chair of the Econometric Institute. Albert Wagelmans defended his PhD thesis entitled 'Sensitivity Analysis in Combinatorial Optimisation', in 1990.

"I studied econometrics at Erasmus University with a specialisation in operations research. After graduating from the master's programme, I did a PhD degree at this same university. Alexander Rinnooy Kan, at that time still a professor of operations research, was my supervisor, and therefore my research had a large quantitative aspect to it. This is still something you see in my research today.

"Seeing my name in print does not give me as much satisfaction as realising that I have just solved a problem."

We conduct quantitative analyses of systems, and develop methods for planning problems. Within that area, our focus is on several topics that include planning of public transportation and production planning. These latter subjects are what I am best known for today, judging by the references of other academics to my publications. They relate to a whole line of research that is about designing more efficient solutions for production planning problems. An example of our research in this area is in non-trivial solutions to simple production planning problems. In this case, stating the problem is simple – analysing the problem and coming up with good planning methods for that problem? That is the challenge.

Research as Problem-solving

Personally, I think of research as problem-solving. As a researcher, you are confronted with a problem, and you attempt to find a more efficient solution to that problem than what is currently out there. The ultimate goal of my research is to obtain the most efficient way of doing certain operations.

Of course, the other things that come with this process – the recognition, publications in prestigious journals – they are by-products, not the ultimate objective. Seeing my name in print does not give me as much satisfaction as actually sitting behind

my desk and realising I have just solved a problem. This gives me an incomparable kick. It is about realising that you are the first person to understand a problem or how it can be better-solved.

Practical relevance and application

I understand how to translate my research into results. This has nothing to do with a science-to-business translation process but is about the starting point of your research. It is important to choose problems that are viewed as interesting by your research community.

I have an important criterion that comes with choosing a research topic: I ask if it is something that anybody else in my area could have also achieved. If the answer is yes, I do not do it. I want my research to invite the response: 'I am not sure if I could have achieved a similar result'.

This attitude has a lot to do with the standards that I learnt while working as a PhD student under Professor Rinnooy Kan. Rinnooy Kan taught all his students that your audience is not located in the Netherlands or in Europe, but the whole world. Your work should therefore be of interest to the whole world.

This is not the single key for getting a publication in a high-ranked journal, but it is surely a very important step. It is rare that people aim for an intermediate level result and end up with a world-class result. You can compare it with pole vault jumping: if you aim for a specific height, you will never jump higher.

The role of the supervisor

Your role in the research process changes as your career develops. When you are working on your PhD thesis and in the years following, your time is spent on your own research. However the more advanced you get in your career, the more you become involved in other obligations and the less time you have for problem-solving. You work instead with younger people, and try to motivate them to achieve great results together.

The supervisor role is predominantly that of coach. One of the things that I am most proud of in my career is having done well in making that transition from researcher to supervisor. I think I have succeeded in motivating younger people to do good to excellent research under my supervision. I have also come to understand that this is at least as important as the primary work involved in research.

“The ‘eureka moment’ is incomparable; if I have one three times a year that is already a lot.”

Both roles have been satisfying for me, in different ways. The students are now the first to see the right answer and I am the second, however I still get the satisfaction of seeing certain intuitions turn out to be true. This is a little less exciting than being the first to know something, which is what you could say, the ‘eureka moment’. The ‘eureka moment’ is incomparable: if I have one three times a year that is already a lot.”

The PhD Defense Ceremony: Present, Past and Future



Ton Molendijk

EUR Head of University
Ceremonies since 1980

A doctoral degree is not just a diploma. In the academic world, it means freedom. Through obtaining a doctoral degree, a doctoral student proves that he or she is capable of conducting scientific research independently, a profound achievement accomplished after years of intense scientific research. It is natural then, that this accomplishment should be concluded in a unique and special way: with a public defense of his or her dissertation in front of a board of professors, and in the presence of family, friends, colleagues and other interested parties.

The Erasmus University ceremony has remained the same since the foundation of the Netherlands School of Commerce in 1913, one of the lawful predecessors of the Erasmus University Rotterdam. The first doctoral degree from the Netherlands School of Commerce was awarded in 1918.



The PhD defense committee award Willem Schram his doctorate (23 November, 2006)

Between the graduation ceremonies of 1918 and 2007, not a great deal has changed. One difference is that, in today's proceedings, the doctoral student is requested to explain his or her dissertation in a way that everyone can understand, before being questioned by a board of professors, a custom that started around twenty years ago. Another difference is a result of the digital age. Doctoral students are now using digital technology to present their dissertations via PowerPoint presentations. Dissertations are also not only available in printed form, but on CD-ROM and online.

But what is it about this ceremony that makes it so special? Obtaining a doctoral degree is such an important event in people's lives, that some compare it with their wedding day. It is not such a strange comparison: just like marriage, there are several traditions bound to the graduation ceremony.

The professors all wear their robes as a sign of dignity and a display of ideals: professors are bound by their devotion to science and their responsibility to society. Indeed, the title 'professor' has its origins in Latin, and is derived from the word 'profiteri' or 'professus', meaning someone who teaches in public. While defending his or her dissertation, the doctoral student is assisted by two people, in Dutch called 'Paranimfen'. They stand on either side of the doctoral student and actually wear the same clothing.

All of this is presided over by the registrar (in Dutch 'pedel'). The registrar guards the protocol and ensures that everything goes well during the thesis defense. His or her most obvious task is to declare, after the 45 minutes of questioning, 'Hora Est'. Translated from Latin this means 'The time is there'. The function of the registrar dates from the twelfth century, when the function of *bidellus* came into being at the University of Paris. The *bidellus* arranged many things within the school in which he was working, and the university as a whole was served by the *bidellus generalis*. The *bidellus generalis* would precede the vice-chancellor at public events, announce dissertation defenses, and handle general university matters.

All these rituals have remained the same for almost 100 years; but what of the future?

How will the graduation ceremony look in the next 100 years? Will people obtain a doctoral degree at all? Will a PhD defense become a digital conference, where members of the commission and the doctoral students themselves are situated in different places around the world? Will the doctoral certificate, which nowadays is written and sealed, be replaced by a microchip? Or will the tradition stay the same for another 100 years?

For the moment, no such plans exist to revise the PhD defense. For a period of such intense work and significant accomplishment, the PhD defense seems a very fitting conclusion.

Ton Molendijk,
EUR Head of University Ceremonies since 1980

Representing PhD's



From left to right:
Oliver Weidenmuller, Remco Prins,
Patrick Verwijmeren

One hundred ERIM PhD candidates have finished their dissertations: a significant milestone and the first of many to come. We would like to congratulate ERIM on this achievement, together with all the PhD candidates who contributed to the total one hundred. Achieving such a large number of dissertations in such short period of time is proof of the inspirational, well-organised, and research-focused environment our university offers. Still, it is not only about quantity. Quality is shown by the high number of top-quality articles published by our PhD students during and after their trajectory. After defending their dissertations, many have accepted offers in prestigious academic institutions, or entered rewarding professional careers.

Reaching the one hundred mark should serve to inspire current and future generations of PhD candidates and the programme management to strive for a continuation of this success story. Successfully completing a dissertation however, is not only determined by the academic excellence of a school, but also by the support and care offered in all areas of PhD life.

The PhD council's objective is to ensure that PhD students find their environment sufficiently nurturing as to allow them to fully exploit their capacities. This includes monitoring the quality and support of ERIM, and encouraging social events as an essential part of the trajectory.

In general, the PhD council focuses on:

- Providing feedback on the quality and quantity of the programme of study;
- Promoting facilities for PhD candidates;
- Improving the research proposals of PhD candidates;
- Providing feedback for improving the quality of the supervision;
- Promoting contacts among PhD candidates;
- Easing the immigration process;
- Assisting with orientation in Dutch society.

We represent the interests of all PhD candidates who are officially affiliated with the research school of ERIM. This concerns all matters that play a part in the completion of the trajectory. At ERIM, PhD candidates are strongly involved in the continual process of programme innovation and improvement. The PhD council conducts independent surveys and monitors recent tangible and intangible developments among our colleagues. The assurance of the quality of education serves both ERIM and our students.

Academic and organisational involvement aside, our primary task is to foster a rich social environment for our graduate students. Examples of this include the annual New Year's Dinner, trips, and sport events, all of which allow PhD students from different fields to mingle. We also keep in touch with each other via our website www.irim.eur.nl/phdcouncil.

We believe that socialising, exchanging ideas, and working with other PhD students can only have positive effects on the quality of dissertations. We are certain that our attempt to encourage interaction among all disciplines, is not only reflected in the innovativeness of the last 100 dissertations, but will manifest itself fully in the many more to come, and the achievements of our alumni. We now strive to build upon these achievements by supporting our current PhD candidates in the best way possible.

The completion of one hundred dissertations is a great achievement for ERIM and the involved schools. It is proof of the exceptional quality of the academics in the various fields, and the overall motivation to ensure ERIM is a peak in the international academic landscape.

Again, we congratulate ERIM and all past PhDs.

The PhD council 2006-2007:

Remco Prins, Patrick Verwijmeren, Oliver Weidenmuller

The Pride of One Hundred Doctorates



Prof. dr Marno Verbeek

ERIM Director of
Doctoral Education,
2003-2006

Writing a PhD thesis is a unique experience. With very few exceptions, the first time is also the last time. Moreover, each PhD student has a rather unique topic (certainly in the field of business and management), a unique personality, and a unique way of coping with the different trials and tribulations that writing a thesis brings along. As director of doctoral education from 2003 until 2006, I had the pleasure of being able to closely observe this process for a large number of PhD students. Fortunately, many have them have now finished and their profile is included in this collection. Undoubtedly, the others will follow in the next few years.

Almost always, the process of writing a PhD is highly nonlinear, with the amount of progress made varying substantially over time. Many people experience a PhD “dip” at least once, during which progress is slow and seemingly negative. Fortunately, most of them recover. Nevertheless, other hurdles are to be taken too, such as: promotor who leave Erasmus University, promotor who have other opinions on where the project should be going, experiments that do not yield the expected results, personal problems related to health and relationships, high teaching loads, and many many others. Obviously, ERIM tries very hard to provide an environment in which these problems can be overcome without too much loss.

Identifying the success and failure factors of PhD trajectories is actually a research topic in itself. Do tight deadlines help? And does the external evaluation of a research proposal? How useful is the role of an extensive course programme? What is the role of the research master? Should there be tough evaluation meetings? At the end of the day, my view is that the most important element for success or failure, for writing a very good PhD thesis rather than just a good one, is human capital. All the rest is helpful, but without the right people it does not amount to much. Therefore, I would like to see this

collection of 100 PhD theses as evidence of the human capital that is brought together at ERIM: the candidates, their supervisors and the supporting staff. I hope you agree with me that we have many reasons to be proud.

Prof. dr Marno Verbeek

ERIM Director of Doctoral Education, 2003-2006

Business Processes, Logistics & Information Systems

Name	PhD Defense	No.	Page
Heidi Alwarez	02-06-2006	80	113
Marcel van Assen	12-05-2005	56	93
Floortje Blindenbach-Driessen	22-06-2006	82	115
Niels-Ingvar Boer	17-06-2005	60	97
Csaba Attila Boer	21-10-2005	65	105
Marisa P. de Brito	12-02-2004	35	87
Dominique Delporte-Vermeijeren	09-05-2003	20	79
Paul C. van Fenema	10-10-2002	19	77
Moritz Fleischmann	05-10-2000	2	61
Andrea Ganzaroli	10-10-2002	18	75
Wilco van den Heuvel	07-12-2006	93	117
Ksenia Iastrebova	02-03-2006	77	109
Otto Koppius	16-05-2002	13	71
Julia Kotlarsky	16-06-2005	59	95
Peter de Langen	22-01-2004	34	85
Tuan Le Anh	21-04-2005	51	91
Tho Le-Duc	23-09-2005	64	103
Ramon Lentink	10-02-2006	73	107
Maria del Pilar Londoño	30-03-2006	78	111
Robert van der Meer	28-09-2000	1	59
Kevin Pak	24-06-2005	61	99
Leon Peeters	06-06-2003	22	81
Vlara Popova	01-04-2004	37	89
Pauline Ratnasingam	22-11-2001	9	67
Dolores Romero Morales	12-10-2000	3	63
Kees Jan Roodbergen	10-05-2001	4	65
Iris Vis	17-05-2002	14	73
Michiel Vromans	06-07-2005	62	101
Ton de Waal	19-06-2003	24	83
Matthijs Wolters	08-02-2002	11	69



Operational Control of Internal Transport

Promotors: Prof.dr. M.B.M. de Koster
Prof.dr.ir. Dekker

EPS-2000-001-LIS
<http://hdl.handle.net/1765/859>

001

Operational Control of Internal Transport considers the control of guided vehicles in vehicle-based internal transport systems found in facilities such as warehouses, production plants, distribution centres and transshipment terminals. The author's interest in research having a direct use for practice has resulted in a combination of theoretical and practical research in vehicle-based internal transport systems. An overview is given of the related literature and results are presented that show how different vehicle dispatching rules behave in different environments.

My findings have led to many articles in national and international publications, and even a best paper award

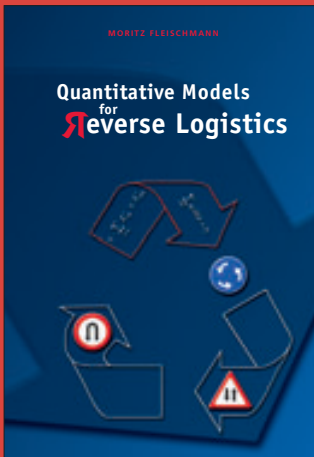


"One of the best pieces of advice I can give any aspiring PhD candidate is to stay focused on the practical value of your research. Many researchers create exotic plans and models in an attempt to capture and improve reality, but I have seen a lot of research energy wasted because theory and practice were too removed from each other.

I started in my doctoral position in order to gain a more in-depth knowledge of supply chain management. I was also attracted by the opportunity to explore case studies, go abroad, and develop knowledge in a multidisciplinary and international environment. My thesis provided two important insights – the first was concerning reaction, waiting and lead times, and showed that they can improve considerably with only a little extra information beforehand. The second was in relation to the sequence of carrying out multiple simultaneous tasks in a logistic environment. My findings have led to many articles in national and international publications, and even a best paper award. A sample selection can be found in: *Journal of the Operations Research Society*, *Journal of Operational Management*, *Springer-Verlag* and *Material Handling Research*.

It has also been very fulfilling to see my results successfully applied by the business world: two different companies (a glass manufacturer and computer parts wholesaler) have significantly improved their logistic warehousing activities using my results.

Today, I continue to use and develop my findings in my role within the supply chain strategy group of Deloitte Consulting. My PhD gave me the opportunity to learn about myself, my goals and to establish a firm network of friends and respected colleagues."



Quantitative Models for Reverse Logistics

Promotors: Prof.dr.ir. J.A.E.E. van Nunen
Prof.dr.ir. R. Dekker

EPS-2000-002-LIS
<http://hdl.handle.net/1765/1044>

002

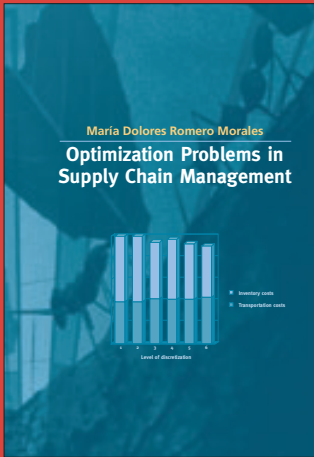
Economic, marketing, and legislative considerations are increasingly leading companies to take back and recover their products after use. From a logistics perspective, these initiatives give rise to new goods flows from the user back to the producer. The management of these goods flows opposite to the traditional supply chain flows is addressed in the recently emerged field of Reverse Logistics. This monograph considers quantitative models that support decision-making in Reverse Logistics. To this end, several recent case studies are reviewed. Moreover, first hand insight from a study on used electronic equipment is reported on. On this basis, logistics issues arising in the management of "reverse" goods flows are identified. Moreover, differences between Reverse Logistics and more traditional logistics contexts are highlighted. Finally, attention is paid to capturing the characteristics of Reverse Logistics in appropriate quantitative models.

A close look at practice provides a great source of research inspiration



"What motivated me to follow the doctoral research path was the opportunity to spend my time thinking about topics that intrigue me. I have never regretted this choice. One of the many things that I have learnt along the way is not to take myself too seriously. My PhD provided insight into how to incorporate recycling into logistics planning. It has since led to publications in the *European Journal of Operational Research, Production and Operations Management, and Interfaces*. My thesis has also been published commercially in *Springer Verlag: Lecture Notes in Economics and Mathematical Systems*.

In addition to publication, results of my PhD thesis have been used by IBM to enhance the re-use of computer equipment as spare parts. The PhD position offered me an excellent opportunity to enter the international scientific community. I am now an associate professor of supply chain management at RSM. A close look at practice continues to serve as a great source of research inspiration to me."



Optimization Problems in Supply Chain Management

Promotor: Prof. dr. ir. J.A.E.E. van Nunen

EPS-2000-003-LIS

<http://hdl.handle.net/1765/865>

003

The goal of this thesis is the study of optimisation models, which integrate both transportation and inventory decisions, to search for opportunities for improving the logistics distribution network. In contrast to Anily and Federgruen, who also study a model integrating these two aspects in a tactical-operational setting, we utilise the models to answer strategic and tactical questions. We evaluate an estimate of the total costs of a given design of the logistics distribution network, including production, handling, inventory holding, and transportation costs. The models are also suitable for clustering customers with respect to the warehouses, and through this they can be used as a first step towards estimating operational costs in the logistics distribution network related to the daily delivery of the customers in tours.

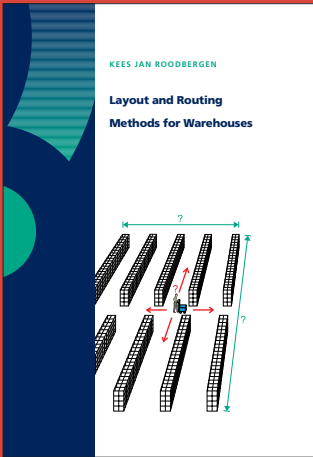
The main focus of this thesis is the search for solution procedures for these optimisation models. Their computational complexity makes the use of heuristics solution procedures for large-size problem instances advisable. We will look for feasible solutions with a class of greedy heuristics. For small or medium-size problem instances, we will make use of a Branch and Price scheme. Relevant characteristics of the performance of a solution procedure are the computation time required and the quality of the solution obtained if an optimal solution is not guaranteed. Conclusions about these characteristics are drawn by testing it on a collection of problem instances. The validity of the derived conclusions strongly depends on the set of problem instances chosen for this purpose. Therefore, the second focus of this thesis is the generation of experimental data for these optimization models to test these solution methods adequately.

Dolores Romero Morales



Dolores Romero Morales is a university reader in operations research at University of Oxford, Said Business School, in the UK. Her main research focus is supply chain planning and data-mining.

Dolores did a BSc and MSc in mathematics at Universidad de Sevilla in Spain before coming to Erasmus University Rotterdam for her PhD in operations research. She has worked at several well-known universities around Europe and published in *Management Science*, *Operations Research*, *INFORMS Journal on Computing* and *European Journal of Operational Research*.



Layout and Routing Methods for Warehouses

Promotors: Prof.dr. M.B.M. de Koster
Prof.dr.ir. J.A.E.E. van Nunen

EPS-2001-004-LIS
<http://hdl.handle.net/1765/861>

004

This thesis discusses aspects of order picking in warehouses. Order picking is the process by which products are retrieved from storage to meet customer demand. Various new routing methods are introduced to determine efficient sequences in which products have to be retrieved from storage. Furthermore, a new method is given to determine a layout for the order picking area. The objective is to minimise the average distance travelled per route by the order pickers.

The results of my doctoral research have been applied in the warehouses of both De Bijenkorf and Ankor BV



"My PhD thesis discusses aspects of order picking in warehouses. Order picking is the process by which products are retrieved from storage to meet customer demand. Various new routing methods were introduced to determine efficient sequences for retrieved products. Furthermore, a new method is given for determining the layout of the order picking area. The general objective is to minimise the average distance travelled per route by the order pickers.

I have had papers published in the *European Journal of Operational Research*, *International Journal of Production Research*, *Interfaces*, and *IIE Transactions*.

The results of my doctoral research have been applied at the warehouses of De Bijenkorf and Ankor BV, and the effects at both locations have since become the subject of published papers.

I am currently an assistant professor of logistics and operations management at RSM Erasmus University."



Interorganizational Trust in Business to Business E-Commerce

Promotors: Prof.dr. K. Kumar
Prof.dr. H.G. van Dissel

EPS-2001-009-LIS
<http://hdl.handle.net/1765/356>

009

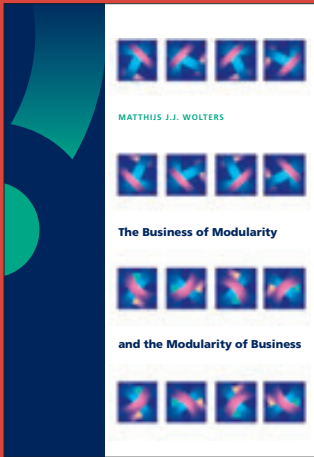
This thesis aims to empirically examine the role of inter-organisational trust (trading partner trust) in e-commerce participation. By doing so, trust behaviours in business relationships were identified. The findings from ten organisations that formed four bi-directional dyads and two uni-directional dyads contributed to a model of inter-organisational trust within bi-directional dyads. The model identified the development of inter-organisational trust in three stages and identified trust behaviours and characteristics involved in the gradual development of trust from one stage to the next stage, thus providing an awareness of trust behaviours that trading partners need to develop. For example competence trust emphasised on an individual or team's ability and skills to operate e-commerce system and applications (i.e. is at a technical level). Predictability trust examined the reflections and interpersonal experiences of the trading partners based on past experiences, and a consistency of trading partner behaviours. Goodwill trust examined the institutional (i.e. the organisation's image, reputation that determines the strategic benefits). Overall, the findings indicated that trust in inter-organisational relationships clearly matter.

My PhD developed in me a confidence that I can achieve anything I put my mind to



My personal experience demonstrates the flexibility offered by ERIM when I completed the majority of my PhD offshore. I spent one semester in spring 1999 Rotterdam developing my research proposal and model, and completed the remaining dissertation independently by communicating with my supervisor via email. This method of research taught me self-discipline, persistence, patience and commitment. Undertaking a PhD programme at Erasmus University also improved my analytical and critical thinking skills.

My PhD research was supported by numerous grants. In addition to receiving university grants I received the National Science Foundation grant in 2002 for US\$60,000. The findings of this study led to many publications in national and international refereed journals, conference proceedings, chapters in books and newsletters. My work was cited by other researchers. I extended and updated the dissertation to include up-to-date current information on theory and findings. The dissertation was published as a book by Idea Group Publishing in 2003. After completing my PhD, in January 2001 I was employed as an assistant professor at the University of Vermont. I then moved to the same position at the University of Central Missouri in July 2003. In August 2006 I was promoted and tenured to an Associate Professor at University of Central Missouri. I enjoy working as a researcher as it is challenging and I gain immense satisfaction in knowing that the outcomes of my research benefit both practitioners and the research community. My current research interests still evolve around IT, e-commerce and trust. In recent years I have examined the role of Internet based EDI, e-marketplaces, web services, e-collaboration, SWOT analysis, balanced scorecard, IT security, knowledge management and e-government among small to medium-sized businesses.



The Business of Modularity and the Modularity of Business

Promotors: Prof.mr.dr. P.H.M. Vervest
Prof.dr.ir. H.W.G.M. van Heck

EPS-2002-011-LIS
<http://hdl.handle.net/1765/920>

011

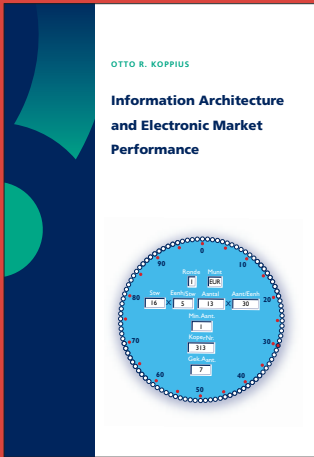
This thesis deals with the concept of modularity, which is used in many different fields of research and applications. The objective of this dissertation is to investigate how and to what extent business networks can use modularity to become more customer-responsive and flexible. For this purpose, a theoretical framework on modularity has been developed, which focuses on three dimensions of doing business: designing products, business processes and supply chains. The central proposition is that a concurrent, modular design in these three dimensions increases the performance of inter-organisational business networks in general and a mass-customisation strategy in particular. This proposition was validated in a number of empirical settings. First, the applicability of a business modelling approach, called Modular Network Design, was validated in the air cargo industry. Second, it was investigated how the Dutch building industry applies modularity in order to mass-customise newly built houses. Third, a survey was held among numerous customising organisations, dispersed all over the world, which led to more understanding about the relationship between business modularity and organisational performance.

As a consultant you are asked to provide people with answers to questions, but I am more interested in why something is the answer, rather than the answer itself!



"The short story of why I decided to enter the doctoral programme was simply that I did not yet feel satisfied with my education – I am a curious guy and wanted to conduct more research and further satisfy my curiosity. At that stage it was not a career move and I did not plan to become an assistant professor.

Once I had completed my dissertation, I started my own consultancy company. I liked consulting and running my own business, but did not find it completely fulfilling. As a consultant you are asked to provide people with answers to questions, but I am more interested in why something is the answer, rather than the answer itself! That is more the role of the academic. I had been teaching occasionally and so, after two years of consulting, I applied for a position at VU University, Amsterdam. I am now an assistant professor and consult on a part-time basis. So from having my own company, I became an employee again. But for me, it was a very good move. I have more job security which is nice, but I also have a lot of freedom in my research to satisfy my curiosity in the ways I want."



Information Architecture and Electronic Market Performance

Promoters: Prof.dr. P.H.M. Vervest
Prof.dr.ir. H.W.G.M. van Heck

EPS-2002-013-LIS
<http://hdl.handle.net/1765/921>

013

Electronic markets are one of the most prominent business applications of the Internet, so determining the factors that drive their performance is of great value. This thesis shows that an important driver of electronic market performance is the information architecture of the market, which describes what type of information is available to whom during the market process. Two studies of electronic market initiatives at a large Dutch flower auction highlight how information and communication technology (ICT) affects the information architecture of the market and the consequences for market behaviour. ICT not only affects existing markets, but also offers opportunities to design innovative new market mechanisms. One of these is a multidimensional auction, in which bidders bid not only on price, but also on dimensions such as quality and delivery time. The effects of different information architectures of multidimensional auctions are explored in laboratory experiments. The findings of the three studies are synthesised into a theory of electronic markets that has important implications for market designers, traders and researchers.

I spent a significant amount of time abroad creating a global network of friends and colleagues that has benefited me to this day



"It was when evaluating my options for the future that I realised a PhD in business would give me the opportunity to diversify from my non-business background (I hold an MSc in applied mathematics). The essence of my thesis was that many, if not most, of the effects of new ICT on organisations and markets are not the effects of technology, but change in information architecture: getting the right information to the right people at the right time. For my research, I used data from Dutch flower auction FloraHolland to evaluate the effects of introducing new forms of electronic auctioning, and these results were then instrumental for FloraHolland in developing their e-business strategy. My results were published in *Decision Support Systems* and I was proud to be awarded the worldwide best dissertation in Information Systems from the Association of Computing Machinery in 2002. Further to my specific research, my PhD taught me the value of reading a wide variety of articles, which helps in appreciating the many different theories out there, and often reveals a better way of getting to the core of any problem and generating new, creative insights.

I was greatly inspired by the open-mindedness and support of my advisors. Now as an assistant professor of decision and information sciences at RSM Erasmus University, I try to provide this same encouragement when supervising my students. I see myself working long-term as a researcher – there is no end to my curiosity in the world around me. A quote by Auguste le Comte best summarises my philosophy: "See what everyone else is seeing ... and think what no one else is thinking". My PhD taught me valuable research skills, both in terms of creative-thinking and executing projects. I also enjoyed the opportunity to travel and spent significant time abroad, creating a global network of friends and colleagues that has benefited me to this day."



Planning and Control Concepts for Material Handling Systems

Promotors: Prof.dr. M.B.M. de Koster
Prof.dr.ir. R. Dekker

EPS-2002-014-LIS
<http://hdl.handle.net/1765/866>

014

Planning and Control Concepts for Material Handling Systems discusses the planning and control of material handling systems in nodes in supply chains. Material handling systems consist of the equipment, personnel, information, materials and related planning and control systems. Automated Guided Vehicles take care of internal transport of loads. Various new planning concepts are developed to determine the number of vehicles required to transport all loads in time. Storage and Retrieval Machines take care of the storage and retrieval of loads in a storage area. A new dynamic programming algorithm is introduced to sequence storage and retrieval requests for a single machine in a number of parallel aisles with transfer stations at both ends of each aisle. Simulation studies are performed to test these new planning and control concepts within the context of a container terminal.

My thesis was awarded the 2002 INFORMS Transportation Science Dissertation Award



"My PhD provided a number of new insights. Perhaps the most important of these were new planning and control concepts for material handling systems that operate in, for example, container terminals.

Since I concluded my doctoral studies I have had papers published in *Transportation Science*, the *European Journal of Operational Research* (twice), the *Journal of the Operational Research Society*, *OR Spectrum*, and the *International Journal of Production Economics*. Furthermore, in 2002 my thesis was awarded the prestigious INFORMS Transportation Science Dissertation Award. I am now an associate professor of Logistics at VU Amsterdam."



Creating Trust between Local and Global Systems

Promoters: Prof.dr. K. Kumar
Prof.dr. R.M. Lee

EPS-2002-018-LIS
<http://hdl.handle.net/1765/361>

018

This thesis focuses on the problem of creating trust between local and global systems. The development global institutions and technologies, such as the credit card system, tends to replace the value of local relationships of trust based on mutual knowledge and to standardise the way trust is established and created between people and firms. In this thesis we argue that the trust embedded within local networks of relationships represents a value for the whole global society. In this perspective we provide three major contributions. The first is to develop a model to interpret the process of trust creation between local and global systems. The second is to apply this model in a number of case studies of Italian industrial districts. The third is to highlight advantages and disadvantages associated to alternative strategies of trust creation between local and global systems.

Doing a PhD at Erasmus was a unique opportunity to follow and develop my own ideas



"My PhD has added value to my job because it allowed me to create an international network that I would not have otherwise had. It also enabled me to develop a research methodology more in line with international standards.

Following my master's degree I worked for two years in a research consortium, where I had the opportunity to do more work on the topics I had just covered. I came to realise that this was what I liked doing. After a short interlude in small and medium enterprises, I accepted the suggestion of a friend of mine who was also doing her PhD at Erasmus, and applied for a project. I learnt two vital lessons while studying: firstly, that whatever you say has to be justified, and secondly, that at some point in time you need to start following your own ideas.

I think my thesis has contributed three major ideas: it provides a specific knowledge-based way to look at trust, which is useful for integrating alternative perspectives on this topic. It also recognises the problem in translating trust from local, embedded, and culture-based trust, to global, codified trust. Finally, it begins to address alternative ways to bridge the gap between these two trust bases. In Italy, having a PhD is not essential for an academic career, but it is an asset. It helped me to get my current position at the University of Milan, where I am a researcher in charge of courses in basic management, and innovation. In American terms that is somewhere between research assistant and associated professor.

I love research because I have the chance to improve myself far more than in other jobs, and I can organise my own life. Doing a PhD at Erasmus was a unique opportunity to follow and develop my own ideas."



Coordination and Control of Globally Distributed Software Projects

Promotor: Prof.dr. K. Kumar

EPS-2002-019-LIS

<http://hdl.handle.net/1765/360>

019

Recently, software development and implementation projects have globalised at a rapid pace. Companies in North America, Europe, and the Far East are beginning to integrate international IT to support operations across the globe. Offshore outsourcing of IT services has become a prevalent strategy to tap into emerging resource bases of countries like India, Philippines, Eastern Europe. However, global distribution has introduced a number of gaps: distance, time zone difference, socio-cultural diversity, differences of infrastructure, and governance differences. These gaps create challenges for the way software projects are coordinated and controlled. This research investigates the impact of gaps on coordination and control modes. It develops these ideas through an extensive theoretical basis and two qualitative case studies to further our understanding of globally distributed software projects, and extend our capability to manage these.

I have always been very interested in business and organisation studies, and wanted the highest level of education in that field



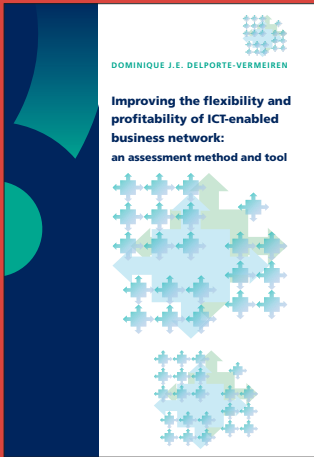
"ERIM has a reputation for providing a unique and demanding opportunity for those wishing to launch themselves into a career as a business researcher or professional. I was always interested in business and organisation studies, and since I wanted the highest level of education in that field, a doctoral position at ERIM was the right step.

The important insights provided by my doctoral thesis were in regards to the transience of knowledge and the multiplicity of perspectives involved in analysing the same phenomenon. My work on coordination and distributed organisations was published or has been accepted for publication in a number of journals such as *Information Systems Journal*, *Communication of the ACM*, *European Journal of IS*, and *Cognition, Technology & Work*. Results have also been communicated widely through publications and seminars in the business world.

In terms of content, my PhD provided me with a solid theoretical basis. With respect to skills, I developed an understanding of new research methods and an analytical/conceptual approach to problem-solving. I also learnt to network, persist and focus.

My PhD is indispensable for my current academic career and my current position as an associate professor at the Netherlands Defence Academy. Even after many years of working as a researcher, I still enjoy the intellectual challenge, the focus on innovation, and the international networking."

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Improving the Flexibility and Profitability of ICT-enabled Business Networks: An Assessment Method and Tool

Promotors: Prof.mr.dr. P.H.M. Vervest
Prof.dr.ir. H.W.G.M. van Heck

EPS-2003-020-LIS
<http://hdl.handle.net/1765/359>

020

This thesis deals with the development and the first empirical examination of an assessment method and decision support tool for the ex ante assessment of margin to be applied in *ICT-enabled redesign of business networks*. Many industries face the demand for customisation. This customisation challenges them to tailor products and services to the specific requirements of every individual customer, while at the same time maintaining their current levels of economies of scale. It forces organisations to become more flexible (defined in terms of their ability to produce different and customised products) towards the market without losing profitability, i.e. margin. Managers start to question the suitability of their current organisational design, which originates from the traditional supply chain and become increasingly aware of the benefits of a different approach to organisational design: ICT-enabled business networks, to respond quickly to a changing environment. However, managers struggle with how they should accomplish this, and to what extent it will influence their current level of flexibility and profitability. Therefore, they need a method and managerial tool that can help them assessing the reengineering of a business network – in particular, prior to performing the actual change in the business network. For this purpose, the described assessment method and decision support tool, called *Business Network Navigator*, was developed.

Preparing your thesis imprisons you like nothing else, but once you are finished it sets you free like never before



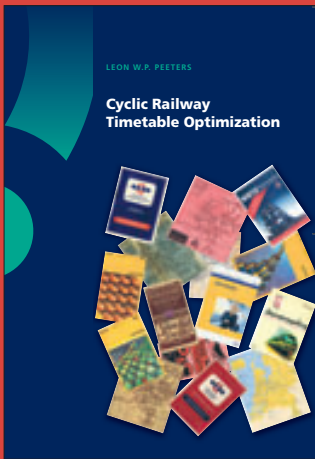
"I had a personal and professional interest in my research area, so a PhD was the natural way to go. But studying made me realise that you can never know it all. There are still so many opportunities for further exploration. Even today companies still struggle with this issue.

My work has led to publications in European management journals, and I have been referenced in a smart business networking book. Part of my thesis will be used in a new book, which is currently in progress.

The PhD gave a whole new direction to my career. It was invaluable in creating the opportunity for the new book and for new assignments. I use and apply the results of my research everyday in my own consulting practice.

I am currently a professor in strategic management, managing director of UAMS (Universiteit Antwerpen Management School), and managing director of DMC BV (Interim management and board consultancy). I also head my own research team.

Preparing your thesis imprisons you like nothing else, but once you are finished it sets you free like never before. It broadens your personal and professional scope and paves the way for you to reach the peak of your own limits."



Cyclic Railway Timetable Optimization

Promotors: Prof.dr. L.G. Kroon
Prof.dr.ir. J.A.E.E. van Nunen

EPS-2003-022-LIS
<http://hdl.handle.net/1765/429>

022

Cyclic Railway Timetable Optimisation describes mathematical models and solution methods for constructing high quality cyclic railway timetables. In a cyclic timetable, a train for a certain destination leaves a certain station at the same time every cycle time, say every half an hour, every hour, or every two hours. Cyclic timetables are widely used in European railways. They offer a clear and transparent product to the railway customers, who only need to memorise the minutes of the hour at which their regular trains depart. Because of the important role of timetable planning for railway operators and railway infrastructure managers, models and methods for optimising cyclic railway timetables provide a valuable tool for these organisations. The thesis presents a mathematical model for optimising cyclic railway timetables, and studies the theoretical aspects behind the model. The investigated aspects include cyclic sequencing, periodic tensions, cycles in graphs, cycle bases of graphs, algorithms for constructing cycle bases, and cutting planes for the model. The developed theoretical ideas are tested on some real-life cyclic railway timetabling instances. The thesis further develops several extensions of the basic model.

Doing research is fun, but it can also be quite frustrating at times



"There were two reasons I began my PhD. First and foremost was that I really enjoyed doing my master's research, and wanted to see if a PhD would be as much fun. The second was that I also wanted to deepen my knowledge.

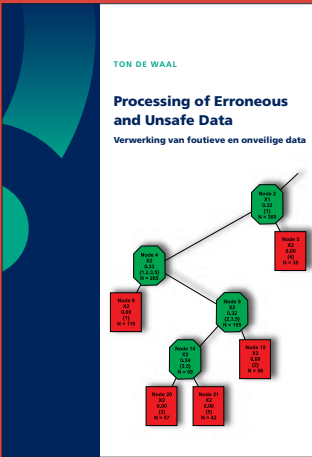
Doing research is indeed fun, but it can also be quite frustrating at times. It taught me that, by hanging in there, you usually get the results you are aiming for, in one form or another.

My thesis has given new insights into the transport sector. Railway timetables have a high potential for improvement. Using the mathematical models and techniques from my thesis, one can optimise passenger travel times, robustness, and operating cost associated with a timetable. My work has been published in *Transportation Science*.

My research was carried out in close cooperation with NS Reizigers and Prorail. In addition to this my co-author, Christian Liebchen, has applied and further developed some of my techniques to optimise the timetable of the Berlin underground network.

A doctorate provided a very good reference for my current job as a postdoctoral researcher at the Institute of Theoretical Computer Science of ETH Zurich. In fact, I see a PhD degree as a basic requirement for getting a position at a university.

I still enjoy doing research, and especially working with motivated and intelligent master's and PhD students."



Processing of Erroneous and Unsafe Data

Promotor: Prof.dr.ir. R. Dekker

EPS-2003-024-LIS

<http://hdl.handle.net/1765/870>

024

Statistical institutes have to overcome many problems before they can publish reliable data. Two of these problems are examined in this thesis. The first problem is the occurrence of errors in the collected data. Due to these errors publication figures cannot be directly based on the collected data. Before publication the errors in the data have to be localised and corrected. In the thesis we focus on the localisation of errors in a mix of categorical and numerical data. This problem is formulated as a mathematical optimisation problem. Several new algorithms for solving this problem are proposed, and computational results of the most promising algorithms are compared to each other. The second problem that is examined in this thesis is the occurrence of unsafe data, i.e. data that would reveal too much sensitive information about individual respondents. Before publication of data, such unsafe data need to be protected. In the thesis we examine various aspects of the protection of unsafe data.

I feel that while a PhD does not necessarily change you, it fundamentally changes the way other people see you

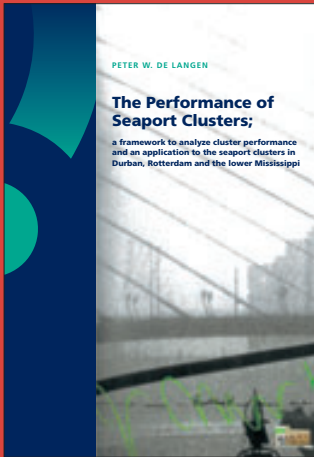


"Originally I had no intention of writing a PhD thesis. While working at Statistics Netherlands, I realised that I had written and published a number of papers on related topics. These then became the basis for my PhD thesis.

I learnt many things while writing my PhD thesis. I learnt how to conduct research scientifically – in particular techniques for documenting and evaluating results. Perhaps my most important personal insight was realising that no matter how in-depth you go into a certain topic, there is always a higher level of knowledge.

I have published several articles in international journals including *Journal of Official Statistics*, *International Statistical Review*, *Survey Methodology*, *Research in Official Statistics and Statistics* and *Operations Research Transactions*. Interestingly, some of the results of my doctoral thesis have been, and still are, applied at Statistics Netherlands. The most important example is an algorithm for detecting and correcting errors in data sets that is frequently used for cleaning data of business surveys.

Completing a doctoral thesis has clearly improved my career, giving me many more options at Statistics Netherlands. My current role is head of the Department of Methodology in Voorburg, in which I manage a group of 20 to 25 academic researchers. Most of these researchers have a PhD degree, so without one myself it would be difficult to gain their respect and have the necessary authority. I feel that while a PhD does not necessarily change you, it fundamentally changes the way other people see you."



The Performance of Seaport Clusters; A Framework to Analyze Cluster Performance and an Application to the Seaport Clusters in Durban, Rotterdam and the Lower Mississippi

Promotors: Prof.dr. B. Nooteboom
Prof.drs. H.W.H. Welters

EPS-2004-034-LIS
<http://hdl.handle.net/1765/1133>

034

This PhD thesis deals with the performance of clusters. Even though cluster studies are numerous, a coherent framework to analyse cluster performance is lacking. In this thesis, such a framework is developed, drawing from different schools that deal with clusters. Central in the framework is a distinction to variables of cluster performance related to the structure of a cluster and variables related to the governance of a cluster. Four structure variables – agglomeration and disagglomeration forces, internal competition, heterogeneity of the cluster and the level of entry and exit barriers – and four governance related variables – the presence of trust, the presence of intermediaries, the presence of leader firms and the quality of collective action regimes – are identified and discussed. The validity of these variables is confirmed in the three case studies, of the port clusters of Rotterdam, Durban, and the lower Mississippi. The strengths and weaknesses of the three port clusters, the importance of the variables discussed above and opportunities for policy and management to improve the performance of clusters are discussed.

The results of this study are relevant for cluster scholars and for scholars specialising in port studies. The thesis is also relevant for (port) cluster managers and for managers of firms in (port) clusters, since implications of this study for policy and management in (port) clusters are discussed.

The general research, analytical and methodical skills I learnt at Erasmus University are invaluable in my role as senior economist in corporate development at the Port of Rotterdam Authority



"The networking skills and contacts I developed with other academics and within the industry during my PhD continue to prove very useful in my career, and the general research, analytical and methodical skills are invaluable in my role as senior economist in corporate development at the Port of Rotterdam Authority. My goal when deciding to begin a doctoral position was to undertake practically-relevant but scientifically-interesting research. I wanted to develop my knowledge and knowledge that was useful and relevant for others. I found Erasmus University provided the perfect environment to achieve this ambition, and I enjoyed working with talented and multicultural colleagues.

The results of my PhD were published in several journals that focused on maritime transport and transport geography such as *Maritime Policy and Management*, *Maritime Economics and Logistics*, *Journal of Transport Geography*, *European Journal of Transport and Infrastructure Research* and *GeoJournal*.

My thesis was also relevant to my current employer as it demonstrated that seaports, which were traditionally mainly regarded as transport nodes, are also strong clusters of economic activity. This very basic idea has all kinds of practical implications for seaports. I continue to apply results of my findings to assist the Port of Rotterdam to develop future strategies and policies. I have, for instance, contributed to the Port Plan 2020, which aims to maintain Rotterdam's position as a leading worldwide seaport. And the value of my research for industry as a whole can be seen in the various invitations I receive to provide speeches at industry conferences. Today I work one day a week as an assistant professor at Rotterdam School of Economics. I find that being involved in research is valuable for my own development, as well as that of my employer and the industry."



Managing Reverse Logistics or Reversing Logistics Management?

Promotors: Prof.dr.ir. R. Dekker
Prof.dr. M.B.M. de Koster

EPS-2004-035-LIS
<http://hdl.handle.net/1765/1132>

035

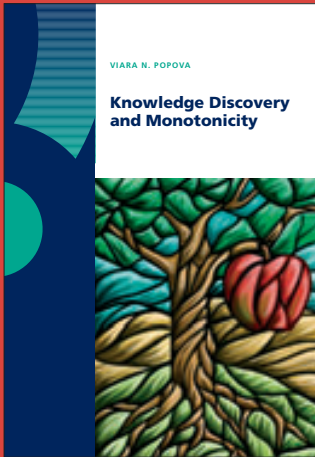
Traditionally, supply chains fine-tune the forward logistics from raw material to the end customer. Today an increasing flow of products is going back in the chain, so companies have to manage reverse logistics as well. This thesis contributes to a better understanding of reverse logistics. The thesis brings insights on reverse logistics decision-making and it lays down theoretical principles for reverse logistics as a research field. In particular, it puts together a framework for reverse logistics identifying the elementary dimensions, providing typologies, and structuring their interrelations. With respect to aiding decision-making, this thesis comprises return handling and inventory management. Regarding the first, the focus is on identifying critical factors that determine if forward and reverse flows should be combined, or if should be dealt with separately. Regarding the second, the main research issue is the value of information. One of the findings is that more informed methods do not necessarily lead to the best performance in case of misinformation. Furthermore, this thesis proposes a reflection on the future development of the field. Through a Delphi study with an international panel of academics working on the area, recommendations are made concerning both research and pedagogy. This thesis also poses the following question: how should we deal with reverse logistics? Is it a matter of simply managing reverse logistics or of reversing logistics management? The message is: logistics cannot go forward without reverse thinking!

Creativity moves in mysterious ways, and that good idea may just come when you least expect it



"I am curious by nature and love challenges. While doing a master's degree at Erasmus University I got to know many doctoral students there. When I saw what a PhD was about I thought: that is exactly the thing for me! I learnt so much during my doctoral studies. I saw how important it is to put things into perspective; and to be patient – creativity moves in mysterious ways, and that good idea you have been waiting for may just come when you least expect. I also learnt that if you stay true to yourself it will pay off. My thesis was on reverse logistics. My research showed that in dynamic environments, to make the best use of information on product returns you have to keep it simple. I have published papers in the *International Journal of Retail & Distribution Management* and *International Journal of Production Economics*. Another paper is under review by the *European Journal of Operational Research*. Several chapters were published in commercial books. Recently I initiated a project with Syntens (an initiative of the Dutch Ministry of Economic Affairs supporting innovation in SMEs), in which the framework I developed will be applied to create a Quick-Scan tool to assess the economic potential of Reverse Logistics for SMEs.

ERIM has three important tools that raise the quality of their doctoral research: it has clear mechanisms in place to monitor progress; it supports and promotes attendance at high-level European courses; and it actively stimulates students to collaborate internationally. I attended relevant courses in England and Belgium, and visited the INSEAD Business School in France, where I worked with Professor Luk van Wassenhove, who is highly regarded in my field. After my PhD I got a research job at University of Cambridge. I am now a research associate at the Department of Mobility Studies, in the Research Institute for Housing, Urban and Mobility Studies (OTB) at Delft University of Technology."



Knowledge Discovery and Monotonicity

Promotor: Prof.dr. A. de Bruin

EPS-2004-037-LIS

<http://hdl.handle.net/1765/1201>

037

The monotonicity property is ubiquitous in our lives and it appears in different roles: as domain knowledge, as a requirement, as a property that reduces the complexity of the problem, and so on. It is present in various domains: economics, mathematics, languages, operations research and many others. This thesis is focused on the monotonicity property in knowledge discovery and, more specifically, in classification, attribute reduction, function decomposition, frequent patterns generation and missing values handling. Four specific problems are addressed within four different methodologies, namely, rough sets theory, monotone decision trees, function decomposition and frequent patterns generation. In the first three parts, the monotonicity is domain knowledge and a requirement for the outcome of the classification process. The three methodologies are extended for dealing with monotone data in order to be able to guarantee that the outcome will also satisfy the monotonicity requirement. In the last part, monotonicity is a property that helps reduce the computation of the process of frequent patterns generation. Here the focus is on two of the best algorithms and their comparison both theoretically and experimentally.

I found that beyond study, some of the main items on an Erasmus PhD student's 'to do list' are networking, growing, and making friends for life



"After graduating from university, I chose to pursue an academic career. A PhD study was a logical step in this direction. In terms of content, the main contribution of my thesis was the development and extension of methods for building monotone classifiers within a number of sub-areas of Knowledge Discovery, namely: Rough Sets Theory, Decision Trees and Function Decomposition.

Being a member of ERIM made my PhD study a more comprehensive process by providing possibilities to follow courses and have contact with other PhD students.

In addition, my experience as a PhD student taught me that, besides study, some of the main items on any Erasmus PhD student's 'to-do list' should be networking, growing, and making friends for life. It was a great experience.

I am now a post-doctoral researcher at Vrije Universiteit Amsterdam. I still find research interesting and stimulating – plus it offers the opportunity to work in a dynamic, open-minded and multicultural environment."



Intelligent Control of Vehicle-Based Internal Transport Systems

Promotors: Prof.dr. M.B.M. de Koster
Prof.dr.ir. R. Dekker

EPS-2005-051-LIS
<http://hdl.handle.net/1765/6554>

051

'Intelligent control of vehicle-based internal transport (VBIT) systems' copes with real-time dispatching and scheduling of internal-transport vehicles, such as forklifts and guided vehicles. VBIT systems can be found in warehouses, distribution centres, manufacturing plants, airport and transshipment terminals. Using simulation of two real-world environments, dispatching rules described in literature and several newly introduced rules are compared on performance. The performance evaluation suggests that in environments where queue space is not a restriction, distance-based dispatching rules such as shortest-travel-distance-first outperform time-based dispatching rules such as modified-first-come-first-served and using load pre-arrival information has a significant positive impact on reducing the average load waiting time. Experimental results also reveal that multi-attribute dispatching rules combining distance and time aspects of vehicles and loads are robust to variations in working conditions. In addition, multi-attribute rules which take vehicle empty travel distance and vehicle requirement at a station into account perform very well in heavy-traffic VBIT systems such as baggage handling systems. Besides dispatching rules, the potential contribution of dynamic vehicle scheduling for VBIT systems is investigated. Experiments using simulation in combination with optimisation show that when sufficient pre-arrival information is available a dynamic scheduling approach outperforms the dispatching approach. This thesis also evaluates the impact of guide-path layout, load arrival rate and variance, and the amount of load pre-arrival information on different vehicle control approaches (scheduling and dispatching). Based on experimental results, recommendations for selecting appropriate vehicle control approaches for specific situations are presented.

Doing PhD research at Erasmus was a great experience and one that I will never forget



"I have long held an ambition to understand the nature of the business world. That is what inspired me to start my PhD, which also taught me the importance of communication and partnership in doing research.

My doctoral research has shown that future information is the key for improving any management decision. It also revealed that the usefulness of this future information depends heavily on the way in which it is applied.

I have since been published in the *Journal of Operations Management*, the *International Journal of Production Research*, and the *European Journal of Operational Research*. Several vehicle-dispatching rules developed by my research have also been tested for a European distribution centre.

Doing research at Erasmus was a great experience and one that I will never forget. The PhD has proved to be a good foundation for my career. It helped me gain respect from fellow researchers and also enabled me to get my current job as a lecturer at the Hanoi University of Technology.

Doing further research is still a part of my teaching job. It means I can contribute not only to the development of science, but also to the Vietnamese economy."



Empirical Studies in Discrete Parts Manufacturing Management

Promotors: Prof.dr. S.L. van de Velde
Prof.dr. W.H.M. Zijm

EPS-2005-056-LIS
<http://hdl.handle.net/1765/6767>

056

Manufacturing firms are bound by the conditions of their environment. They have to fulfil the demands of various stakeholders, such as customers, suppliers, government, financiers, and employees) that provide them the resources to perform their operations. The effectiveness of a manufacturing firm depends on the fit between the manufacturing system and the level of uncertainty in its environment. There must be consistency between numerous manufacturing dimensions, such as operations strategy, process choice, level of decentralisation, production planning and control strategies, concepts, and tools, and the characteristics of the dominant Product / Market / Technology (PMT) combinations of the manufacturing firm.

This book focuses on empirical studies that address the impact of PMT-uncertainty on various operations management issues in Dutch discrete parts manufacturing firms. It includes an in-depth exploratory longitudinal case study at Ureco Aerospace, a second-tier supplier in the aerospace industry, and two independent surveys (i.e., questionnaire-based research) among Dutch discrete parts manufacturers. The central research question of this book is, 'What is the impact of PMT-uncertainty on important discrete parts manufacturing management issues, such as the strategic focus on competitive priorities, the dominant type of manufacturing layout, the decentrality of the locus of production planning and control, the use of various production planning and control tools, and line management's attention for social issues like individual competence management?' In addition, we extensively focus on organisational and innovation-related characteristics that affect the adoption of an Advanced Planning and Scheduling system within the discrete parts manufacturing industry.

I believe it is essential to work with a good supervisor who truly knows how to manage research projects



"I work as a management consultant at Berenschot Business, as well as conduct research for RSM.

I decided to study for a PhD degree for the usual reasons – to develop myself further and gain more knowledge on a particular aspect of management. Conducting good research requires excellent preparation, planning and commitment. I also believe it is essential to work with a good supervisor who truly knows how to manage research projects, but is flexible in his or her contact moments as well. The most important insight of my research was that uncertainty in a production context (product/market/technology uncertainty) impacts the planning and control (decision) structure and tools differently."



Management of Globally Distributed Component-Based Software Development Projects

Promotor: Prof.dr. K. Kumar

EPS-2005-059-LIS

<http://hdl.handle.net/1765/6772>

059

Globally Distributed Component-Based Development (GD CBD) is expected to become a promising area, as increasing numbers of companies are setting up software development in a globally distributed environment and at the same time are adopting CBD methodologies. Being an emerging area, the management of GD CBD has evolved primarily on an ad hoc basis. At present, little is known about how to successfully organise and manage GD CBD. To fill this gap, this research explores the management of GD CBD and reveals factors that contribute to success in GD CBD projects. Data are drawn from several successful GD CBD projects at LeCroy, SAP and TCS, compared with one unsuccessful project at Baan. The results suggest that inter-site coordination, appropriate tools and technologies, social ties, knowledge sharing and components management are the main factors that contribute to success in GD CBD. Lastly, a framework assisting managers to organise and manage CBD in GD environments is offered.

During my graduate studies at RSM I conducted research in leading companies including SAP, Tata Consultancy Services (TCS), Baan and LeCroy Corporation



"I graduated from Technion, the Israeli Institute of Technology, as an engineer in Industrial Engineering and Management in 1996. In 2000, after finishing my master's degree, I decided to travel abroad for my PhD and chose RSM Erasmus University.

During my graduate studies at RSM I conducted research in leading companies including SAP, Tata Consultancy Services (TCS), Baan and LeCroy Corporation and spent five months working at Henley Management College in the UK, which was sponsored by a Marie Curie Scholarship from the European Commission.

Papers based on my dissertation have been published in the *European Journal of Information Systems*, *Journal of Information Technology*, and a publication in *Communications of the ACM* is forthcoming.

Since December 2003 I have been working as an assistant professor of information systems at Warwick Business School, in the UK. My main research interests revolve around managing knowledge, social and technical aspects involved in the management of globally distributed IS teams, and IT outsourcing.

I still collaborate with my colleagues from RSM. Together with colleagues from the London School of Economics in the UK, we organised the first Information Systems Workshop on Global Sourcing, which took place in March 2007 in val d'Isere, France. We are now organising the Second Workshop on Global Sourcing that will take place in March 2008."



Knowledge Sharing within Organizations: A Situated and Relational Perspective

Promotor: Prof.dr. K. Kumar

EPS-2005-060-LIS

<http://hdl.handle.net/1765/6770>

060

Knowledge sharing is of crucial importance for organisations, due to the division of labour and accompanying fragmentation, specialisation and distribution of knowledge. It is a means to achieve the organisational objectives. However, organisations have experienced that people do not always share their knowledge with others. Even when people know that they have to share their knowledge and with whom, when they have appropriate cognitive and communicative skills to do so, and also have the right communication technologies at their disposal, knowledge sharing does not always happen. Whereas existing literature has identified a variety of barriers for sharing knowledge, people's motivations for sharing knowledge within organisations are still not fully understood. These motivations can be investigated by addressing the reciprocal nature of knowledge sharing, as being a social process. This research focuses on different kinds of relations within which knowledge sharing takes place and explains how different relational models influence knowledge sharing behaviour. Furthermore, it explores how the relational models underlying knowledge sharing differ within different types of organisations. Based on two qualitative case studies, this research develops a theoretical and methodological framework for describing and analysing the situated and relational nature of knowledge sharing.

I notice that more and more organisations find [a PhD] desirable or necessary



"After four years of working as a policy consultant at the Ministry of the Interior and Kingdom Relations (BZK) at the Strategic Policy Unit (Bureau Strategische Kennisontwikkeling), I am now a senior consultant at Berenschot Procesmanagement (Public Management). So I am again working in the commercial sector, although I am still doing advisory work for the public sector.

I chose to do a PhD because during my master's degree I had become enthusiastic about knowledge management and wanted to deepen my knowledge in the area of knowledge sharing processes. My experience of doing a PhD was intense, solitary and with highs and lows, but the end result was amazing.

I look back at that period with a great deal of pleasure. I had a lot of positive responses on my thesis – a lot more people have read it than I thought would be the case. I am now planning to rewrite my thesis into a version for managers as I have noticed that the subject is quite popular with practitioners.

Although initially a PhD in business administration did not seem attractive in terms of career advantages, I now notice that more and more organisations find it desirable or necessary. Knowledge sharing processes are crucial for organisations and I am confronted with them every day. My PhD has contributed to the fact that I can see through complex problems rapidly. This is of great importance in both the functions I have held."



Revenue Management: New Features and Models

Promotor: Prof.dr.ir. R. Dekker

EPS-2005-061-LIS

<http://hdl.handle.net/1765/6771>

061

Revenue management is the art of selling a fixed and perishable capacity of a product to those customers that generate the highest revenue. In recent years, revenue management has gained a lot of attention among both academics and practitioners and has grown into one of the most successful applications of operations research. This thesis provides an overview of revenue management techniques presented throughout the literature. More importantly, new techniques are constructed for hotel, airline and cargo revenue management problems to account for new features such as a rolling horizon, convertible seats and unique booking requests. Mathematical, stochastic and dynamic programming techniques are used to construct solution techniques which are evaluated in a simulated environment chosen in correspondence with practitioners. The results provide useful insights for practitioners and can be used to further develop and extend current revenue management techniques.

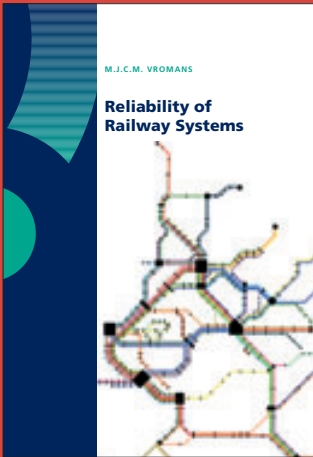
It is not so much the knowledge you possess that is important, but the capacity to discover new things for yourself



"I believe that it is not so much the knowledge you possess that is important, but the capacity to discover new things for yourself. I am currently a business consultant with a specialty in revenue management. I chose to study for a PhD because I felt my Master of Science studies did not give me the theoretical depth of knowledge that I wanted.

My results have led to publications in the *Journal of Pricing & Revenue Management* and *Statistica Neerlandica*, and with some more publications forthcoming. My research in revenue management has made me one of the most prominent revenue management professionals in the Netherlands.

During my studies, I learned many things, perhaps the most important of which was how to manage myself. A doctoral position provides a great deal of freedom, and it is important to learn this ability or risk losing yourself."



Reliability of Railway Systems

Promotors: Prof.dr. L.G. Kroon
Prof.dr.ir. R. Dekker

EPS-2005-062-LIS
<http://hdl.handle.net/1765/6773>

062

Railway transport plays a key role in mobility in the Netherlands and other countries. It has been recognised that the on-time performance is one of the key performance indicators in railway transport. Many different internal and external factors cause the train operations to be disturbed. Moreover, incurred delays are often propagated to other trains and to other parts of the network. The societal, managerial, and scientific relevance of research on the on-time performance of railway systems are eminent. This thesis provides a clear picture of the reliability of railway systems. A railway system can be considered as a very large and complex stochastic dynamic system. "Reliability of Railway Systems" describes mathematical models for the evaluation and optimisation of railway timetables. Special attention is given to the allocation of running time supplements. These supplements can be very useful in containing delay propagation. However, the effectiveness of these supplements highly depends on the location within a train line. A surprising, but potentially effective supplement allocation rule is developed to decrease the propagation of delays. Another important subject is the heterogeneity of train traffic, or in other words the speed differences. Besides showing a strong correlation between speed differences and reliability, new measures were developed to capture the heterogeneity. Furthermore, an innovative stochastic linear program is presented that is not only able to evaluate, but also to optimise timetables. It integrates most railway dependencies, and it directly optimises the average arrival delays. The model shows that considerable improvements are possible with respect to the current timetable in the Netherlands. Several variants of the model are described, such that the model can be used for a wide range of problems.

As my PhD position was in the field of railways, it was a natural route to my current position as a consultant at ProRail



"To me, a PhD seemed the optimal combination of theoretical research and practical application. It taught me the benefits of perseverance.

My thesis revealed how to improve the allocation of supplemental times in planned timetables. It has led to publications in *Interfaces* and the *European Journal of Operational Research*. My lecture notes have appeared in *Computer Science* and *Statistica Neerlandica*.

The results of my PhD thesis have been applied successfully by NS, the Dutch National Railways, on their timetable for their Amsterdam to Den Helder route.

As my PhD position was in the field of railways, it was a natural route to my current position as a consultant at ProRail. Both the knowledge and the skills I acquired have proved very useful in my job."



Design and Control of Efficient Order Picking Processes

Promotor: Prof.dr. M.B.M. de Koster

EPS-2005-064-LIS

<http://hdl.handle.net/1765/6910>

064

Within a logistics chain, products need to be physically moved from one location to another, from manufacturers to end users. During this process, products are buffered or stored at certain places (warehouses) for a certain period of time. Order picking – *the process of retrieving products from storage (or buffer area) in response to a specific customer request* – is the most critical warehouse process. It is a labour intensive operation in manual systems and a capital intensive operation in automated systems. Order picking underperformance may lead to unsatisfactory service and high operational cost for the warehouse, and consequently for the whole chain. In order to operate efficiently, the order picking process needs to be designed and controlled optimally. This thesis aims at providing analytical models to support the design and control of efficient order picking processes. Various methods for estimating picking tour length, determining the optimal storage zone boundaries, layout, picking batch size and number of pick zones are presented. The methods are tested by simulation experiments and illustrated by numerical examples.

I received many offers after my PhD... and finally decided on a position as a business process improvement manager with Unilever Vietnam



"After achieving a *cum laude* master's degree, I felt the need to challenge myself further by pursuing a PhD. It was a rewarding experience, and my findings led to papers in *International Journal of Production Research* and *European Journal of Operational Research*. Learning effective networking skills was one of the most important aspects of my studies, and it was enjoyable being able to share ideas and results with others who had similar study themes and interests.

With its international reputation, ERIM led to many opportunities after my PhD defense. I received many offers: of post-doctoral positions, as assistant professor, and junior lecturer and consultant. I finally decided on a position as a business process improvement manager with Unilever Vietnam. In this role, I have led several innovation projects, most of which have emerged from newly-developed theories in logistics. My PhD has given me a solid background in my field, as well as preparing me to conduct extensive operational research and successfully manage large projects. I am now involved with some internal consulting, teaching, and organising workshops and seminars. My ability to complete all of these activities effectively has been greatly enhanced by my experience at ERIM."



Distributed Simulation in Industry

Promotors: Prof.dr A. de Bruin
Prof.dr.ir. A. Verbraeck

EPS-2005-065-LIS
<http://hdl.handle.net/1765/6925>

065

While distributed simulation is widely accepted and applied in defence, it has not gathered ground yet in industry. In this thesis, we investigate the reasons behind this phenomenon by surveying the expectations of industry with respect to distributed simulation solutions. Simulation models in industry are mainly designed and developed in commercial-off-the-shelf (COTS) simulation packages. The existing distributed simulation architectures in defence, however, do not focus on coupling models created in COTS simulation packages. Therefore, in order to motivate the industrial community into easily accepting and using distributed simulation, one should strive to couple models built in these packages. Furthermore, coupling these models should be possible without requiring too much extra effort from modellers. In this thesis, based on a survey with experts in domain, we propose a list of requirements for designing and developing distributed simulation architectures that would encourage the industrial community to accept and apply distributed simulation. Furthermore, we present a lightweight distributed simulation architecture which has been successfully applied in two industrial projects, and which satisfies, to a large extent, the proposed requirements.

A PhD in business and management broadens your perspective and improves your problem-solving abilities



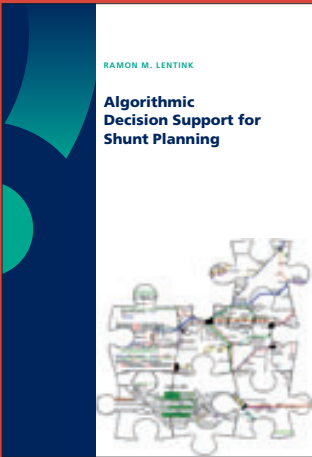
"During my master's degree I was offered the chance to begin a PhD in simulation and container logistics. I thought it would be an interesting challenge to start my new career as a researcher in those areas.

Through my doctoral study I developed a broader way of thinking and enhanced problem-solving strategies in my work. Before that time I had mainly been thinking as a software engineer, and not as a researcher. Now I analyse problems from various angles, beginning at a higher conceptual level.

During my research I carried out a comprehensive survey among several relevant experts, and the results have provided important insights for the field. My thesis was published by ERIM and by TRAIL, and has since led to publications in *Journal of Simulation Practice and Theory*. While involved in my doctoral study I participated in two commercial (FAMAS) projects, in which I applied my theory. Being a member of a research group with other PhD students, and participating in formal and informal events guarantees a pleasant study environment. Moreover, doing a doctorate as part of a group like ERIM helps you form a professional network that can be important when building a career.

I am currently a project manager at TBA BV. Since I still work in the same area (simulation and container logistics), I apply what I learned during my PhD on a daily basis. Although I am mostly involved in commercial projects, in order to complete these I always need to carry out research. From time to time I also help to coordinate students involved in projects at our company who are writing their theses.

I would say that a PhD in business and management broadens your perspective and improves your problem-solving abilities."



Algorithmic Decision Support for Shunt Planning

Promoters: Prof.dr. L.G. Kroon
Prof.dr.ir. J.A.E.E. van Nunen

EPS-2006-073-LIS
<http://hdl.handle.net/1765/7328>

073

In order to provide train services in the Netherlands with a high quality, much coordination is required and a complex planning process is carried out. One of the last elements of this planning process is operational shunt planning. Shunt planning focuses on the logistics within a station and its surroundings. Since demand for transportation fluctuates over a day, a railway operator typically has a surplus of rolling stock outside the rush hours, and especially during the night. In general, the idle rolling stock is parked at a shunt yard, thereby keeping the main railway infrastructure available for other train services. Besides parking of rolling stock, matching of arriving to departing rolling stock, routing over local railway infrastructure, cleaning of rolling stock, and crew planning are part of shunt planning. Every change in a previous step of the planning process is likely to require changes in shunt plans at one or more stations. Therefore, many planners at NS Reizigers are currently involved in shunt planning. In addition, high-quality shunt plans enable a smooth start-up of the railway operations in the morning. A smooth start-up decreases the chances of disturbances in the morning. It is well known that such disturbances spread out easily in time and space. Therefore, the quality of shunt plans influences the quality of the services offered to passengers. The relevance of research on shunt planning from a societal, managerial and scientific point of view is therefore clear. "Algorithmic Decision Support for Shunt Planning" introduces relevant aspects of shunting and provides a first step for quantitative models and algorithms to support shunt planning. The algorithms for solving the models contain algorithms that resemble the current practice of shunt planners as well as algorithms that are somewhat farther away from current practice. Computational tests on real-life data show that high-quality solutions are typically found within minutes of computation time. In addition, these algorithms are designed to interact with shunt planners. They provide a firm basis for an advanced planning system to support shunt planners.

Receiving my PhD was an important indicator for my employer that I was able to develop and implement a vision on the future of algorithms related to their products



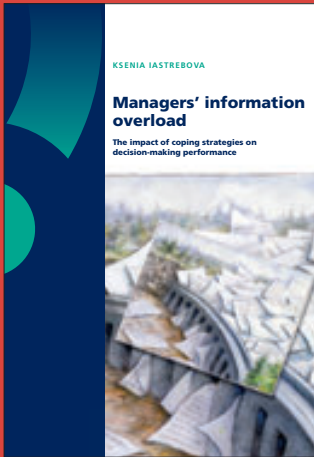
"ERIM really inspires its members to do first-class research, giving them the opportunity to undertake research alongside intelligent colleagues, and I thoroughly enjoyed being part of that!

I am now a senior software engineer at ORTEC where I am responsible for several parts of the state-of-the-art algorithms that empower our Advanced Planning Systems.

Receiving my PhD was an important indicator for my employer that I was able to develop and implement a vision on the future of algorithms related to their products. All the computational results reported in my thesis were applicable to real-world planning problems and focused on mathematical models and algorithms.

For me as person, my PhD resulted in an improvement in my analytical skills, and my ability to see the big picture. I am now better able to understand and value scientific publications and their applications in day-to-day business. Though now working as a practitioner, I also try to contribute to the scientific research in my field.

I began a PhD with the goal of increasing my scientific knowledge, and I feel I certainly achieved this. I also gained some valuable lessons such as being responsible for final results, and working independently."



Managers' Information Overload: The Impact of Coping Strategies on Decision-Making Performance

Promotor: Prof.dr. H.G. van Dissel

EPS-2006-077-LIS

<http://hdl.handle.net/1765/7329>

077

At the beginning of the 20th century, information was a scarce resource. The expansion of information and communication technologies, however, brought dramatic changes in terms of volume of information, driving society into the information age with new economic, social, and ethical rules. The problem of having too little information has been transformed into a problem of having too much information and has generated feelings of deficiency in the face of a constantly increasing information load. In this thesis, we develop an analytical approach to study the problem of information overload and human coping with it. Three generic groups of factors that contribute to the emergence and proliferation of information overload are specified. While often they have an independent effect, they also produce interactions reinforcing or eliminating each other. Hence, information overload is a complex phenomenon that results from the interactions among a large number of factors. Based on literature review and empirical data analysis, we made a distinction between three types of coping, i.e. human-enabled, technology-enabled, and organisation-enabled. We further model human coping behaviour using the analytical apparatus of the structuration theory, paying specific attention to the role of technology in assisting and facilitating human information processing. In so doing, we not only suggest a method for detecting the coping strategies but also provide an explanation of why certain strategies fail. Three qualitative case studies are presented in this thesis and are used to test and refine the conceptual model. The results suggest that to control the risks imposed by the complexity of the information environment, organisations must manage a number of critical areas. We propose detailed guidelines for "information overload diagnoses". These guidelines not only help to detect the level, the scope, and the factors behind information overload, but also provide methods for fulfilling diagnoses and a basis for developing countermeasures.

RSM is considered one of the top business schools in Europe and highly appreciated by employers. From my own experience, my PhD at ERIM gave me an entry ticket to a highly prospective segment of the labour market



"I am now a business portfolio adviser in the New Business Development division at Shell International Exploration & Production. While the area of my PhD research does not directly overlap with my current profession, I tend to believe that the value of it is immense – the ability to tackle non-structured, vaguely-defined problems, to employ independent thinking, and to feel comfortable with various decision-making tools.

I treated pursuing a doctoral programme as a personal challenge. I have a master's degree from the Urals State University (Russia), and wanted to prove own competitiveness in a leading international research institute. I was thrilled by the state-of-art research available in the area of information systems – an area in which Russia is obviously lagging.

My PhD thesis was written on the basis of three studies conducted in three companies in the Netherlands. The results of the studies were communicated to the top management and used as input into their strategic outlooks. My results were also presented at the European Conference on Information Systems (ECIS), 2002 and the Doctoral Consortium at the International Conference on Information Systems (ICIS), 2002, and published in a number of articles in Dutch newspapers.

Pursuing a doctoral study is a very hard and sometimes even painful experience. It teaches you to structure your workload, set deadlines and, most importantly, meet these deadlines. For me, it has been worth the effort. RSM is considered one of the top business schools in Europe and is highly appreciated by employers. From my own experience, my PhD at ERIM gave me an entry ticket to a highly prospective segment of the labour market."



Institutional Arrangements that Affect Free Trade Agreements: Economic Rationality Versus Interest Groups

Promotors: Prof.dr. H.E. Haralambides
Prof.dr. J.F. Francois

EPS-2006-078-LIS
<http://hdl.handle.net/1765/7578>

078

This dissertation presents a time motion study of what actually happens at the busiest U.S-Mexican border crossing at Laredo. The North American Free Trade Agreement (NAFTA) assumes seamless border crossings without detailing however how this would be achieved particularly in the case of trucking, the most important cargo transport mode. This dissertation presents evidence that NAFTA has not led to an efficient border crossing: a border that could be crossed in 15 minutes with a single truck and driver takes several days, drivers, and pieces of equipment. In fact it takes longer to cross the Rio Grande than go from Chicago to Laredo by truck. This is contrasted with a mini-time motion study of an efficient border crossing at Ambassador bridge between the United States and Canada, which has more traffic than all Laredo bridges combined, yet it has only 4 lanes versus the 22 crossing lanes available at Laredo, presenting the effects of the attempt to solve an institutional problem by building more infrastructure. The time-motion study establishes which practices or regulations cause which inefficiencies and what are the consequences in terms of time, money, and equipment. This analysis shows the way in which interest groups profit from inefficiency and it also reveals the economic forces at work on the local and national level in both countries. Such inefficiencies not only cost importers and exporters time and money – they also cause welfare losses to the entire economy because of the distortions they introduce to consumption and sourcing decisions. In order to measure the macro-economic impact of these non-tariff barriers, the dissertation uses the General Trade Analysis Project – GTAP model – to simulate the removal of iceberg trade costs. The results of the analysis indicate that the removal of such barriers would benefit the Mexican economy by \$1.8 billion per year, while the U.S. economy would see a welfare increase of about \$1.4 billion per year. Trade flows between Mexico and the United States would likewise increase, with southbound trade expanding by about \$6 billion and northbound trade growing about \$1 billion per year. This work is relevant for business and government people pressing the case for well intended free trade agreements and promoting the technology that can expedite greater volumes of trade. Further research along the lines of this work may provide a refined theoretical and methodological basis for cross-border policy.

My PhD allowed me to thoroughly research a subject of interest in an area in which I had over 10 years professional experience



"I am a consultant in international trade and transportation. The idea of doing a PhD actually came from my husband Paul Kent, a PhD economist well-known in the international port community. Before I started the doctoral research I had worked in international trade, in an environment where trade was greatly constrained, and I was interested in looking at the emerging subject of free trade agreements. Paul introduced me to Professor Hercules Haralambides who enthusiastically welcomed the idea of research on the emerging subject of border-crossing economics and how border inefficiencies present barriers to the intended benefits of free trade agreements. During my doctoral studies, I learned to be grateful and humble. Developing something new is a challenging process. Patience and perseverance are very helpful, while perfectionism can get in the way.

My research led to publications in numerous international journals. The chief economist for Latin-America and the Caribbean, World Bank, invited me to utilise the same conceptual analysis of my thesis: "Institutional Arrangements that Affect Free Trade Agreements: Economic Rationality Versus Interest Groups" to write a case study for their analysis of Lessons from NAFTA (North America Free Trade Agreement) to CAFTA (Central American Free Trade Agreement). The World Bank now has a growing interest in trade corridors and border crossings. In a way, this is the application of my thesis in the real world.

My PhD has allowed me to thoroughly research a subject of interest in an area in which I had over 10 years of professional experience prior to my enrolment in the PhD programme. It also allowed me to contribute to the understanding of border problems that cannot be fully understood with simple time and costs measurement studies."



Distributed Collaborative Learning Communities Enabled by Information Communication Technology

Promotor: Prof.dr. K. Kumar

EPS-2006-080-LIS

<http://hdl.handle.net/1765/7830>

080

How and why can Information Communication Technology (ICT) contribute to enhancing learning in distributed Collaborative Learning Communities (CLCs)? The first part of the book offers a review of the current literature and relevant theories concerned with the phenomenon of ICT enabled distributed collaborative learning. It identifies gaps in the current knowledge. Many questions can be asked about the role of technology in distributed CLCs. How technology is enabling collaborative learning in learning communities is an important one. What are the issues and problems in the context of technology enabled collaborative learning, is another. The articulation of CLC characteristics stem from the Communities of Practice and Communities and Technologies movements that have taken root in twenty-first century Information Society dialog. The theoretical lens provides a framework to study this phenomenon empirically in a case study setting. The research methodology explains the choice and justification for the single case study of the Fielding Graduate University. Fielding offers a unique example of both the phenomenon and context of technology enabled distributed graduate education. The study findings can begin to be generalised to CLCs with similar characteristics to the Fielding Graduate University. Because of the need for intense collaboration, distributed collaborative learning can be facilitated by the use of rich media. Where people use media rich technologies their distributed collaborative learning results seem to be better than their colleagues that did not use ICT. Therefore, media rich ICTs with collaborative features may improve the level of learning and performance in collaborative distributed learning environments.

My PhD position further legitimised my role as director of the Center for Internet Augmented Research and Assessment (CIARA) at Florida International University in Miami



"My doctoral thesis provided me with a much deeper understanding of distributed collaborative learning enabled by ICT. My research has become input into a three year proposal to the US National Science Foundation (funded three months after my graduation) called Global CyberBridges: www.cyberbridges.net. For me, a PhD was the logical next step for my career development as an information communication technology (ICT) researcher, administrator, and educator. Studying at Erasmus University added an exciting international dimension to my study – I like to travel and enjoy adventures around the world. But the most important thing I learned during my doctoral study was the ability to design and carry out a post-graduate research study. The literature review, analysis, and conclusions from my doctoral thesis provided the background for several international journal articles. An example is, "CyberBridges; A Model Collaboration Infrastructure for e-Science," which has been accepted into the Seventh IEEE International Symposium on Cluster Computing and the Grid – CCGrid 2007.

Professor dr. Daniel Sewell, who is the VP of Research and Information Technology at Fielding Graduate University, is applying the results of my dissertation to that institution's strategic development of the ICT for distributed collaborative learning. My PhD position further legitimised my role as director of the Center for Internet Augmented Research and Assessment (CIARA) at Florida International University in Miami as well as Principle Investigator (PI) and Co-PI on several research grants from the US National Science Foundation. I am still working as a researcher. My motivation for this is quite simply that I enjoy the work. Along with my colleagues we have several US National Science Foundation grants and cooperative agreements."



Innovation Management in Project-Based Firms

Promotor: Prof.dr. S.L. van de Velde

EPS-2006-082-LIS

<http://hdl.handle.net/1765/7828>

082

Project-based firms have an organisational structure, capabilities and routines that clearly distinguish them from firms that manufacture mass products. Some have claimed that these characteristics make project-based firms more innovative than for instance manufacturing firms, others argue the contrary. The central question in this research is to what extent the specific characteristics of project-based firms affect innovation management. We focus on new product or service development projects in project-based firms and investigate the influence of firm characteristics on the management practices for these projects. We performed exploratory case studies to generate hypotheses and subsequently tested these hypotheses using a large scale comparative survey of project-based and non-project-based firms in the Dutch Information and Technology, Construction, Engineering and related industries. We find that development projects enable project-based firms to follow more innovative strategies. To execute these development projects successfully, they are to be managed differently than is currently described in the innovation management literature. Multidisciplinary teams and planning, for example, hamper development projects of project-based firms. In firms that manufacture mass products, where specialisation abounds, the experts of the various disciplines need to collaborate in multidisciplinary development teams. On the contrary, in project-based firms it seems that the experts within one discipline, who usually work each at separate projects, need to work together in development projects, since collaboration between disciplines abounds. Subsequently, the project leader's task seems to be the translation of the specialised new services and products and to ensure that these are implemented within projects executed to customer order. This is a different task than for heavyweight project leaders in manufacturing firms, who have to enable communication and collaboration between disciplines. Furthermore, it seems that project-based firms should apply a more emergent style of project management on their development projects, as their capabilities in efficient project planning hamper the quality of the services and products that are developed.

I gained real insights into the ways innovation is managed in project-based firms



"Knowing how to analyse data is always valuable. I truly enjoy doing research, which is why I chose to do a PhD. I wanted to invest the time to study and understand innovation management in project-based firms, and in my job, I did not have the time or opportunity to do this.

During my studies I succeeded in gaining real insights in the way innovation is managed in project-based firms. I also learned what it takes to practice academic rigour.

My thesis was published in *Research Policy*, and another chapter is currently under review at *Organization Science*. It has not yet been applied in the business world, but I have given talks on my results at Siemens in The Hague and Visser Smit and Hanab – they were very interested in the results.

I am currently a visiting scholar at the University of Maryland and have a part-time assistant professor position at RSM."



The Economic Lot-Sizing Problem: New Results and Extensions

Promotor: Prof.dr. A.P.L. Wagelmans

EPS-2006-093-LIS

<http://hdl.handle.net/1765/8193>

093

One way for firms to reduce cost is efficient production planning. The main theme in this thesis is a classical production planning problem: the economic lot-sizing (ELS) problem. The objective of this problem is to find a production plan that satisfies the given demand for a finite, discrete planning horizon, and minimises the total setup, production and holding costs. We study aspects of the classical problem as well as extensions of this problem. In the first part of the thesis we consider the ELS model with time-invariant cost parameters. We analyse properties of an optimal solution and, in particular, we are interested in the proportion of holding cost and setup cost in an optimal solution. Furthermore, we perform a worst case analysis on a broad class of on-line heuristics for the problem. Because the classical model is relatively simple, we also consider extensions of the model. We are interested whether there exist algorithms to solve the extensions efficiently. In the first extension we incorporate pricing decisions in the ELS model. The problem is now to find optimal price(s) and an optimal production plan simultaneously. We consider models with variable prices and a constant price over time. Furthermore, we extend the ELS model with a remanufacturing option. It is assumed that a known quantity of products returns from the customer in each period and those returned products can be remanufactured to satisfy demand (besides regular manufacturing). We derive algorithms and complexity results for models with a joint setup cost for manufacturing and remanufacturing (in case of a single production line) and a separate setup cost (in case of separate production lines).

I was awarded the Chorafas Prize for 2005, a prize designed to stimulate young researchers



"Doing research is almost the equivalent of solving puzzles. For me, this is extremely rewarding, and I continue to conduct research so that I can keep on solving these puzzles. During my master's degree, I enjoyed doing the research and writing involved in my thesis. A PhD was a way to continue conducting research.

Narrowing problems down to such an extent that only the 'real' problem remains – this is the most important thing I learned during my doctoral studies. In terms of content, in my thesis I developed solution methods for some production planning problems. Results of my research were published in *Computers & Operations Research*, *European Journal of Operational Research*, *International Journal of Production Research* and *Operations Research Letters*. I was awarded the Chorafas Prize in 2005, a prize designed to stimulate young researchers.

I am currently an assistant professor at the Econometric Institute of Erasmus University Rotterdam. Without a PhD I would not have been able to get this job."

Organisation

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Labour Flexibility in China's Companies: An Empirical Study

Promotors: Prof.dr. A. Buitendam
Prof.dr. B. Krug

EPS-2001-006-ORG
<http://hdl.handle.net/1765/307>

006

Labour flexibility in China's Companies: An Empirical Study explores labour flexibility at the workplace in ten manufacturing companies in China. It addresses how HRM contributes and facilitates management in coping with increasing market competition. Flexible labour practices are related to the company level HR system, and change of the HR policies and practices entails a consistency perspective. Chinese managers have strong incentives to increase labour flexibility in the company. They simultaneously face constraints and/or opportunities as related to legacies and changes in the institutional framework of a Transition Economy.

At ERIM, academic research and practice are so closely integrated and interwoven that they provide an invaluable learning environment



"I started my doctoral research at Erasmus University in 1996 as soon as I had finished my master of science in development in The Hague.

Researching taught me to put the corporate world in perspective, and to understand the importance of management in today's changing business landscape. My work showed that labour flexibility is one of most important tools that management can use to deal with this.

Part of my doctoral thesis was published in the *Journal for East European Management Studies*.

My PhD provided me with the foresight and management skills to deal with business, especially with respect to human resource management. I am currently a business development manager in a parent company, and a general manager in the subsidiary.

Erasmus University and ERIM is a great place, where academic research and practice are so closely integrated and interwoven that they provide an invaluable learning environment for PhD students in business and management."



Outsourcing, Supplier-relations and Internationalisation: Global Source Strategy as a Chinese Puzzle

Promotor: Prof.dr. R.J.M. van Tulder

EPS-2001-010-ORG

<http://hdl.handle.net/1765/355>

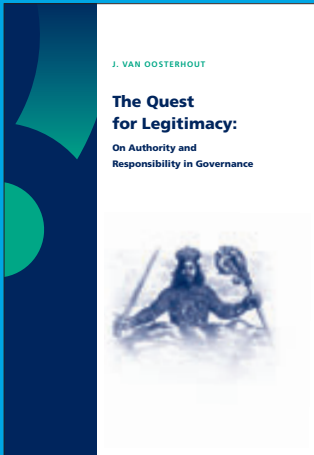
010

This thesis deals conceptually and empirically with the important question of how firms can obtain competitive advantage through managing their inputs. It investigates the performance effects of three dimensions of sourcing strategy: outsourcing, supplier relations and internationalisation. Sourcing strategy has become a topic of increasing interest for both practitioners and academics. Quantitative analysis techniques are used to study managerial decision-making in the Dutch manufacturing sector. One important overall conclusion is that managers tend to overestimate the efficiency of vertical markets for the provision of inputs at the expense of organising.

Michael J. Mol

Michael Mol is currently a senior lecturer in strategic management at the Business School of the University of Reading in the UK, and a visiting researcher of the Management Innovation Lab at London Business School.

His work centres on the topics of management innovation and outsourcing, with a focus on the strategic management of large firms, sourcing strategy, and management innovation. To date, Michael has worked and studied at seven universities in five countries, and his publications have appeared in or are due to appear in, among others, *International Business Review*, *Research Policy*, *Sloan Management Review*, *Strategic Organization*. He has written four books (most recently with Cambridge University Press and FT Prentice Hall).



The Quest of Legitimacy: On Authority and Responsibility in Governance

Promotors: Prof.dr. T. van Willigenburg
Prof.mr. H.R. van Gunsteren

EPS-2002-012-ORG
<http://hdl.handle.net/1765/362>

012

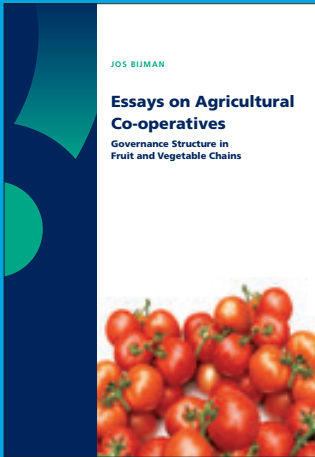
Although authoritative governance is ubiquitous in modern society, the nature of authority is one of the most neglected and understudied topics in economic, political and organisational theory today. This study aims to correct for this lacuna. Its main conclusion is that there is no such thing as an unambiguous concept of authority. It is argued that both authority and responsibility in governance should be conceived in institutional rather than conceptual terms, and that the quest for legitimacy that is indissolubly tied up with any understanding of authority, ultimately involves a problem of institutional design.

I see my thesis as a jump-start to my research career rather than as an end product



"For me, getting a doctoral degree was a way of completing an investment in myself that began the moment I entered primary school. Today, I continue to invest in developing myself through conducting research because it connects very well with who I am. I love the challenge of creating new insights and further developments in theory, or interpreting new findings in empirical research.

I am a professor of corporate governance and responsibility at RSM. A PhD was a necessary part of my career as an academic, so it speaks for itself that it creates value in my role. Part of that value was learning patience, and being prepared to radically change your research questions when necessary. My PhD provided more insights than that; so many, I cannot list them. I see my thesis as a jump-start to my research career, rather than as an end product."



Essays on Agricultural Co-operatives; Governance Structure in Fruit and Vegetable Chains

Promotor: Prof.dr. G.W.J. Hendrikse

EPS-2002-015-ORG

<http://hdl.handle.net/1765/867>

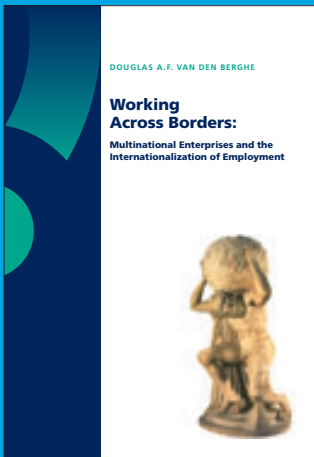
015

This thesis studies the efficiency of the marketing co-operative for carrying out transactions with farm products. A co-operative is a special type of governance structure, characterised by collective ownership and forward vertical integration. These characteristics influence investment decisions by farmers and other firms in the agrifood chain. As vertical co-ordination has become more important in agrifood markets, investments in production and marketing become co-specialised. The main question is whether the farmer-owned co-operative induces optimal incentives for complementary investments in two (or more) stages of the chain. The empirical research focuses on the Dutch fruit and vegetable industry.

My motivation for undertaking research was curiosity and a thirst for creating new insights



"Since I had the goal of pursuing an academic career, a doctoral position was a natural step in this process. My motivation for undertaking research was curiosity and a thirst for creating new insights. Building upon an MA in political science, my doctoral research revealed a whole new theoretical domain: economic organisation theory. The focus of my thesis was how a changing market environment has lead to restructuring of Dutch agricultural cooperatives. Findings lead to publications in several international journals, namely: *American Journal of Agricultural Economics*, *European Review of Agricultural Economics* and the *Journal of Chain and Network Science*. A PhD has been very advantageous for me, and I am now an assistant professor of management and organisation at Wageningen University."



Working Across Borders: Multinational Enterprises and the Internationalization of Employment

Promotors: Prof.dr. R.J.M. Tulder
Prof.dr. E.J.J. Schenk

EPS-2003-029-ORG
<http://hdl.handle.net/1765/1041>

029

Multinational enterprises (MNEs) are often held responsible for the 'relocation of production' and 'exporting jobs' to, often low-wage, countries at the expense of domestic jobs. Additionally, host country governments – in particular in developing countries – often perceive international production by MNEs as the panacea for generating employment and economic growth.

What is the spatial organisation of production and employment of MNEs? What are the employment effects of changes in the geography of international strategy? Have MNEs increasingly integrated production across borders with a regional division of labour and, what are the employment effects?

This thesis demonstrates that the geography of a MNE's internationalisation strategy as well as the stage of its internationalisation process influences employment in both home and host countries. Competition among workers within macro regions in industrialised countries (e.g. the EU) and among low wage countries or regions is often greater than between high and low wage countries. The employment effects of internationalising firms are often intertwined with processes of regional integration as well as with the herding and strategic behaviour of MNEs.

My PhD provided me with the analytical skills that clients prefer in assisting them to make the right decisions in their offshoring projects



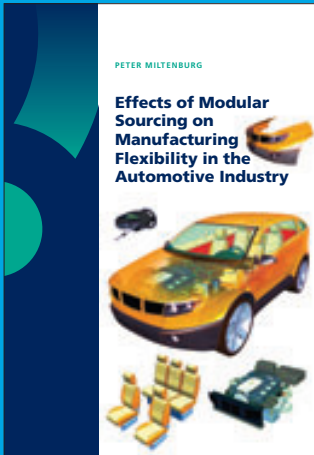
"My PhD was actually something I enrolled in while I was a research associate within the leading research programme: 'Internationalisation and competitive space'. I was responsible for setting up an expert centre on the managerial and academic effects of internationalising large firms. As the expert centre and its associated database on internationalisation strategies became well known, I decided to write a research proposal on its results.

Apart from the academic and intellectual learning curves that come with a doctoral thesis, you learn most about yourself and your capabilities. I learnt very well how to set priorities, I experienced the boundaries of my intellectual capabilities, and I also learnt about managing my supervisors!

My thesis led to publications in the *Transnational Corporations Journal*, and a forthcoming book with Edward Elgar (2007), as well as a number of major projects with Ernst & Young – International Location Advisory Services (ILAS). I managed several large relocation and offshoring projects ranging from shared service centre activities to top class R&D centres.

During the completion of my PhD I accepted a position at the United Nations (UNCTAD) as an economic affairs officer for two years, and I am now a director with Ernst & Young – ILAS.

My PhD provided me the analytical skills that clients prefer in assisting them to make the right decisions in their offshoring projects. It also enhanced my productivity and made me a powerful writer. In my opinion, a PhD in business and management combines the business and managerial skills of a first-class MBA with the intellectual insights of a professor in (international) management."



Effects of Modular Sourcing on Manufacturing Flexibility in the Automotive Industry

Promotors: Prof.dr. J. Paauwe
Prof.dr. H.R. Commandeur

EPS-2003-030-ORG
<http://hdl.handle.net/1765/1039>

030

Modular sourcing represents a departure from 'traditional' sourcing methods since it reduces the process and product related complexity. The importance of this concept to the automotive industry has been increasing tremendously the last few years and entails a re-structuring of automotive supply chains. In a modular sourcing relationship a supplier develops and produces a complex part of a vehicle (e.g. front-end including lights) on behalf of the vehicle manufacturer. This study focuses on the effects of modular sourcing on the flexibility of manufacturing systems in the automotive industry. Based on a solid theoretical analysis, a conceptual framework is developed in this study, which observes several actors and influential variables. In order to develop and validate this conceptual framework both exploratory case studies (at DaimlerChrysler, Porsche, Volkswagen, BMW) and quantitative analysis have been used. The results of this study demonstrate that the flexibility of the manufacturing system is positively affected by the application of modular sourcing. However, outsourcing too many activities can result in quality problems, higher costs, and can actually reduce the level of manufacturing flexibility.

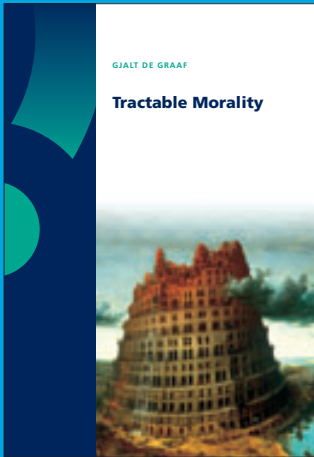
Throughout the world a PhD degree stands for expertise in a specific subject



"In a past role as a consultant for Arthur D. Little, I worked on several global automotive projects. I discovered that both vehicle manufacturers and large suppliers seem to have difficulties in grasping the concept of manufacturing flexibility and how it is affected by modular sourcing. This was what sparked my interest. I devoted my doctoral thesis to uncovering and solving these specific problems.

Throughout the world a PhD degree stands for expertise in a specific subject. I chose Erasmus University for its strong name and affiliated research institutes which stand for quality research done by quality people. My studies taught me to always look for different viewpoints on various subjects as well as general strategic decision-making skills. Completing my doctoral thesis was excellent both to learn from and to profit from. Conclusions from my study have been published in the Dutch journal *Management & Organisatie*, another article is under review for *Long Range Planning*, and a book on the topic of strategic sourcing is currently in the making.

I am now a team leader at the strategy department of the BMW Group in Munich, Germany. I have used the insights gained from my research in several projects. Both my PhD and ongoing research I conduct in my spare time allow me to contribute to improving efficiency and shareholder value."



Tractable Morality: Customer Discourses of Bankers, Veterinarians and Charity Workers

Promotors: Prof.dr. F. Leijnse
Prof.dr. T. van Willigenburg

EPS-2003-031-ORG
<http://hdl.handle.net/1765/1038>

031

Ethical problems continually confront managers in the workplace, but how do they know what the “right” thing to do is? A manager’s world is more complicated than choosing between “doing well” and “doing good.” It is difficult enough to identify the ethical dimensions of their decisions in the first place, let alone consider the consequences of the various actions that might follow. Nor are scholars certain of how to research ethics within organisations.

What terms and concepts are most useful?

This thesis studies discourse theory to help both managers and academicians. Within discourse theory, language is seen as constitutive of reality. This has consequences for business ethics because, after all, how we look at the world and perceive facts determines how we value.

The book’s three empirical studies of customer discourses of bankers, veterinarians and charity workers pose some intriguing questions while framing the discourse analyses. Does the Rabobank treat its customers the same way as its competitors? Do fundraisers and managers of charities define “customer” differently? How do veterinarians deal with conflicts of interest between animals and animal owners? The answers lie within.

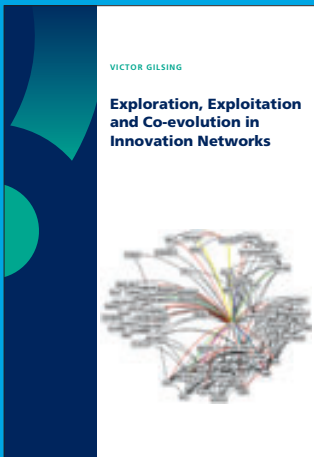
I gained valuable insights from my research, like that managers do not choose between 'doing well' and 'doing good'



"Doing a PhD made me realise how enjoyable it is to conduct research. I was interested in pursuing an academic career, which was I chose to do a PhD, and the experience confirmed my choice.

During the course of my research, I gained valuable insights, namely that language is constitutive of reality; that managers do not choose between 'doing well' and 'doing good': they need a tractable morality; that discourse theory is very useful for business ethics; and that fundraisers within charities strive to have both good marketing, and reliability and independence, which lead to conflicts.

My research led to published articles in the *Journal of Business Ethics* (two articles), the *Journal of Agricultural and Environmental Ethics*, *Business Ethics: A European Review*, and *Journal of Veterinary Medical Education*. It also resulted in my current position as assistant professor at the VU University."



Exploration, Exploitation and Co-evolution in Innovation Networks

Promotors: Prof.dr. B. Nooteboom
Prof.dr. J.P.M. Groenewegen

EPS-2003-032-ORG
<http://hdl.handle.net/1765/1040>

032

This PhD thesis describes the co-evolution of sectoral characteristics, networks of firms and the embedded learning regime from the perspective of a sectoral innovation system (SIS). More specifically, this research aims to shed light on how the institutional environment of a SIS conditions network structures and learning regimes and how outcomes from a learning regime may affect again the institutional environment of a SIS. Moreover, this research aims to understand in how far this co-evolutionary process differs between different SIS's. In analysing this co-evolutionary process, two views on organisation are combined, namely a competence view and a governance view. Following this, a dynamic model of co-evolution at the level of a SIS is developed based on which a number of hypotheses is developed. To test these hypotheses, two SIS's in the Netherlands have been studied over the period from the late 1980's towards the early years of the new millennium: multimedia and pharmaceutical biotechnology. The empirical findings indicate that a general pattern of co-evolution on a sectoral level can be identified. How this pattern settles in network characteristics, coordination mechanisms and in properties of a learning regime is specific to the institutional set-up within a SIS or within different parts of a SIS. In this respect, this study contributes to the understanding of the dynamics of SIS's as well as of how the optimality of network structure and coordination mechanisms varies with different types of SIS's.

I have experienced multinational and governmental organisations, and that was what motivated me to pursue an academic career



"I did my PhD alongside my job at the Dutch Ministry of Economic Affairs, where I was working at the time. I started researching for two reasons: one was that I had an intrinsic interest in the role of inter-company networks for innovation; and the other was the opportunity to learn more about the world of science and decide if I wanted to pursue a scientific career. Happily, my experience met both objectives: I finished my thesis in less than four years and could not wait to enter academia.

My doctoral research showed me the benefits of analytical sharpness and perseverance. It taught me to see how key structural properties of technology-based inter-company networks vary between exploration and exploitation, and how much this varies between different industries.

My PhD work has appeared in *Research Policy* and *European Management Review* (both co-authored with Bart Nooteboom) among others, and my thesis was published commercially by Edward Elgar Publishers.

Stork Aerospace asked me to apply the conclusions of my thesis to their innovation network. The results were very positive and we will probably continue collaborating in the near future.

Towards the end of my doctorate I was approached by Professor Geert Duyters at ECIS who asked if I wanted to work with him. I am now a senior researcher with ECIS, based at the Eindhoven University of Technology.

For me a PhD is a 'sine qua non' for an academic career – I could not do without it! Having worked for Unilever and the Dutch Ministry of Economic Affairs, I have experienced multinational and governmental organisations, and that motivated me to pursue an academic career – it is what fits me the best."



The Rise of Regionalism: Core Company Strategies under The Second Wave of Integration

Promotor: Prof.dr. R.J.M. Tulder

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038

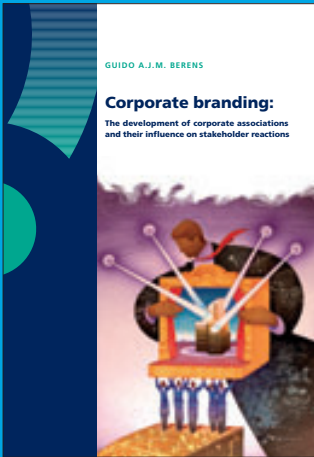
Regionalism has eclipsed the multilateral system as the 'fast track' for international economic restructuring. Within that framework, the Single European Market (SEM) and North American Free Trade Agreement (NAFTA) have emerged as the bi-polar core of the global economic system. Both agreements were sold to the public on relatively abstract terms, employing complex economic models as the basis for projected growth and increased competitive advantage. National governments at the time tended to take a relatively simplistic view of 'the firm' and ignore the strategic diversity among economic actors. Partly as a result, ten years into the 'Second Wave' of regionalism there are few uncontested conclusions as to its outcomes or significance. Regional integration in Europe and North America was largely facilitated through the lobby activity of Western 'core companies': large, powerful firms that lead economic restructuring and operate with one foot in the political process. For Western core companies, regionalism has become the institutional framework of choice within which the struggle for the preservation and consolidation of their core positions is played out. Taking their spatial organisation of production in 1990 as a baseline, this study is the first to systematically unravel the traditional macro-aggregated understanding of integration outcomes. The evidence shows that, despite the persistence of 'globalisation' ideology, regionalism has fuelled a diverse pattern of strategic migrations among core companies, particularly since 1995. The outcome is one of growing polarisation between North American and European core companies, and consequently within an increasingly dyadic world economy.

I am an insatiably curious person, which is why I enjoy academic teaching and research



"One of the things I learnt during my PhD was that globalisation, from a firm-strategic perspective, is not nearly as extensive as people and the media like to believe. For me, these kinds of insights, which provide a deeper understanding of the world we live in, are extremely rewarding. But this sense of reward requires a passion for the subjects you are investigating.

During my PhD (and since its completion) I have had papers published in the *Multinational Business Review* and the *European Management Journal*; others are pending. My PhD was a necessary step to getting where I am now – assistant professor of international business at the University of Amsterdam Business School. I am an insatiably curious person, which is why I enjoy academic teaching and research."



Corporate Branding: The Development of Corporate Associations and their Influence on Stakeholder Reactions

Promotor: Prof.dr. C.B.M. van Riel

EPS-2004-039-ORG

<http://hdl.handle.net/1765/1273>

039

Companies are becoming increasingly transparent toward society. But how do people respond to this transparency? Some critics state that the majority of people do not care about the way companies behave, at least as long as it does not affect them personally. Obviously, this criticism is overstated since there have been large-scale consumer boycotts. However, the question is under which conditions people are more likely to care about the way a company behaves. This thesis contributes to an understanding of this issue by looking at the development and influence of corporate associations, i.e., of the perceptions that people have regarding companies. It addresses three important questions. First, which types of corporate associations can be distinguished? Second, under which conditions do different types of corporate associations influence people's preferences for a company's products, stocks, and jobs? And third, which way of communicating about a company leads to the most favourable corporate associations? These questions are addressed by three experimental studies and by a thorough review of the literature.

During my PhD I really learnt to have confidence in my own judgement



"During my PhD I really learnt to have confidence in my own judgement. As a PhD student, you can regard yourself as 'the expert' on your topic, and that is empowering. In my current role as assistant professor at RSM, this confidence is important, as well as the many methodological skills I learnt (especially during the so-called "NOBEM" course) which I depend on in my current work.

I was convinced before I began my PhD that I wanted to be a researcher, and I saw the degree as a necessary step to an assistant professorship. On a content level, my PhD provided me with some very interesting insights. One of these was that branding strategies in which the company brand is made visible at the product level (like in the case of Philips) increase the salience of the company's expertise; but a strategy in which the company brand is only visible in the background (like in the case of Unilever) increases the salience of the company's social responsibility.

My findings have resulted in articles in the *Corporate Reputation Review*, the *Journal of Marketing*, and the *Journal of Business Ethics*. My first study was commissioned and used by a large financial company as input into its branding strategy (whether or not to make the company brand visible at the level of the subsidiaries).

Research is a natural career for me. I really enjoy both reading and writing, and when I am interested in something, I really like to get to the bottom of it."



Trust and Trouble: Building Interpersonal Trust within Organizations

Promotors: Prof.dr. B. Nooteboom
Prof.dr. A.M. Sorge

EPS-2004-040-ORG
<http://hdl.handle.net/1765/1271>

040

Trust is considered to be important for successful cooperation by many people, so why do we not see predominantly high-trust work relationships? Part of the explanation, this book argues, is that trust is difficult to build and maintain in work relations. The purpose of this study is to find out more about how trust works as an interactive and asymmetrical process, how trust is built up against the inevitable occurrence of trouble and how organisational policies and settings affect the generation and maintenance of trust. Following relational signalling theory three master frames are identified: the hedonic frame (with the goal to feel good or better right now), the gain frame (with the goal to improve one's resources) and the normative frame (with the goal to act appropriately). It is argued that trust requires the absence of opportunistic behaviour by the trustee so that the trustor can make himself vulnerable to the action(s) of the trustee. This requires a stable normative frame, since opportunistic behaviour is highly likely in the other two master frames. The key argument put forward in this study is, therefore, that for interpersonal trust to be built in work relations within organisations, both individuals in the relationship need to have their actions guided by a stable normative frame. Thus the stability of normative frames becomes a joint goal and likely to be jointly produced within the relationship. The theory shows that for interpersonal trust to be built (1) legitimate distrust situations must be taken away through interest alignment arrangements, (2) institutional arrangements must be put in place that stimulate frame resonance, (3) both individuals must regularly perform actions conveying positive relational signals and (4) both individuals involved in a trouble situation must at least act in ways that are not perceived as negative relational signals. Given trust's complexity, testing the theory requires a multi-method approach, using several sources of data and several types of analysis. A multiple case study strategy was applied covering two organisations. Embedded within the case study strategy, a multi-method approach was used with interviews, observations, a questionnaire survey, documents and verification meetings as instruments for three types of analysis: a quantitative trust and trouble event analysis, a quantitative survey analysis and qualitative analyses.

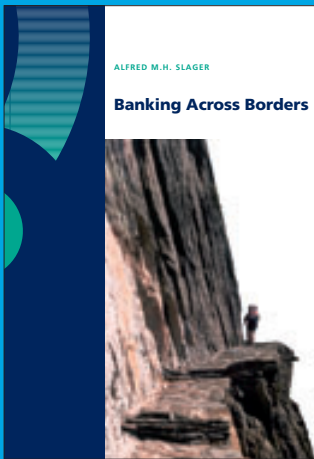
An executive board member of one of the companies I conducted research on said he applies insights from my findings in his decision-making – this is rewarding to hear



"I am in academia because I am fascinated by how organisations, and relationships within and among organisations, work. I was an external PhD candidate at ERIM. My research showed how trust works as an interactive and asymmetrical process. The key argument I put forward is that for interpersonal trust to be built in work relations within organisations, both individuals in the relationship need to have their actions guided by a stable normative frame. My findings were published in a commercial publication by Edward Elgar in 2005 called *The Trouble with Trust*.

An executive board member of one of the companies I did my research on said recently that he regularly talks about my work to his clients and applies insights from my findings in his decision-making – this is rewarding to hear.

Getting a PhD degree allowed me to get a position as assistant professor at the VU Amsterdam, department of Public Administration and Organisational Science."



Banking across Borders

Promotors: Prof.dr. R.J.M. Tulder
Prof.dr. D.M.N. van Wensveen

EPS-2004-041-ORG
<http://hdl.handle.net/1765/1301>

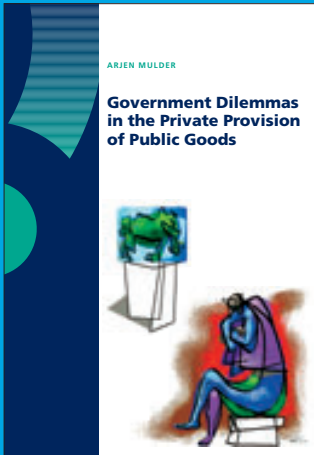
041

Since the 1980s, many of the largest banks in the world have increased their foreign activities dramatically. Currently, international capital and banking markets are more intertwined than ever, making a correct assessment of the costs and benefits of internationalisation a serious matter for bank management, regulators as well as shareholders. This study contributes to a better understanding of the internationalisation of banks. The study appraises to what extent banks internationalised because of internal, institutional or sectoral incentives. The internationalisation strategies of the world's largest banks in eight countries between 1980 and 2000 are described and analysed. These banks have dominated the internationalization of banking. Strategic commonalities and differences are identified on the basis of a strategic typology developed for this study. The central research question deals with the effectiveness of internationalisation. Using a self constructed internationalisation database, differences are estimated between foreign and domestic performance, and the effects on shareholder return. A higher degree of internationalisation has on average not contributed to bank performance. Similarly, most shareholders have not gained by more internationalisation. The study also tries to address the future outlook for international banking – how will the internationalisation of banks proceed? The potential for further financial deregulation in the home country, uncertainty on the international regulatory regime, and the business mix of the bank are likely drivers for the bank's future internationalisation strategy and profitability enhancement.

Having a PhD adds value to the quality of your work



"I am an advisor to the CEO of PGGM Investments, the Dutch pension fund for healthcare that manages 80 billion euros worth of assets. I am also a part-time assistant professor at the financial management department of RSM. Professionally, I have been in the asset management industry for ten years. From my perspective, having a PhD does not advance your career in the Netherlands, but it is certainly a boost to your ego! It also adds value to the quality of your work. My thesis dealt with the internationalisation of banks: this now provides me with a theoretical framework for analysing trends and their implications for pension funds and asset management. My research also offers me guidance on the successes and pitfalls of international strategies. My initial interest in pursuing a PhD was aroused by working at Fortis, a financial conglomerate that is an amalgamation of Dutch and Belgian banks and finance companies. RSM at the time posted a PhD research proposal on the internationalisation of banking. Since I did not want to quit my day job, I was lucky that Dick van Wensveen and Rob van Tulder agreed to coach me outside the regular trajectory. The abridged version of my doctoral thesis has recently been published by Palgrave Macmillan under the title "Internationalisation of Banks: Patterns, Strategies, And Performance". I joined the financial management department at RSM in 2005 on a part-time basis, combining lectures and research. I have since happily ventured into other subjects in my research like asset management and pension funds. I especially enjoy studying real-life issues for pension funds and financial services in a theoretical context, and the other way around. Perhaps the most important thing I learnt during my doctoral study was that, if you put your mind to it, anything is possible. I am convinced there is an army of fine intellectuals out there who would do my PhD subject more justice than I did, but a successful PhD project needs discipline and determination, and these are qualities I appear to have instilled in my DNA."



Government Dilemmas in the Private Provision of Public Goods

Promotor: Prof.dr. R.J.M. van Tulder

EPS-2004-045-ORG

<http://hdl.handle.net/1765/1790>

045

The private provision of public goods is a much debated topic, both in the academic and the 'real life' literature. From an academic perspective, numerous potential pitfalls exist with respect to funding, willingness-to-pay, and the free rider problem. The logical solution to these problems has therefore always been government provision of public goods. In an era where governments withdraw from the market place as active providers of goods and services, however, there is a renewed interest in the private provision of these activities. This thesis takes a governmental perspective, asking how governments can encourage investments in the private provision of public goods. Since from an economic perspective the so-called 'coercive' measures (most noteworthy: regulation) are by definition inefficient, I focus on the non-coercive measures. Therewith, a trade-off is introduced between the efficiency and effectiveness of the government intervention-coercive measures are most predictable in their outcomes, but less efficient, whereas non-coercive measures are most efficient, but less predictable. The choice for non-coercive intervention instruments yields a number of dilemmas, illustrating the complexity of the choices to be made. The four dilemmas discussed are the Influenceability Dilemma, the Smart Governance Dilemma, the Policy Portfolio Dilemma, and the Joint Ownership Dilemma.

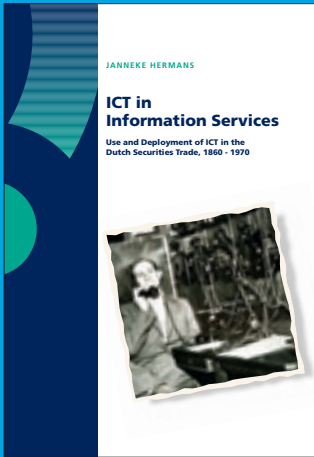
My PhD was beneficial not so much for the content of the trajectory, but rather the mindset it helped me develop



"At a certain point in my professional career I felt my learning curve was flattening. I still learnt 'skills', but the rate of acquiring content was decreasing. This was the reason behind my decision to pursue a doctoral degree.

Both during and after my master's in business administration degree, I had been fascinated by the field of economics. It was not surprising then that my PhD thesis had some economic content. From my research I deduced that it was possible to not only set up an incentive scheme to let the private sector invest in seemingly unprofitable assets, but also to determine some 'optimal' amount (in pecuniary terms) of these incentives.

It was great to be given the opportunity to conduct research on a theme I really liked (and still do); but while I had hoped to find answers in the field of economics, I felt the number of assumptions underlying my framework mushroomed, making it very difficult to match my ideas with empirical analysis. This is why, after my PhD, I abandoned the public economics/public management theme for finance. In the end, my PhD was beneficial not so much for the content of the trajectory, but rather the mindset that it helped me develop. I am now an assistant professor in finance at RSM Erasmus University."



ICT in Information Services; Use and Deployment of ICT in the Dutch Securities Trade, 1860-1970

Promotor: Prof.dr.drs. F.H.A. Janszen

EPS-2004-046-ORG

<http://hdl.handle.net/1765/1793>

046

Traditionally, information and communication technologies (ICT) have been considered as technologies that support business processes. With the hype of the 'new economy' at the end of the 1990s ICT is increasingly more seen as a strategic asset. The question arises what effects ICT really has had on firms. This thesis analyses the use and deployment of ICT in the Dutch securities trade in the period 1860-1970. It shows the role ICT has had on the level of the firm and on the industry level. This is done by studying the range of services which financial intermediaries provided and by studying the structure of the Dutch securities trade. Concerning the first, ICT has made the provision of services enormously more dynamic. Only think of the possibility to inform clients during trade time on the current rates by means of ICT. Concerning the second, ICT has had a less apparent effect. We see the rise of large of joint stock commercial banks that control almost completely the chain of steps necessary to execute a securities trade order. Before, several intermediaries were involved to execute such an order. The fact that these large players had the means to provide themselves with the most modern and fast ICT of that time, and thus to lower transaction costs, seems to be of overriding importance.

ERIM offered a very professional environment... international courses, funding for travelling to courses and conferences, and financing literature



"I am currently a Curator Telecommunication Technologies at the Museum for Communication in The Hague. Having a PhD means that when I am asked to take care of the content for an exhibition – which frequently happens – I know where to look for relevant information. I know how to take care of the background research in order to come back with an informative and well-structured exhibition, and that is still my favourite waste of time.

A PhD for me was a way of being able to continue the research and writing that I so much enjoyed while doing my master's thesis. I learnt a great deal: the importance of structuring your texts and making clear arguments. Specifically, I also discovered some great insights, one of which was that the introduction of communication technologies such as the telegraph, the telephone, and the stock-ticker, increased the transparency of the securities trade. The buyer therefore got more in control over his bought and sold securities.

My thesis resulted in publications in *History and Technology*, and the *Scandinavian Journal of Management*. ERIM offered a very professional environment, international courses, funding for travelling to courses and conferences, financing literature that was important for my research, and publishing my thesis. It was an enjoyable experience."



New Competition: Foreign Direct Investment and Industrial Development in China

Promotor: Prof.dr. R.J.M. van Tulder

EPS-2004-047-ORG

<http://hdl.handle.net/1765/1795>

047

Since the late 1970s, China has transformed itself from a centrally planned economy into an emerging market economy. During this process, new forces of competition have been injected into Chinese industries through imports, market entries and various institutional arrangements. Inward Foreign Direct Investment (FDI) has become a crucial channel through which a new competitive force is introduced from abroad. By exploring both the new, as well as the 'old', forces of competition and the new competitive situations emerging in Chinese industries, this study assesses the institutional and economic characteristics of the Chinese model of development and provides a particular interpretation of the much heralded – but less understood – 'Chinese miracle'. The primary aim of this study is to examine inward FDI as an industrial phenomenon – how the introduction of a new competitive force through FDI inflows influences the development of industries. It offers an interdisciplinary effort to advance the understanding of the FDI impact on industrial development in emerging markets. Based on a multidimensional, dynamic and comparative approach to analysing industrial advancement, this study investigates in particular the development of two Chinese industries – the automotive industry and the electronics and ICT sector. It illustrates the critical role of the policy environment in determining the effects of inward FDI. The policy environment at the industry level is largely defined by both entry restrictions and trade barriers. This study suggests that, under certain circumstances, multinational corporations and domestic firms might collaborate to dominate a market, for instance by establishing international joint ventures. This reinforces the problems of market dominance, regulatory capture and welfare losses. This study also seeks to help policy makers understand the evolution of industries and to provide a fact base for decision making at both industry and national level. It advocates a more sophisticated and competition-friendly framework of public policy, which requires both the introduction of new institutions and the upgrading of existing policy instruments. This framework is vital to ensure the contestability of markets, to reap the benefits of FDI, to tackle the negative effects of FDI and to promote long-term sustainable industrial development.

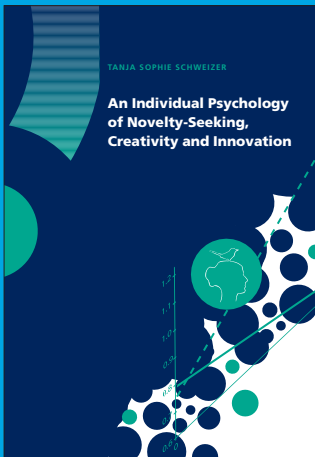
I decided to pursue my PhD at Erasmus University because I was aware that RSM is considered one of the leading business schools in Europe



"I am now an associate economic affairs officer at the United Nations. I decided to pursue my PhD at Erasmus University because I was aware that RSM is considered one of the leading business schools in Europe, and especially in the area of research.

I learnt a great deal during my time in my doctoral position, the main part of which was an in-depth understanding of the methodology of conducting business research.

My research revealed that pro-competition policies are important for enhancing the contributions of inward FDI in the development of industries, and papers are currently under review for publication by JIBS, as well as other journals."



An Individual Psychology of Novelty-Seeking, Creativity and Innovation

Promotor: Prof.dr. R.J.M. van Tulder

EPS-2004-048-ORG

<http://hdl.handle.net/1765/1818>

048

What does it take to generate something new? The desire to seek something new, the satisfaction of finding something, sharing these findings with others who also recognise them as new – these are key ingredients of generating a novelty. Part One of this book proposes a model of the novelty generation process based on an analysis of psychological theories, most importantly drawing from neuropsychology and social psychology. This Novelty Generation Model (NGM) clearly distinguishes three components: novelty-seeking, creativity and innovative performance. It is meant to provide a basis for better understanding the links between these particular components and identifying what interferes with and what facilitates each of them. Practical advice is also generated on this basis that is relevant not only for the novelty-seekers themselves, but also for their social environment that may want to support them. Highly-creative professionals are often only loosely affiliated with organisations, while much of the current scientific literature on creativity and innovation focuses on individuals in tighter employee relationships and teams in organisations. This book presents an individual work psychology for those settings where creative professionals (be it artists, scientists or inventors) see organisations (e.g. publishers or universities) more as service-providers to their own work. In such comparatively free professional settings other support issues seem to become more relevant: For instance grants and awards conferred to individuals. These phenomena that have not yet been paid attention to in the psychological literature on creativity and innovation are given a place in this individual work psychology. Many questions may be asked about grants and awards, whether they actually support innovation is an important one. Part Two, the empirical part of this book, among others presents a large-scale longitudinal study that tests some more specific hypotheses on the relationship between the individual's innovative performance and winning awards and grants. The study includes 1348 writers and poets that have received grants and/or awards in the German-speaking publishing area.

Through my work I have learnt that it is good to be stubborn on some occasions, and to be flexible on others



"Several factors led me into research; I wanted to find out whether there were any good ideas in me and whether I could bring these out and turn them into something tangible. I also wanted to challenge myself to expose my ideas to the criticism of a research community.

Through my work I have learnt that it is good to be stubborn on some occasions, and to be flexible on others. I have also seen that some things are sold as new, even when they are not; and that other things can be new, but not recognised as such by the public. Sometimes people who focus too much on novelty-seeking, do not properly finish the projects they start.

The publications I have appeared in include *Long Range Planning*, *Technology & Innovation Management*, *Creativity & Innovation Management Journal* and *Journal of Arts Management* (for my management research) and *Cerebral Cortex* (for my brain research). My 'Novelty Generation Model' has also been applied in a national innovation programme of the Australian government.

My PhD position helped me get the job I really wanted: assistant professor in the Department of Clinical Neuropsychology at the Vrije Universiteit Amsterdam.

I like to spend as much time as possible doing new and exciting things. Since being a researcher means reading fresh articles, conducting new experiments, and writing texts that do not exist yet, this is my ideal profession."



Is there a (Fe)male Approach? Understanding Gender Differences in Entrepreneurship

Promotor: Prof.dr. A.R. Thurik

ESP-2005-054-ORG

<http://hdl.handle.net/1765/2005>

054

Female entrepreneurship matters. Both academic research and policy are increasingly fuelled by the idea that female entrepreneurs are important for economic progress. Female entrepreneurs make a significant contribution to job creation, the total gross domestic product (GDP) and business diversity. Coupled with global growth of female participation in entrepreneurial activity, an increasing number of researchers have examined female entrepreneurship in recent decades. Unlike past studies, which focus primarily upon female entrepreneurship in Anglo-Saxon countries, the present thesis investigates gender differences in entrepreneurship in the Netherlands. Different aspects of entrepreneurship are studied including the individual, the organisation and the environment. One unique aspect of the research in this thesis is that a systematic distinction is made between direct and indirect gender effects, disentangling 'pure' gender effects from effects of factors that are correlated with gender. Findings indicate that female and male entrepreneurs differ with respect to a range of aspects such as self-perceptions regarding entrepreneurship, time invested in the business, start-up capital and HRM. Most of these differences can be attributed to indirect effects, although some evidence has been found for direct gender effects.

The topic of entrepreneurship really appealed to me, particularly after talking to several inspiring entrepreneurs

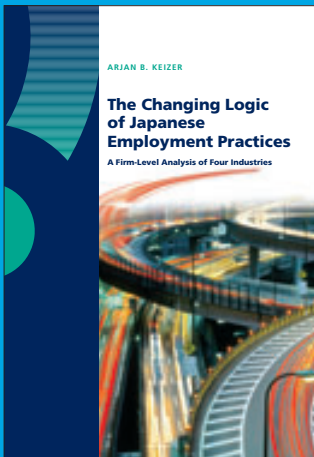


"I never expected to like writing and research so much during my master's – it was a pleasant surprise. I started my PhD after completing my MA thesis in 1999, for which I had done a quantitative and qualitative study on the differences in start-up capital between female and male entrepreneurs. The topic of entrepreneurship really appealed to me, particularly after talking to several inspiring entrepreneurs. It is also a research area that is interdisciplinary, which I like, as in addition to economics I also took courses in sociology during my master's.

During my PhD I learnt how to write in a structured logical manner, without using too many (difficult!) words. On a personal level I learned how to deal with criticism, and I discovered that I can be quite persistent when I want something. I also learned a lot about working with statistics. Before writing my PhD I knew little about statistical techniques and working with programmes like SPSS, E-views and Stata.

My thesis led to publications in *Entrepreneurship and Regional Development*, the *Journal of Business Venturing*, *International Small Business Journal*, and *Small Business Economics*. I have presented my results at international conferences, several meetings of entrepreneurs' networks, and at the Ministry of Economic Affairs, and it has been published in national newspapers.

Today I am an assistant professor at the department of applied economics at Erasmus University Rotterdam. I like writing, investigating and using my own creative thinking to find out how relationships between variables work out and can be explained, which is why I choose to be an academic."



The Changing Logic of Japanese Employment Practices: A Firm-Level Analysis of Four Industries

Promotors: Prof.dr. J.A. Stam
Prof.dr. J.P.M. Groenewegen

EPS-2005-057-ORG
<http://hdl.handle.net/1765/6667>

057

In previous decades, the perception of Japan's employment practices has been strongly intertwined with its economic fortunes. From the 1970s, the employment practices came to be seen as one of the cornerstones of Japan's economic success. However, this perception changed, albeit with a substantial delay, when the economy proved incapable of returning to its former path of growth after the 'bubble' burst at the end of the 1980s. Like so many of its economic institutions, the employment practices became the subject of substantial criticism in a debate on the revitalisation of Japan's economy. This study takes its position within this debate by discussing the likelihood, character, and economic consequences of change. Environmental changes, like the ageing of the population and the substantial decrease in economic growth, require Japanese firms to adapt their human resource management. However, the embeddedness of national practices limits the scope of firms to make these adjustments; and change is determined by the dialectics between their strategies and existing practices. The firm, as an institution, thus experiences the impact of both the embedded employment practices and the economic impact of environmental changes. Accordingly, it is at the centre of this study. Theories of the firm are used to discuss the contribution of employment practices on efficiency, capabilities, and competitive strength. Case-studies from four different industries – automobile, electronics, construction, and retailing – describe the adaptations made by individual firms. Subsequently, these findings constitute the basis for a discussion of industry-specific employment practices and provide an answer to whether developments such as the rise in performance-based pay and labour mobility have altered the logic of Japanese employment practices

I find research simply the best way to spend my working hours



"A PhD offers the possibility of really focusing on and developing a deeper understanding of a single topic – making a certain field really one's own.

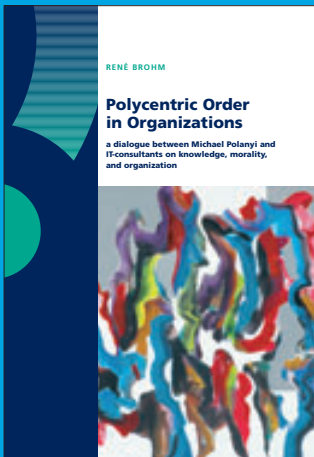
I pursued a PhD because of my interest in academic research and my (continued) interest in Japanese employment relations. This interest arose during my MA thesis and a one-year programme organised by the Dutch Ministry of Education that sponsors recent graduates to study Japanese, and do internships in Japan.

My PhD thesis discusses the changes in Japanese employment practices during recent years. I find and discuss two major developments: a rise in performance-related pay and a rise in non-regular (part-time, temporary) employment. In my thesis I argue that there is an important continuity despite these changes.

I have written several papers on the basis of my thesis, but none are as yet beyond the stage of 'revise and resubmit'. In addition, I have recently agreed with Routledge to have an updated version of my thesis published in 2009.

Today I work as a lecturer in comparative employment relations at the Bradford University School of Management in the UK. Having a PhD is simply the sine qua non for my current position, which I was offered partly on the basis of a draft of the first chapters of my thesis.

My PhD continues to inspire my work in terms of both research and teaching. I find research challenging – it simply seems the best way to spend my working hours."



Polycentric Order in Organizations: A Dialogue between Michael Polanyi and IT-Consultants on Knowledge, Morality and Organization

Promotors: Prof.dr. G.W.J. Hendrikse
Prof.dr. H.K. Letiche

EPS-2005-063-ORG
<http://hdl.handle.net/1765/6911>

063

During the last decade there has been a tremendous interest in organisation studies and management practice in the role of knowledge in organisations. Using terms such as 'post-industrial age', 'knowledge management', 'organisational learning', 'knowledge intensive firms', and 'communities of practice' both academics and practitioners have tried to find ways to manage professionals, to facilitate learning in organisations, and to develop an effective organisational memory. The predominant approach has been fairly one-sided. The question generally posed has been "How can organisations develop knowledge?" while the opposite question: "How can knowledge develop organisations?" has not received the same attention. When we realise that the increased importance of knowledge has in some cases altered the fundamentals of the firm, it is time to reconsider the nature of knowledge intensive organisations. Through increasing specialisation and a reliance on professionals the knowledge can no longer be centralised in a managerial hierarchy. Thereby the legitimacy of the manager's ability to make decisions is in question. The aim of this thesis is to envision an alternative approach to organising that goes under the name polycentric order, a concept forwarded by the Hungarian philosopher Michael Polanyi, well-known for his concept tacit knowledge. Is it possible that decisions develop from open conversations, and organisation emerges from participation? This may seem a Utopia. Managers may be unwilling to yield power and face instead the uncontrollable outcomes of open conversation. Directors may fear organisational paralysis from an abundance of incommensurable perspectives. On the other hand, the management of professionals is a paradoxical task. Since there is hardly a sharing of knowledge across hierarchical levels, managers will not have the knowledge to set up agreements with professionals, to guard them, or to assess the end results. This all suggests important issues in terms of the relations between organisations, managers and professionals. This thesis describes how professionals can create a safe haven (Dutch: 'vrijplaats') for their professional development in an organisation. In contrast to a community of practice, a safe haven is a means for professionals to negotiate on dedicated resources for a longer period of time. In this way professionals have responsibility for their own development, and do not yield this responsibility to their organisations.

I began a PhD in knowledge management hoping that such a study would clarify the problems I encountered in my job



"In 1995, I took a job as a software designer, applying the mathematical design techniques I had learned. The problems I encountered in these and other projects taught me that modelling techniques and software methodologies were not enough to develop information technology. The crucial factors seemed to lie in how people collaborated with one another, and how hierarchical relationships often frustrated this collaboration.

Two years later I began a PhD in knowledge management, hoping that such a study would clarify these problems. I discovered that phenomenological and hermeneutical approaches to science were more rewarding than a control-oriented objectivistic approach. Instead of asking, 'how can we organise knowledge?' I explored the mutual interdependency between knowledge and the organisation. I developed new implications of the philosopher Michael Polanyi's concept of polycentric order, to show how groups of professionals can create a safe haven for their professional values and development.

I have had papers published in several international journals and books, including *Critical Perspectives on International Business*, and *Advances in Knowledge Management*, and am currently an assistant professor at the Vrije Universiteit Amsterdam, involved in subjects including information management, decision-making, research design, and philosophy of science."



The Re-Emergence of Foreign Banks in Shanghai: An Ecological Analysis

Promotor: Prof.dr. B. Krug

EPS-2005-066-ORG

<http://hdl.handle.net/1765/6926>

066

Is China, with one of the world's fastest growing economies, indeed the market of high returns and quick profits as the popular press and communis opinio seem to suggest? This book offers a more moderated perspective. It shows, by employing theories and methods from the field of organisational ecology, that the intricacies of the local market might frequently have been underestimated. Based on a detailed analysis of the re-emerging population of foreign banks in Shanghai, it points out that as more and more foreign banks set up operations in Shanghai, competition among them is intensifying to the extent that it is deterring the founding of new foreign banks in Shanghai. Foreign banks furthermore face long waiting times before they can start providing banking services and, in addition, their profitability is affected by the growing number of domestic banks. From a theoretical perspective, the findings in this book add significantly to the study of re-emerging organisational forms, the study of ecological dynamics prior to entry into a population, and theories concerning inter-population competition such as resource partitioning.

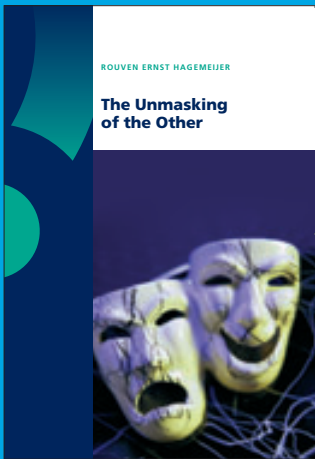
The best advice I can give to aspiring doctoral students is to team up with those interested in the same topics to learn from each other's experience



"As I didn't feel attracted by the corporate world and wanted to 'do something extra', a PhD position was the perfect option. I found the strength of the ERIM programme lay in its excellent support and flexibility. The mandatory courses gave me a broad overview of the field, whilst the possibility of attending courses and conferences at other institutions was important for the development of my thesis.

One of the most significant lessons I learned during my PhD was the value of working on papers with others. The best advice I can give to aspiring doctoral students is to team up with those interested in the same topics in order to learn from each other's experience. My research provided important empirical evidence about the stages that precede market entry and how these stages are affected by the presence of competitors. These dynamics were found to occur among both potential entrants and established organisations. A chapter of my thesis has been published in *Organization Science* and future journal publications may follow.

I am now an assistant professor at the Hong Kong University of Science and Technology. Even after several years, I continue to find the content and theoretical area that I am working in very exciting, challenging and rewarding. From an institutional perspective, I also enjoy the autonomy and flexibility of working in academic research."



The Unmasking of the Other

Promotors: Prof.dr. S.J. Magala
Prof.dr. H.K. Letiche

EPS-2005-068-ORG
<http://hdl.handle.net/1765/6963>

068

Do we truly understand the nature of that, which is foreign, excluded and new? Do we truly understand the nature of the Other? Contemporary thinking in the field of Organisation Theory has spent a considerable amount of academic time and space on the issue of Otherness. It sees the Other as a victim of organisational exclusion or repression and therefore in need of liberation and emancipation. In addition, said liberation is seen as an ethically just act: it is, quite simply, the right thing to do. This book seeks to provide an answer to the following two questions: are we capable of conceptualising the Other as Other? Is it truly humane to pursue the emancipation of the Other? To this end, it provides an in-depth look at the work of French philosopher Michel Serres, who has written about these topics at length. However, to truly comprehend the notion of Otherness, one needs to undergo an epistemological transformation, for it is not a matter of vision but one of noise instead. The time has come to open our ears. Be careful, though: you may not like what you hear ...

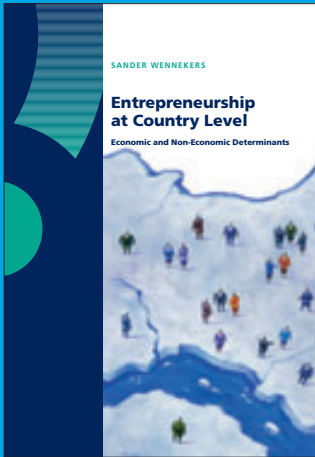
I am still working as a researcher because I feel I have not said everything I want to say just yet



"I decided to work on a PhD because it presented me with a great opportunity to further my intellectual growth. This has certainly proved the case as it has enabled me to develop my potential to its fullest. While carrying out my doctoral research, I learned how to manage people who have a whole range of different interests. One thing I have come to realise, however, is that co-operation between disciplines is often preached but seldom practiced.

For me, my doctorate was a prerequisite for a career in academia – it has opened many doors that might otherwise have remained shut. It has also led to publications in *The Journal of Organizational Change Management*.

I am still working as a researcher because I feel I have not said everything I want to say just yet – that is why I am now an assistant professor at RSM Erasmus University, in the Department of Personnel and Organization Sciences."



Entrepreneurship at Country Level: Economic and Non-Economic Determinants

Promotor: Prof.dr. A.R. Thurik

EPS-2006-081-ORG

<http://hdl.handle.net/1765/7982>

081

The rate of entrepreneurship, however defined, differs across countries and over time. As entrepreneurship is widely considered to be vital for innovation and economic growth, it is important to know more about the causes of this variety. This book investigates the rate of occupational entrepreneurship at country level, either measured by the number of business owners as a percentage of the labour force, or by some metric of the dynamics of entrepreneurship such as 'nascent entrepreneurship' and new business start-ups. Historical case studies set the stage for a multidisciplinary framework for explaining the rate of entrepreneurship. Based upon several strands of literature, this framework is built around an occupational choice model while linking the individual, the firm and the aggregate level. Technological, economic, demographic, cultural and institutional factors act as entrepreneurial framework conditions. In addition, feedback mechanisms are elaborated. Empirical investigations carried out against the background of this framework show that dissatisfaction, uncertainty avoidance and social security entitlements affect the rate of entrepreneurship. In addition, either a negative or a U-shaped influence of the level of economic development is found, while dummy variables for recent decades suggest a positive impact of global trends such as the ICT revolution, deregulation and the onset of a 'network economy'.

Curiosity is my great motivator



"After graduating in 1977 with an MA in economics from Erasmus University Rotterdam, I worked as a researcher for CPB and, since 1988, for EIM Business and Policy Research. In 1998, after completing a joint research paper with Professor Roy Thurik entitled 'Linking Entrepreneurship and Economic Growth', we decided that our investigation required a dissertation. It took eight more years to fully realise this idea and defend it (in 2006).

Curiosity is my great motivator. While researching I learned to define concepts carefully, to distinguish between causes and effects, and to make use of a broad scientific literature. The biggest insight I gained was that the wide variation in rates of entrepreneurship across countries is partly related to economic development, but also depends on demographic, cultural and institutional factors.

Seven papers underlying my thesis have been published in *Entrepreneurship: Theory and Practice*, *Small Business Economics*, the *International Journal of Entrepreneurship Education*, the *Journal of Small Business and Enterprise Development* and the *Journal of Evolutionary Economics*.

My PhD thesis has been used as a basis for the 'vision document' for EIM's research programme on SMEs and Entrepreneurship – a group I have led since 1996. My thesis has also received publicity in several Dutch newspapers and magazines, as well as on Dutch television (NCRV Network)."



Changing Quality Controls: The effects of Increasing Product Variety and Shortening Product Life Cycles

Promotors: Prof.dr. B.G. Dale
Prof.dr. A.R.T. Williams

EPS-2006-084-ORG
<http://hdl.handle.net/1765/7992>

084

Management control systems, such as quality controls, are an essential part of any organisation. Yet, many such systems were originally developed when the business world was relatively stable. Currently, the rate of change in many markets is rapid because a large number of product variants are offered to consumers, and product life cycles are decreasing fast. This research is a study of how these two trends of increasing product variety and shortening product life cycles affect quality management systems. Since the automotive industry is a business sector that has been strongly influenced by these two developments, the empirical part of the research consists of case studies at two car manufacturers and a truck manufacturer, and a questionnaire survey among a sample of Western European automotive suppliers. This research takes a novel approach to quality management research by applying a model from the field of management control. The research has found that the complexity that is caused by increasing product variety and shortening product life cycles is to a large extent shifted to suppliers when car manufacturers outsource large parts of the development and assembly work. However, since Just-In-Time production is the standard for first tier suppliers, there is virtually no time to solve quality problems once they occur. Therefore, both car manufacturers and their suppliers have moved the focus of their quality management systems to preventing quality problems from occurring. In situations of shortening product life cycles, the empirical data clearly support the increased use of participative and cooperative quality control systems, as predicted by the research model. Finally, the research suggests that the complexities of dealing simultaneously with many different product variants, combined with the frequent introduction of new products and variants may mean that some quality problems are neither preventable, nor curable. Quality management research has to devise tools and techniques to enable the customer and the organisation to deal with these issues.

I learned methods of examining and solving problems that give me a real advantage in business over the practitioners who have not developed these skills

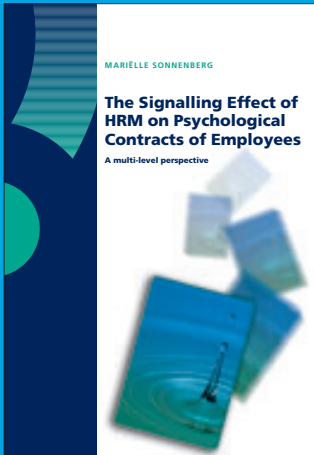


"Being from an entrepreneurial family, an academic career was an unlikely choice for me. However at ERIM I found that PhD research offers many benefits not readily available in the business world. Firstly, it allowed me to specialise in a discipline without being bothered with the daily problems that you encounter in the commercial world. I was also able to learn methods of examining and solving problems that give me a real advantage in business over the practitioners who have not developed these skills. But perhaps the greatest benefit was that the academic environment provides relatively easy access to some of the most interesting organisations and influential people from around the world. Meeting with CEOs, top managers and entrepreneurs is a learning experience that very few other professions can offer.

I am now associate editor of the *International Journal of Quality and Reliability Management*. I am co-editor of the fifth edition of one of the most influential textbooks on quality management: *Managing Quality* by Blackwell Publishers. I have been published in a large number of journals such as: *International Journal of Quality and Reliability Management*, *Information and Management*, *Total Quality Management and Business Excellence*, *International Small Business Journal*, *Managing Service Quality*, *International Journal of Productivity and Quality Management* and *The TQM Magazine*.

Results of my PhD thesis are also being applied in a long-term project involving a major global car manufacturer who is implementing my findings on quality management.

I am now employed as an assistant professor of quality management and performance improvement at RSM. I find there is still much to be studied and discovered in my field. Visiting companies all over the world and studying their innovative quality management systems is a job that never ends and never bores."



The Signalling Effect of HRM on Psychological Contracts of Employees: A Multi-level Perspective

Promotor: Prof.dr. J. Paauwe

EPS-2006-086-ORG

<http://hdl.handle.net/1765/7995>

086

What are the drivers of high performing organisations? During the last decade, the contribution of HRM to organisational performance has dominated HRM research and practice. Employees and their relationship with the organisation take central stage in this perspective since HRM aims to contribute to organisational performance while optimising the relationship between employees and the organisation. However, HRM research has failed to empirically establish this relationship.

This study fills this important void in HRM research by empirically investigating the relevance of HRM for the employee-organisation relationship. In doing so, this study 'bridges' two streams of HRM research: organisational level research on HRM and performance and individual level research on employee work perceptions and behavioural performance. We focus our attention on the concept of the psychological contract. The psychological contract is defined as: "an individual's belief, shaped by the organisation, regarding reciprocal obligations". The psychological contract connects organisational level and individual level perspectives because of its focus on the exchange relationship between organisation and the individual. Based on a sample of 49 organisations with 2099 individual respondents we investigated the signalling value of HRM for employees' assessment of the degree of violation of their psychological contracts, using a multi-level analytical technique. The findings indicate that there is a significant relationship between HRM, organisational design factors and the degree of perceived psychological contract violation. These findings provide us with one of the first empirical indications on how HRM leads to effectiveness.

As a result of the knowledge and expertise I developed during my PhD research, I feel more confident in my work as an expert when consulting for organisations

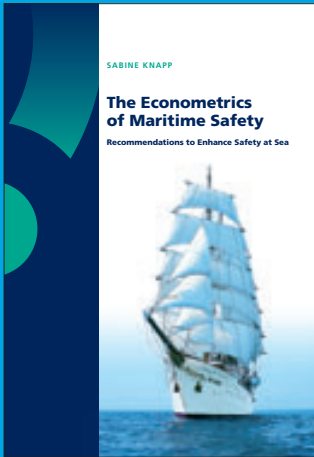


"ERIM offered me a great opportunity to combine elements of economics, business management and psychology in my PhD. As I was not completely satisfied with the intellectual challenges I faced during my master's, this chance to broaden my knowledge further was hugely appealing.

Overall, I found the most valuable aspect of my doctoral study was learning how to approach unfamiliar and complicated issues by finding and asking the right questions. My research led to insights in human resource management, such as that the balance between employees and employers' obligations and contributions have a large influence upon employees' behaviour.

As a result of the knowledge and expertise I developed during my research, I feel more confident in my work as an expert in consulting for organisations. Specifically, I feel that my analytical skills are now well developed, and I feel comfortable working independently. I am currently employed as a consultant in human performance at Accenture, and have worked with human resource management departments at several large international organisations.

I am continuing my research by working on several articles, as I am consistently curious about new developments. I would encourage potential and current PhD candidates to reach out to other experts and built your network internationally – ERIM is the place to be if you want to work in an international environment!"



The Econometrics of Maritime Safety: Recommendations to Enhance Safety at Sea

Promotor: Prof.dr. Ph.H.B.F. Franses

EPS-2007-096-ORG

<http://hdl.handle.net/1765/7913>

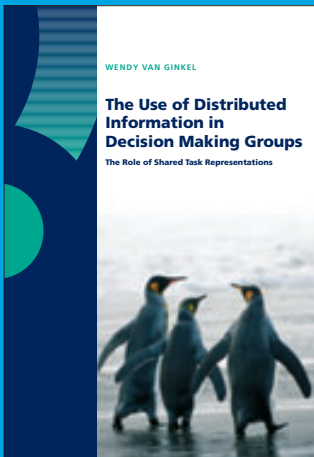
096

The maritime industry is characterised by a heavy legal framework based on international law with limited legal enforcement possibilities in case of non compliance. This creates loopholes and distortion to competition due to the existence of a market of substandard ships. The lack of trust in the industry has created a playground for inspections on certain ship types including considerable amount of industry driven inspections. This thesis is based on a unique dataset of 183,000 port state control inspections and 11,000 casualties from various sources in order to identify areas for improvement in the safety system, in particular port state control. Two areas of potential improvement have been identified: 1) the targeting of ships for inspections and 2) the inspections and follow up on deficiencies itself. The effect of port state control inspections towards the probability of casualty can be measured for very serious casualties but not for serious and less serious casualties. While key figures on deficiencies and detentions vary accordingly across the regimes, the differences towards the probability of detention is merely reflected by the differences in port states and the treatment of deficiencies and not necessarily by age, size, flag, class or owner. The classic variables such as ship type, age, size, flag, the classification society, deficiencies found in prior inspections and detention are all valid variables for targeting sub-standard ships but flag is only one variable out of many variables that can be used to target sub-standard ships. Targeting on combined inspection and ship particular data including information about change of ownership, class withdrawal, change of class and vetting inspections can further enhance targeting of vessels. The probability of casualty either per seriousness of casualty or casualty first event also revealed three areas of interest – the ISM code, ship and cargo operations and machinery and equipment which are the main areas that have been identified in order to decrease the probability of a casualty.

My thesis will hopefully open up a new chapter in maritime safety research



"I received my first master's degree from Maine Maritime Academy (USA) in 1995 followed by two others in the years to follow. After serving at sea for around 10 years on cruise ships as a hotel officer, I decided to return to the European Union and establish myself in the commercial shipping industry. I therefore started my doctoral studies. My main interest was to apply econometrics to the commercial shipping industry, in particular the area of maritime safety in order to open up a new research chapter for this segment of the industry. I have partly achieved this goal since my thesis was submitted by two countries (New Zealand and Australia) to the International Maritime Organisation (IMO), a United Nations specialised agency where it is on the agenda item for its 15th session of its flag state sub-committee meeting in June 2007. One of the most important insights my thesis provided was the ability to combine various datasets to produce useful results in the interest of many stakeholders of the shipping industry in a topic which is normally not treated openly due to its political nature. One of the personal insights I gained in this process was to learn that some policy-makers lack the ability to interface with academia for the benefit to society. My thesis so far has lead to publications in *Marine Policy*, *Maritime Policy and Management* and in *Ocean Economic Reviews*. In addition, two major industry newspapers Lloyd's list and Tradewinds took an interest in it and one article of mine was featured in Lloyd's list in October 2006. I was also asked to publish an article in an important industry journal, the BIMCO bulletin. I am very grateful to my supervisor, Prof. Philip Hans Franses who supported my ideas and made my PhD project possible. I am currently still affiliated with the Econometric Institute to finish up my research and submit articles to journals. Since November 2006, I have been working for the European Maritime Safety Agency (EMSA) as a project officer."



The Use of Distributed Information in Decision-Making Groups: The Role of Shared Task Representations

Promotor: Prof.dr. D. van Knippenberg

EPS-2007-097-ORG

<http://hdl.handle.net/1765/8424>

097

Organisations frequently rely on groups for purposes of decision-making, because groups are supposed to possess more relevant informational resources than individuals, which should allow them to make higher-quality decisions. Yet, research has shown that groups tend to be quite poor users of their informational resources. That is, information that only one of the group members possesses gets exchanged less than information that all members possess. Moreover, when this information does get exchanged, groups often fail to adequately integrate it in coming to a decision. This can lead to lower-quality decisions than when groups fully capitalise upon individual members' unique information. It therefore is of importance to identify factors that affect decision-making groups' use of distributed information. In the present research I argue that group members' understanding of their task and its informational requirements is critical for groups' use of distributed information. A fundamental reason for groups' insufficient information use seems to be that groups often fail to see the necessity of elaborating on distributed information. Group members' understanding of the decision-making task often seems to centre more on the need to find common ground than on the discussion of information. In the present dissertation I examine the effect of groups' understanding of their decision task, as reflected in their shared task representations, on groups' use of distributed information by means of a series of experiments. I show that when groups hold task representations that stress the value of exchanging and integrating distributed information before coming to a decision, they discuss more distributed information and make higher-quality decisions. In addition, I identify several factors, like group reflexivity and leadership that are able to influence the development of shared task representations and therefore also group information use and performance in decision-making groups with distributed information.

I like the diversity of activities you encounter as a researcher, from thinking up ideas, to analysing, and writing them up



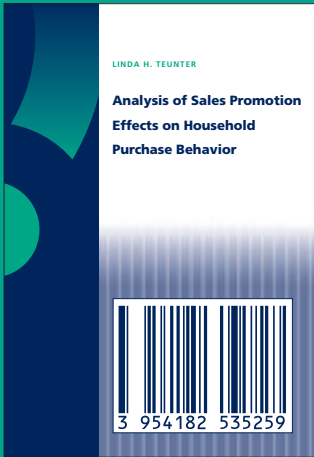
"After graduating in 2002 in the field of work and organisational psychology, I wanted to pursue a PhD – I am very interested in research. I learned many things during my doctoral studies, often interrelated: everything from designing studies to writing them up in a way that makes your findings interesting for others.

My doctoral research demonstrated that decision-making groups often have a maladaptive understanding of their task that leads them to integrate information to a lesser degree than desired.

Recently, I started a position as an assistant professor at the department of Personnel Management and Organisational Behaviour at RSM Erasmus University. My main motivation for working as a researcher is the freedom that you have: being able to come up with ideas and ways to put them to the test. I also like the diversity of activities you encounter as a researcher, from thinking up ideas, to analysing, and writing them up."

Marketing

Name	PhD Defense	No.	Page
Niek Althuisen	15-12-2006	95	199
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Dennis Fok	06-11-2003	27	179
Robert Govers	24-11-2005	69	185
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Analysis of Sales Promotion Effects on Household Purchase Behaviour

Promotors: Prof.dr.ir. B. Wierenga
Prof.dr. T. Kloek

EPS-2002-016-MKT
<http://hdl.handle.net/1765/868>

016

Manufacturers and retailers are spending more and more of their marketing money on sales promotions. Conflicting empirical results exist with respect to the effects of these sales promotions on household purchase behaviour. Based on household scanner data, new insights are developed into the drivers of household promotion response and into the different reaction mechanisms that constitute household promotion response.

Because of my PhD I was able to start a senior position right away; I was seen as an authority on methodological, empirical, and analytical questions

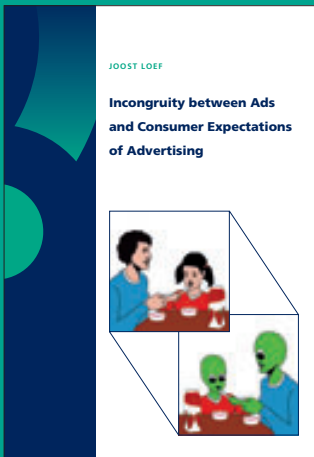


"I am a senior research manager (research director) at MetrixLab, an online market research agency. Because of my PhD I was able to start a senior position right away; I was seen as an authority on methodological, empirical, and analytical questions.

I decided to pursue a PhD simply because I found the topic interesting and had a desire to challenge myself and develop more knowledge – to continue evolving myself.

My research lead to publications in *Tijdschrift voor Economie en Management* (Belgium). Moreover, several fast-moving consumer goods manufacturers and retailers purchased the dissertation itself. I have also had interviews on television and radio, and been quoted in articles in newspapers.

Having a PhD has standing – it impresses people. I enjoy still working as a researcher, but I prefer applied research because it has real, practical implications that have an impact on practice."



Incongruity between Ads and Consumer Expectations of Advertising

Promotors: Prof.dr. W.F. van Raaij
Prof.dr. G. Antonides

EPS-2002-017-MKT
<http://hdl.handle.net/1765/869>

017

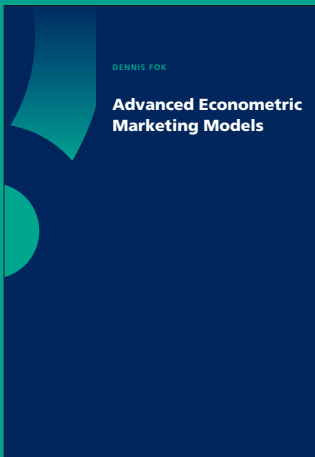
The effectiveness of advertising is a topic of interest to both marketing research and advertising practice. Many advertising theories specify that effective ads, i.e., ads that result in favourable brand attitudes, should match consumer brand expectations. Implicit in these theories is the assumption that consumers use their brand schemas in ad processing. Alternatively, however, consumers may use their ad schemas in ad processing. Especially in a cluttered media environment consumers have formed expectations of advertising in particular product categories. In this thesis, we consider both the origins of consumer expectations of advertising and study the effects of ads that are incongruent with such advertising expectations. We find that ads that match consumer brand expectations are only more effective than brand-mismatching ads if the brand schema is salient in ad processing. The requirement of schema salience is stricter than the brand awareness requirement that is part of the aforementioned advertising theories. If consumers use their ad schemas in processing advertising, brand-matching does not affect consumer evaluations of brands and ads. Contrary to incongruity with the brand schema, incongruity with the ad schema is evaluated favourably. This is explained by the way in which consumers determine incongruity with the brand schema and incongruity with the ad schema. Consumers only consider ad relevancy to the brand in case of incongruity with the brand schema. In line with this reasoning, we find that incongruity with the brand schema mainly has cognitive consequences, whereas incongruity with the ad schema predominantly has affective consequences.

It is a lot of fun providing clients with valuable research-based insights



"I am currently working as a senior researcher at Dataview onderzoek, a marketing research agency. I enjoy research and will continue to pursue a career as a researcher – it is a lot of fun providing clients with valuable research-based insights that will improve the way they do business.

My motivation for pursuing my PhD was my desire for intellectual challenge. I found that challenge: I learnt how to analyse (research) problems from various perspectives, and gained insights into the effectiveness of advertising. My ERIM papers are currently under review in international journals."



Advanced Econometric Marketing Models

Promotor: Prof.dr. Ph.H.B.F. Franses

EPS-2003-027-MKT

<http://hdl.handle.net/1765/1035>

027

The present availability of large databases in marketing, concerning, for example, store-level sales or individual purchases, has led to an increased demand for appropriate econometric models to deal with these data. The typical database contains information on revealed preferences, measured by for example sales, market shares or brand choices. In this thesis we study econometric models for some of these series, to be precise, we consider market shares, purchase timing and brand choices. These models allow us to, for example, gain insight into the effect of marketing instruments on consumer behaviour. Examples of topics we discuss are heterogeneity in decision processes and the development of easily interpretable models to capture dynamical features in market shares and interpurchase times. Additionally, we contribute to the econometric literature by extending and developing models and estimation techniques.

The more you study and the more you learn, the more you realise how little you actually know about many things



"The more you study and the more you learn, the more you realise how little you actually know about many things. After four years of study (at bachelor and master level) at the Erasmus University, I felt that there was still so much I did not know or understand that I decided to take up a doctoral programme.

In my thesis, I demonstrated how modern econometric techniques can be applied to important marketing questions. I also worked on extending existing models and developing new models to fit particular marketing problems. On the one hand, these techniques can be used to obtain forecasts; on the other, they result in very valuable management insights.

My PhD thesis led to published articles in the *Journal of Applied Econometrics*, *International Journal of Research in Marketing* and *Journal of Marketing Research*. It also allowed me to become an assistant professor in econometrics at the Erasmus University, Rotterdam School of Economics. Why do I enjoy this position? Firstly it is a chance to further improve my knowledge; and second, it gives me the opportunity to contribute to the economic and econometric literature, eventually allowing others to benefit from my work."



Governance of Global Interorganizational Tourism Networks: Changing Forms of Co-ordination between the Travel Agency and Aviation Sector

Promotors: Prof.dr. F.M. Go
Prof.dr. B. Nooteboom

EPS-2004-036-MKT
<http://hdl.handle.net/1765/1199>

036

This thesis has as its object of analysis the co-ordination and evolution of global inter-organisational networks that produce corporeal mobility: the travel agency and aviation sector. These networks are part of one of the largest and oldest global economic sectors, tourism. This thesis tentatively concludes that economic sectors where producer and consumers meet in service encounters are prone to be innovative. However, contrary to the 'accepted wisdom' that networks are flexible, highly adaptive structures that promote collaboration this inter-organisational network is characterised by a high degree of inertia, high levels of tension and conflict and low levels of collaboration. When researched at the national level the same networks were found to be highly innovative and to create many backward linkages. Answers to these seemingly contradictory observations focus on the way the sectors are embedded in institutional arrangements, the forms of co-ordination that govern the distribution relationship and the characteristics and structure of relationships. Conceptually, elements of a generalised theory of transaction costs are tested. One of the main conclusions is that competence and resource based approaches are mutually supportive and not exclusive in explaining change and inertia.

My PhD experience taught me to aim for the highest level



"Thomas Cook invented the basic tenet of Fordist production (the complete and consistent interchangeability of parts) 50 to 60 years before Henry Ford started producing his T-Ford. This is an example of how often service industries are forerunners of radical architectural innovations, and yet these innovations are generally only recognised – and therefore attributed – to their application in the industrial sector.

This was the subject of my PhD thesis, pursued at RSM. I chose to do a doctoral degree because I always felt that a PhD would be valuable. It was: my PhD experience taught me to aim for the highest level. My thesis led to published articles in *Group Decision and Negotiation: special issue*. Perhaps the most interesting result of my research was its practical application in the business world. My report on an intervention in the airline and travel agency sectors structured the agenda of negotiation between both sectors for five years (1999-2004).

Today, I am a director of group decisions rooms, an assistant professor at TU-Delft, (section systems engineering), and a senior management consultant. I enjoy research – it offers both autonomy, and immense satisfaction if you are a curious person."



Virtual Communities of Consumption: Networks of Consumer Knowledge and Companionship

Promotors: Prof.dr.ir. G.H. van Bruggen
Prof.dr.ir. B. Wierenga

EPS-2005-050-MKT
<http://hdl.handle.net/1765/6663>

050

Marketers have to deal with consumers who increasingly interact with other consumers through the Internet. Electronically based discussion forums, bulletin boards, list servers, chat rooms, and newsgroups provide consumers worldwide with the ability to share their knowledge, experiences, and opinions. The popularity of electronic consumer exchanges is reflected in the vast number of virtual communities that specifically focus on consumption-related interests. These virtual communities of consumption represent substantial networks of consumer knowledge and companionship that affect consumer behaviour. This dissertation presents three empirical studies that offer systematic insight in various aspects of virtual community participation and its effects on consumer decision-making. It establishes that members attach more value to the virtual community as a source of information than to other sources including traditional media. Furthermore, it demonstrates that virtual communities increase consumer knowledge and alter choice behaviour. An analysis of member participation patterns has resulted in a member typology that enables marketers to locate interesting target segments and that offers insights in how to address them. Finally, the dissertation presents an illustration of online forum discussion practices that highlights how discussants communicate with, and actively try to influence, each other. It shows that members share an interest in the community's focal topic, but that their related opinions and behaviours greatly differ. Ultimately, to the benefit of both academics and marketers, the dissertation provides a better understanding of the functioning of virtual communities as sites of interpersonal influence.

It is rewarding to know that I am contributing to improving business practice

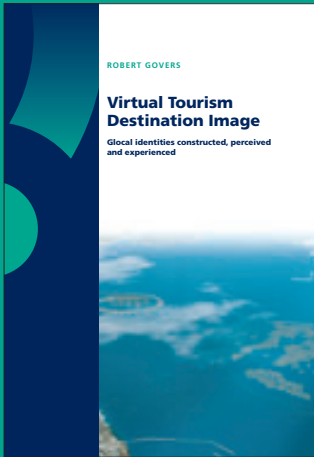


"I found out while writing my master's thesis that I have a taste for academic research. After graduating, I spent one year working for a national broadcast company: the experience was so miserable in terms of intellectual challenge that I was ready to go back to the university to get my PhD degree after one year!"

One of the most important insights I gained during my doctoral studies was that the output of my qualitative work is better and more interesting than the output of my quantitative work. I learnt where my strength lies in terms of theories, research questions, and methods.

It is rewarding to know that I am contributing to improving business practice. For my thesis, I used a company that exploited a virtual community for a field study. My survey made it very clear that many community members did not know that the community had a variety of databases available on distinct subjects. After seeing these results, the management began to highlight the different databases on their main page, which resulted in an increase in the number of users of, and contributors to, these databases.

My PhD position at ERIM, and the fact that my PhD supervisors are known academics has directly influenced my chances of landing a job at a good management school abroad: I am now an assistant professor at HEC Paris. Without these affiliations it would have been much harder to get in."



Virtual Tourism Destination Image: Glocal Identities Constructed, Perceived and Experienced

Promotors: Prof.dr. F.M. Go
Prof.dr. K. Kumar

EPS-2005-069-MKT
<http://hdl.handle.net/1765/6981>

069

Will local identities become more important in the face of globalisation? Or will successful international hubs be able to reproduce cultural identities in ephemeral images and copied environments such as on The World? This cluster of man-made islands, representing both a local and global theme, is currently being built off the Dubai coast. The effects of such mega-projects and tourism development in Dubai, particularly in terms of the reproduction of its cultural identity, forms the central research background for this dissertation. The duality between the local and the global is integrated in the dynamic tourism destination image formation model that is constructed in this investigation. It identifies a triadic tension between place identity, its projection and the consumers' perceived image. This tension is short circuited during the travel experience, when host (supply) meets guest (demand). At this overlap, three potential gaps could negatively affect the level of satisfaction experienced in the host – guest encounter. The empirical research focuses on measuring projected and perceived images in order to test the way in which the gaps can be assessed. This is accomplished through an innovative methodology based on computerised-supported content analysis. The projected image is measured through a content analysis of 20 Dubai based websites while the perceived images are gauged by content analysing 1.100 online responses to a qualitative image survey. The results for Dubai were compared to other destinations such as the Canady Islands, Flanders, Florida, Morocco, Singapore and Wales. And indicate that gaps exist because of a friction between Dubai's rapid development as a global hub and its strong local identity and image. A theoretical solution for bridging the gaps is discussed and conceptually applied in the concluding chapter. It is based on the destination branding literature and establishes the general usefulness of the model and its research methodology.

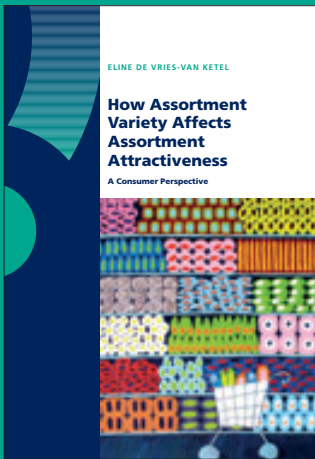
I feel it is a privilege to be able to spend your professional life working on something that interests you



"After completing my master's degree at RSM Erasmus University, I worked in South Africa for a year. On returning to the Netherlands, I was hired by Prof. Dr. Frank Go as a project manager contract research at the Centre for Tourism Management at RSM. It was Prof. Frank Go who inspired me to work in academia and convinced me to complete my PhD on a part-time basis with him as my supervisor, when I moved to work in higher education in Dubai for four years.

I feel it is a privilege to be able to spend your professional life working on something that interests you. During my doctoral degree I gained the understanding that, from an applied perspective, it is crucial that tourism destinations link their development strategy, promotion and product offering to their place identity. In a globalised world, the 'sense of place' becomes increasingly important in bridging the gaps between identity, image (perceptions and expectations) and experience, through place branding. We are currently applying the results of this research to place branding in the Province of Limburg, Netherlands and in Flanders.

My doctoral thesis lead to publications in the *Annals of Tourism Research*, *Journal of Travel Research*, *Information Technology and Tourism*, and *Tourism: An international Interdisciplinary Journal*. Professionally, my PhD allowed me to move from my position as a researcher at University of Leuven, Belgium, to assistant professor. For me, my PhD was only the start of a life-long learning process, the goal of which is to better understand the world we live in."



How Assortment Variety Affects Assortment Attractiveness: A Consumer Perspective

Promotors: Prof.dr.ir. G.H. van Bruggen
Prof.dr.ir. A. Smidts

EPS-2006-072-MKT
<http://hdl.handle.net/1765/7193>

072

Nowadays, variety is abundant in many different areas. Over and over again, people have to choose from huge amounts of possibilities. However, do consumers actually value the high variety presented to them for all the choices they have to make, even for repetitive decisions on daily groceries? Retailers currently realise that although more variety can be beneficial, it has its costs for consumers as well. This thesis provides insights into the relationship between the amount of variety in a retailer's assortment and how attractive the assortment is from a consumer's point of view. Based on a rich quantity of experimental data this thesis uncovers the overall effects of assortment variety as well as the underlying processes, more specifically the perceived benefits and costs of variety. The relationship is examined across different types of assortments and buying situations. The thesis demonstrates that an optimal level of assortment size, which has been frequently suggested in the literature, seems to exist for simple groceries, such as potato chips. In addition, buying such products under time pressure makes a large assortment less appealing to consumers. For more complex products, like laptops, small and large assortments seem to be as attractive: a carefully selected small set of products already suffices. In-depth analyses reveal the role of consumer perceptions of variety and the benefits that make an assortment attractive. For instance, we reveal the important impact of feelings of decision freedom. Moreover, it is shown that although variety leads to multiple costs of variety, only a small selection of them makes an assortment less appealing. One such cost, a lack of overview, damages assortment attractiveness, making a clear organisation of products on the shelf essential. In particular for complex products, anticipated regret of making the wrong choice is critical, since this too lowers assortment evaluations. Ultimately, this thesis offers a better understanding of the effects of variety in assortments on consumer assortment evaluations.

Perhaps the biggest insight I gained from my research was that there are limits to how much variety consumers want – though they might think otherwise

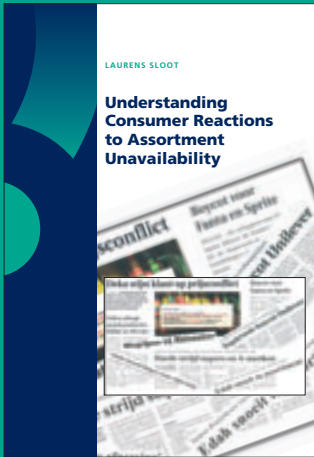


"I was working as a business analyst prior to my PhD, and I have since returned to the business world again, as a market researcher at Verify.

Starting a PhD was an obvious choice for me. I was very enthusiastic about the subject matter, and attracted to the tasks associated with performing research.

During my doctorate I learned not only to create deadlines, but also to enforce them. Perhaps the biggest insight I gained from my research was that there are limits to how much variety consumers actually want to encounter in (retail) assortments – though they might think otherwise.

In business my PhD degree appears to work as an indicator of my abilities. While it has not directly boosted my career, the quality of my input has now helped to raise the quality level of my company's products."



Understanding Consumer Reactions to Assortment Unavailability

Promotors: Prof.dr. H.R. Commandeur
Prof.dr. E. Peelen
Prof.dr. P.C. Verhoef

EPS-2006-074-MKT
<http://hdl.handle.net/1765/7438>

074

Any regular grocery shopper will be familiar with the annoying situation in which his or her preferred product is not available at the moment (s)he wants to buy it. Assortment unavailability can be temporary (e.g., out-of-stock) or permanent in nature (e.g., assortment reduction). Shopper research shows that the unavailability of products is one of the most significant annoyances for grocery shoppers. This dissertation presents three empirical studies that research consumer reactions to out-of-stock and assortment reduction. Both out-of-stock and assortment reduction lead to consumer complaining behaviour, category sales losses and store switching behaviour. It is found that consumer reactions to assortment unavailability are mainly related to brand- and product-related antecedents of the item that is not available. Furthermore, the long-term impact of an assortment reduction on category sales differs from the short-term impact. In summary, this dissertation concludes that retailers should be very careful reducing assortments and boycotting brands.

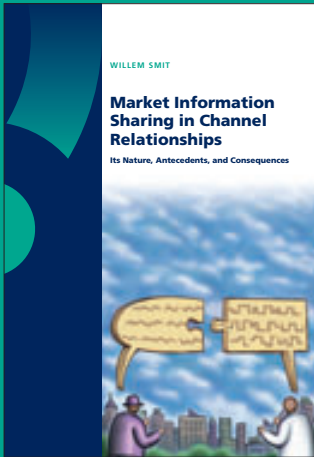
We tested the effects of reducing assortment and, based on our results, the retailer decided to reduce assortments on a national level



"One area of research for my PhD was a collaborative project with a major food retailer in the Netherlands. We tested the effects of reducing assortment and, based on the results, the retailer decided to reduce assortments on a national level.

I pursued a PhD because I wanted to improve my academic skills as well as to become an expert in the field of retailing. I am very curious as a person and like to explore new research areas. One thing I learned during my PhD was that writing a doctoral dissertation consists of 10% inspiration and 90% transpiration! I also gained insights into the way consumers behave in real buying situations; and that what people say is often not what they do. My results were published in the *Journal of Retailing* (2004) and *Journal of Marketing Research* (2006).

Until this year I was director of EFMI Business School. This is an academic business school of the Erasmus University that focuses solely on management issues in the food industry. From January 1st, 2007, I have been working in a part-time position as associate professor of Retailing & Trade Marketing at the University of Groningen."



Market Information Sharing in Channel Relationships: Its Nature, Antecedents, and Consequences

Promotors: Prof.dr.ir. G.H. van Bruggen
Prof.dr.ir. B. Wierenga

EPS-2006-076-MKT
<http://hdl.handle.net/1765/7327>

076

Efficient Consumer Response, Quick-response, Continuous Replenishment Planning, Vendor-Managed Inventory, Collaborative Planning Forecasting and Replenishment – all are names for channel arrangements in which retailers and suppliers actively work together in transforming the supply chain into a demand-driven channel in order to fulfil consumer wishes better, faster, and at lower costs. For collaborative channel arrangements it is essential that retailers and suppliers keep each other informed about the latest consumer market developments. This dissertation focuses on market information sharing practices in retailer-supplier channel relationships. By investigating the underlying nature, it finds that it is important to separate sharing mode from the shared content. The sharing mode in the information sharing arrangement is the way in which information is communicated between the retailer and the supplier. A key lesson is that the content shared in a channel relationship follows a hierarchical structure, meaning that channel members share more confidential and strategic information only after disclosing more operational and tactical market information. The dissertation also exposes the circumstances in which channel firms are most inclined to share strategic market information in a more collaborative manner. Furthermore, two empirical studies with different methodologies demonstrate that market information sharing leads to a better channel performance. This dissertation not only provides an in-depth insight into market information sharing practices, but also gives marketers precise guidelines to design effective market information sharing arrangements.

A PhD in business and management connects two separate worlds: it encourages more research in business, and more business in research



"Retrospectively I can give good reasons why I began my PhD, but at the time (in 1999) I actually had more incentive not to engage in research: a booming economy, flourishing internet start-ups, and friends earning good money. I went back to university to find out why some companies were more successful in marketing their products than others.

My dissertation provided insights into information sharing between retailers and suppliers, such as Efficient Consumer Response, Quick-response, Continuous Replenishment Planning, Collaborative Planning Forecasting and Replenishment.

Five trade journals in the Netherlands have published the results of my studies. Through my network of business relationships I have also stayed in touch with many of the retailers who participated. Several of them have developed their supplier relationship management in accordance with my work. The doctoral position gave me a real advantage in conceptualising and investigating complex business phenomena. I learned to ask the right questions and how to design appropriate and original methodology to analyse the responses. The PhD has therefore been instrumental in my everyday task of building solid bridges between business and academia.

I am now a research fellow in marketing at the International Institute of Management Development (IMD) in Lausanne, Switzerland. My role is to bring relevant academic yet topical research into the IMD classroom. A PhD is a prerequisite for the job, and I am always using the knowledge I acquired to design new studies.

My motivation comes from a strong urge to bring more business into research, and more research into business. A good PhD in business management connects and encourages the two separate worlds of academia and business."



Strategic Innovation Capacity: A Mixed Method Study on Deliberate Strategic Learning Mechanisms

Promotor: Prof.dr. P. Matthyssens

EPS-2006-087-MKT

<http://hdl.handle.net/1765/7991>

087

Managers of Western industrial companies are eagerly looking for effective weapons to fight the hypercompetition and commoditisation tendencies they are confronted with. In recent years, management scholars have been trying to answer their calls, propounding 'strategic innovation' as an appropriate means to counter the competitive threats that intensify strategy convergence among the different firms in an industry. They have recommended firms to deviate from the existing industry rules of playing the game, in order to create fundamentally new and superior customer value. Yet, research on this kind of innovation is still in its infancy. Even though the phenomenon of strategic innovation did arouse (marketing) managers' interest, academia has so far been unable to provide managers with concrete handles they may use to stimulate their firm's capacity for strategic innovation. Moreover, insights have been supported mainly by examples or anecdotes, and contributions tend to lack scientific rigor and corroboration despite their promising ideas. This book is hence motivated by a scientific quest for any mechanisms firms can use to deliberately crank up their strategic innovation capacity. It builds on insights from the management literature, integrates several theoretical concepts and translates them into concrete business practice. The book reports the results of qualitative and quantitative empirical studies of Dutch industrial firms. Evidence is provided that the establishment of specific managerial mechanisms may indeed foster a firm's strategic innovation capacity. The book distinguishes several categories of mechanisms, specifies what elements these mechanisms should target, how different mechanisms work in concert and finally, what effects organisational and supply chain characteristics may produce on the effectiveness of these mechanisms.

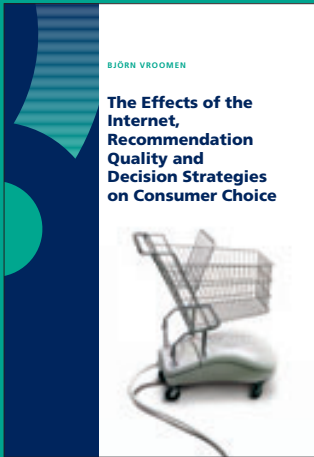
I have been contacted by several industrial companies to advise them in their programmes for breakthrough innovation



"One of the things I learned during my PhD was that companies can actually foster their capacity for strategic innovation in a very deliberate and structured way. I am now a strategy consultant with the Boston Consulting Group in the Netherlands. Since conducting my research at RSM I have been contacted by numerous industrial companies asking me to advise them on their programmes for breakthrough innovation.

I chose to study for a PhD for my own intellectual development. The idea of working in an intellectually inspiring environment fascinated me; I had papers published in the *Industrial Marketing Management*, and *Journal of Managerial Psychology*, and have re-written the first part of my thesis for a management book (Acco, 2004) that was awarded Management Book of the Year (Belgium, 2004). It also received the PIM Marketing Literature Award (The Netherlands, 2005).

RSM Erasmus University is a well-respected school in the field of management. For me, my PhD has opened many doors, not only in academia, but also in the business world."



The Effects of the Internet, Recommendation Quality and Decision Strategies on Consumer Choice

Promotor: Prof.dr. Ph.H.B.F. Franses

EPS-2006-090-MKT

<http://hdl.handle.net/1765/8067>

090

The Internet conquered the world at a very rapid pace. Moreover, it is an ideal communication and transaction channel for both firms and consumers. An aspect of the Internet is that recorded visits to a website create a valuable source of information on online consumer behaviour. This information can subsequently be used to support firms and consumers in their decision-making processes. Several aspects of consumer decision making in relation to the Internet are, however, still rather unclear. In this thesis we firstly investigate what determines that the Internet or other channels like the brick-and-mortar store are used for information search or purchase. In addition, we investigate whether a firm can select mortgage-loan applicants on the likelihood of a purchase, which is based on recorded online consumer behaviour. This type of information may also be used to provide consumers with recommendations on products and services. Differences in the quality of these recommendations may affect consumer decision-making. Moreover, this effect on consumer behaviour is likely to be related to a change in decision-strategy usage. Both aspects of decision-making in an online environment are discussed in this thesis.

It is the thrill of discovery that motivates me



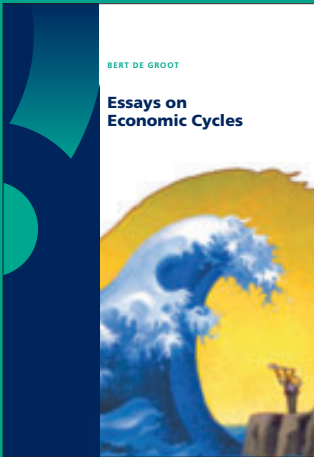
"A PhD is an opportunity to gain a head-start professionally. In my current position as researcher at the CPB Netherlands Bureau for Economic Policy Analysis, we are required to conduct high-quality research, and my PhD gives me a clear advantage.

This was one of my motivations for enrolling in the PhD programme at ERIM. The other was the personal challenge. Although my focus today is on applied research, the challenge and thrill of discovery still motivates me.

What did I learn during my PhD? To be able to quickly analyse and solve a problem.

My research was published in *The Journal of Service Research* and a paper related to my thesis is forthcoming in the *International Journal of Research in Marketing*. During my PhD I also participated in research on other topics that lead to publications in the *European Journal of Operational Research*, *Journal of Advertising* and the *International Journal of Forecasting*.

A PhD degree in (business) economics from Erasmus University is widely recognised. The name ERIM itself is not yet as well-known outside the academic world since it is still a relatively young institution, but that is just a matter of time."



Essays on Economic Cycles

Promotors: Prof.dr. Ph.H.B.F. Franses
Prof.dr. H.R. Commandeur

EPS-2006-091-MKT
<http://hdl.handle.net/1765/8216>

091

Schumpeter's line of thought of multiple economic cycles is further investigated. The existence of multiple cycles in economic variables is demonstrated. In basic innovations five different cycles are found. Multiple cycle structures are shown in various macro-economic variables from the United Kingdom, the United States of America and the Netherlands. It is remarkable that the lengths in years of the individual cycles are similar to the Fibonacci sequence. This relationship has never been found before in the economy. This sequence is well known in the scientific fields of biology, physics and astronomy. It can also be observed in art, music and architecture. The existence of this relationship gives a new perspective on macro-economic relationships and economic growth. The multiple cycle approach is also applied to the Dutch economy. On the basis of a 5 and 11 year cycle present in the Dutch Gross Domestic Product (GDP) a long term forecast model is developed. At the same time a new real time indicator, also known as "*nowcast indicator*", of Dutch GDP is developed. This indicator serves as a thermometer of the Dutch economy and is called the "*Econometric Institute Current Indicator of the Economy*" (EICIE). In contrast to most other forecast models, which are much larger, this forecast model is based upon a single equation. The model is based on a single explanatory real variable, namely staffing data from Randstad Staffing Services.

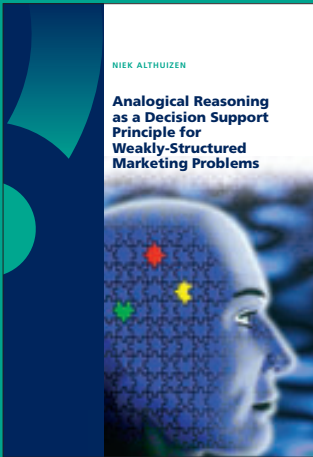
Schumpeter and Fibonacci had a story to tell



Bert de Groot is Rector Magnificus and Dean of Nyenrode Business Universiteit. He is a former member of the Randstad Holding N.V. Board of Directors.

De Groot has held numerous leading positions on a national and international level in sectors ranging from telecommunications to the pharmaceutical industry and from life sciences to the computer sector. In addition to his position at Randstad (staffing services) he was associated with the Dutch Royal Navy, biotech and pharmaceutical company Gist Brocades N.V, Unisys Inc. information management and computer industry), telecom multinational KPN, Boer & Croon (executive management), Pharming N.V. (life sciences), AM NV (project development), the Erasmus School of Economics and the Erasmus Universiteit Rotterdam Holding B.V. (commercial research). De Groot gained extensive experience in corporate recovery (at Pharming and others) and corporate delisting (at AM). He holds various supervisory board memberships.

Bert de Groot studied econometrics at the Erasmus Universiteit Rotterdam (EUR) and has followed management programmes at IMD, Nyenrode, Wharton and INSEAD. De Groot is member of the Econometric Institute of the Faculty of Economic Sciences at the EUR. At Nyenrode, Bert de Groot holds the chair in '*Business and Economic Cycles*'. He has a number of publications on economic cycles to his name and makes short- and long-term predictions for Randstad and the Dutch economy in general.



Analogical Reasoning as a Decision Support Principle for Weakly-Structured Marketing Problems

Promotor: Prof.dr.ir. B. Wierenga

EPS-2006-095-MKT

<http://hdl.handle.net/1765/8190>

095

Many marketing problems are weakly-structured. From the psychological literature, we know that analogical reasoning is an effective problem-solving method in weakly-structured decision situations. That is, when confronted with a problem, one of the first things managers will naturally do is to search their memory for previous, similar experiences (or cases) that could help to solve the problem at hand. Case-Based Reasoning (CBR) is a state-of-the-art artificial intelligence technique that mimics this kind of human reasoning and can be used to put the vast amount of experience-based marketing knowledge into action for decision-making in situations for which model-based decision support is not available. In a series of experiments, we investigate the effectiveness and efficiency of CBR system availability under different conditions. We use the design of sales promotion campaigns as our weakly-structured application domain in marketing. Part I of this dissertation provides a theoretical and methodological background for the studies carried out in Part II. This dissertation shows that analogical reasoning does help to improve marketing decision-making. More specifically, we demonstrate that a CBR system helps to design better, more creative sales promotion campaigns and helps to design them more efficiently. Furthermore, we show that the effects of CBR system availability are dependent on: (1) the content of the case-base (i.e., near analogies versus far analogies), (2) the size of the case-base (i.e., large size versus standard size), and (3) the characteristics of the decision-maker (i.e., innate creative ability). Interestingly, the effect of CBR system availability on solution quality is largest for decision-makers with a low creative ability (i.e., a compensation effect). Finally, we show that decision-makers have difficulties in recognizing the contribution of the CBR system to the objective quality of their solution. These findings have important managerial implications, which are discussed in the final chapter of this dissertation, such as "capture, store and make knowledge available in the form of cases" and "different types of decision makers need different types of CBR systems".

The reputation of RSM, and its research school ERIM, has helped me to establish contacts with practitioners and to pursue an international career in academia



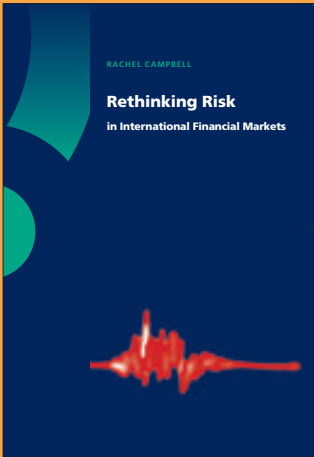
"For my master thesis, I received the Unilever Research Award 1999. This award stimulated me to apply for a PhD position in marketing at ERIM and further strengthen my research capabilities.

My dissertation research focused on the value of analogical reasoning for supporting marketing decision-making. More specifically, I demonstrated that providing decision-makers with analogies, by means of a so-called Case-Based Reasoning (CBR) system, improved the design of sales promotion campaigns in terms of both their quality (i.e., better, more creative campaigns) and efficiency (i.e., less time needed to design a campaign). Interestingly, decision-makers with a low creative ability benefit more from such a system than decision-makers with a high creative ability. In addition, decision-makers do not recognise the positive influence of the analogies provided by the CBR system on the quality of their solution. My dissertation outlines the implications of these findings for marketing theory and practice.

The reputation of RSM, and its research school ERIM, has helped me to establish contacts with sales promotion practitioners. For instance, for my empirical studies I was able to use real-life campaign briefings from Grolsch and Unilever and sales promotion experts were involved in rating the quality of the campaign proposals. It also helped me to pursue an international career in academia. Currently, I am working as an assistant professor at the marketing department of ESSEC Business School Paris."

Finance & Accounting

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Rethinking Risk in International Financial Markets

Promotor: Prof.dr. C.G. Koedijk

EPS-2001-005-F&A

<http://hdl.handle.net/1765/306>

005

This thesis aims to address many of the issues raised concerning the appropriate definition and measurement of risk. An alternative approach to the estimation of risk, and the risk-return trade-off in international financial markets is investigated. Rather than focusing on the deviation of returns as the appropriate measure for risk, the more relevant negative domain when defining risk is focused upon. The notion of downside risk is applied as a more appropriate measure for risk. The focus is on a variety of international financial markets and applications of downside risk are used for improving market risk and credit risk management models. A downside risk approach for portfolio management is also derived, providing a pragmatic approach to implementing an alternative risk measure into international finance.

RSM Erasmus University provided me with the perfect environment to pursue my academic research interests with the necessary link to industry



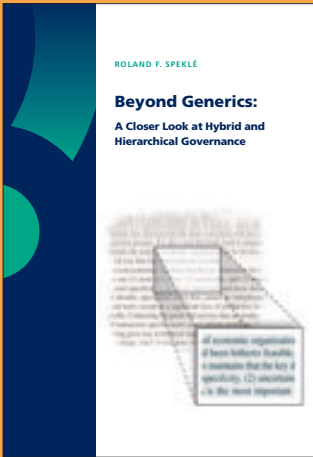
"Having finished my master's thesis, I was asked if I had considered an academic career and offered a PhD position: I decided to take up the challenge.

My thesis focused on understanding risk in financial markets, and led to five publications in leading finance journals: two in the *Journal of International Money and Finance*, and one each in the *Journal of Banking and Finance*, the *Journal of Portfolio Management* and the *Journal of Risk*.

The results from my PhD thesis have also been used in literature by the Basel Committee on Risk Management practices, and by the Institute of Actuaries in Australia.

I learnt a great deal. One thing stands out: that cooperation and collaboration between researchers in the development of ideas greatly enhances understanding and knowledge, and benefits both the economy and society. The doctoral position provided me with the necessary platform to pursue further research in financial markets, and develop my career academically, for which I am eternally grateful to my supervisor Professor Kees Koedijk.

Presently, I am an assistant professor of finance at Maastricht University and last year took up an appointment again at RSM. I still greatly enjoy research and am interested in risk in financial markets; my research has also moved into other areas of financial markets, such as sustainable investments and art as an investment. I believe RSM Erasmus University provided me with the perfect environment to pursue my academic research interests with the necessary link to industry."



Beyond Generics: A Closer Look at Hybrid and Hierarchical Governance

Promotor: Prof.dr. M.A. van Hoepen

EPS-2001-008-F&A

<http://hdl.handle.net/1765/357>

008

The main theme of this thesis is that the general logic of Transaction Cost Economics (TCE) is receptive to refinement, allowing a disaggregation of the hybrid and hierarchical modes of governance. It is argued that such a disaggregation is useful for two main reasons:

- (1) it may increase the accuracy of TCE's predictions and may improve the expressiveness of its style of explanation, and;
- (2) it may enlarge the conceptual scope of TCE, opening up problem areas that previously did not fit neatly into the realm of this approach.

This general idea ties together the two substantive parts of this study. The first of these parts starts from the empirical observation that hybrid structures do sometimes survive conditions of substantial uncertainty – an observation that does not go well with received TCE –, and examines two cases of hybrid contracting in such conditions. It is argued that both cases are examples of a hitherto ignored subcategory of governance that, once identified, restores TCE's ability to explain this observation. The second part brings TCE's explanatory apparatus to bear on issues of management control. It is shown that TCE supports a highly detailed study of control issues, and that it has much to offer when it comes to explaining control structure variety within (and beyond) the hierarchy. Based on these insights, this part proposes a theory of management control that specifies the composition of various archetypal control structures, and links these to the characteristics of the activities they are expected to control.

What is my motivation? I just love the work!



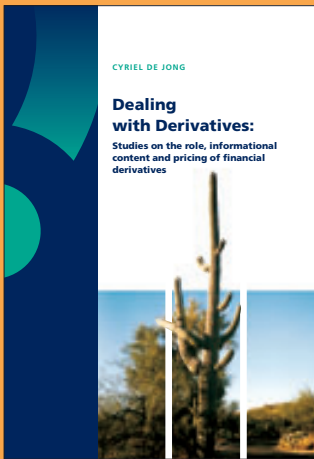
"I have always been attracted to the idea of doing research. More specifically, I have long been fascinated by the power of relatively simple theories to explain apparently complex phenomena. I also have a strong predilection for evidence-based reasoning.

The main insight revealed by my thesis was that management control structures can be studied productively from a configuration perspective, based on economics. The main chapter has been published in *Accounting, Organizations and Society*.

While I am not aware of any direct influence of my work on the business world, I am sure that my ideas regarding design of management control structures have influenced many students.

I never held a PhD position at ERIM – ERIM came into my life after the completion of my thesis and its contribution has been the publication of that thesis.

Today I am a full professor of management accounting and control at Nyenrode Business University. What is my motivation that keeps me in research? I don't know, I just love the work!"



Dealing with Derivatives: Studies on the Role, Informational Content and Pricing of Financial Derivatives

Promotor: Prof.dr. C.G. Koedijk

EPS-2003-023-F&A

<http://hdl.handle.net/1765/1043>

023

The aim of this thesis is to improve the understanding of derivatives markets, which should ultimately lead to a better diversification of risks among market participants. The author first analyses the impact of derivatives on the market quality of the underlying asset. With experiments and a theoretical model it is shown that derivatives generally make markets more efficient, although volatility may increase, depending on the exact market structure. Next, the author presents two methods that derive information about the underlying price process from traded options. The models approximate the option prices well and the extracted information explains future volatility better than historical data. Finally, a model for the valuation of options in electricity markets is presented that deals with the special characteristics of electricity spot prices and may serve to value electricity generation plants.

A PhD is simply the best possible start for an entrepreneurial career



"I run my own company (together with a business partner), providing consulting and training services to energy companies in the area of trading and risk management. I began this while still working on my PhD, and continued part-time when I was a part-time assistant professor. I am now a full-time consultant.

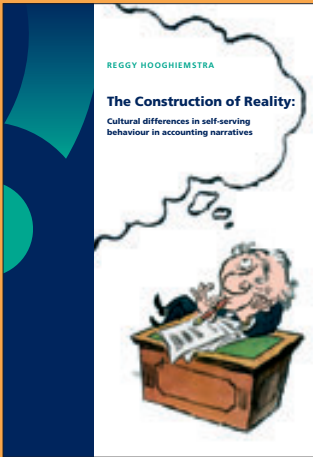
At the age of around 21 I felt I was too young to start working in a company and had an interest in exploring a specialist area in more detail. I also enjoyed teaching and saw a PhD as an opportunity to become further involved in this.

Studying at this level taught me to be more rigorous and exact, particularly in writing down results and referring to other literature.

Some of my findings were published in the *Journal of Business*. And the model for spot power prices (and variants of it) that I developed in my thesis has been implemented in various companies, including Europe's largest energy company: E.ON.

For my work as an energy market consultant it is important to be able to show that you are a specialist in your area, and the fact that I completed my PhD certainly helps, especially with German companies.

I still publish from time to time and intend to continue doing so. For me, a PhD was simply the best possible start for an entrepreneurial career."



The Construction of Reality: Cultural Differences in Self-serving Behaviour in Accounting Narratives

Promotors: Prof.dr. L.G. van der Tas
Prof.dr. A.Th.H. Pruyn

EPS-2003-025-F&A
<http://hdl.handle.net/1765/871>

025

A number of prior studies have revealed that CEOs' accounts of company performance are self-serving. These studies, predominantly conducted in the United States, show that CEOs are willing to take credit for favourable outcomes, but are reluctant to assume responsibility for unfavourable ones. Recent social-psychological research, however, suggests that such self-serving biases are less universal than they were previously thought to be and might be more typical for western than for eastern societies. Therefore, we examine whether such cultural differences are also present in managers' explanations for company results. Content analysing 278 letters to the shareholders of American, Dutch, and Japanese companies we find that CEOs' explanations do cross-culturally vary, thereby complementing and extending previous work on self-serving biases in accounting narratives.

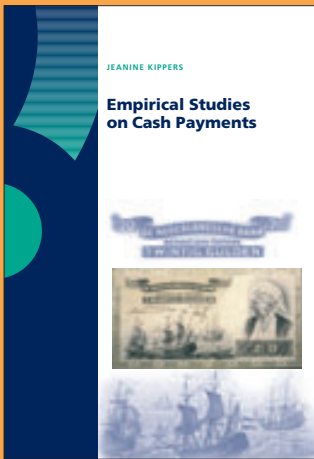
The foremost conclusion of my work was that Japanese and US managers are more similar (as far as financial reporting is concerned) than we previously thought



"The most important thing that led me to start a PhD was that I was always interested in researching the area of financial reporting and culture. When I saw an advertisement offering a vacancy in precisely this area, the choice was an easy one.

If research has taught me anything it is to be both patient and vigorous. In terms of content, probably the foremost conclusion of my work was that Japanese and US managers are more similar (as far as financial reporting is concerned) than we previously thought.

The PhD position clearly helped me to obtain my current position as an assistant professor at the University of Groningen. I think I have stuck with research for two reasons: firstly, I like having the time to examine various aspects of financial reporting and corporate governance. Secondly, I like being able to cooperate with other researchers and subsequently improve my research skills."



Empirical Studies on Cash Payments

Promotor: Prof.dr. P.H.B.F. Franses

EPS-2004-043-F&A

<http://hdl.handle.net/1765/1520>

043

Cash is still the most common means of daily payments. The large number of cash payments is supported by a costly distribution system in which retailers, banks and central banks participate. Currency is issued in a range of bank note and coin denominations to facilitate efficiency in cash payments. The purpose of this thesis is to study the performance of a currency range in practice. It presents a number of empirical studies on cash payments at the individual payment level, whereby cash payments are viewed as the outcome of a choice process. This type of analysis calls for labor-intensive data collection methods and the development of a sophisticated econometric model. This thesis introduces such a model for cash payments, and it reviews its application to three unique data sets of cash payments. The data concern payments in the Netherlands before and after the transition from the guilder to the euro in 2002, and payments in an experimental setting. The estimation results allow for an assessment of the use of different bank note and coin denominations in cash payments, and of possible preferences for one of more denominations. Currency research generally approaches currency use from a macroeconomic point of view. The novelty of this thesis is that it contributes to currency research by focusing on individual cash payments.

A PhD is recognised in the banking business, where a doctorate contributes to your reputation of being highly professional



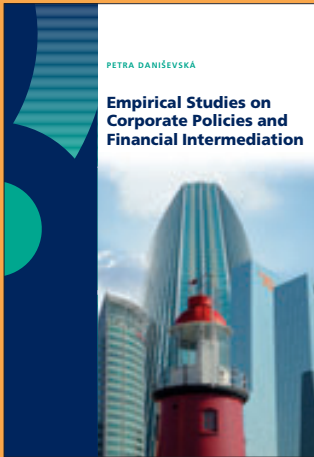
"I had been working for two years at the Nederlandsche Bank (DNB) on a practical level, and felt the need to further explore econometrics. DNB offered me the chance to combine my job with writing a doctoral thesis on a work-related subject, and I decided to take up that opportunity.

A doctoral study is a long-term project during which you encounter several problems and challenges. These arise on a technical level, concerning data and modelling issues and the ability to draw conclusions. But you also need to withstand the stress attached to writing a thesis (alongside a full-time job), whilst keeping the faith that after all those years you will end up with a 'product' (a published thesis) that you are proud of and that is recognised by the scientific community. The biggest discovery for me was that I had the ability to succeed in this.

The most important contribution made by my thesis is the recognition that cash payments can be studied empirically at payment level. The use of cash was previously only studied using economic data. We showed that payment level research provides more information on how cash is used by the public. This is useful for institutions that are part of the cash distribution channel.

I have now been working in the banking sector for 10 years. A PhD has no direct consequences for my career, but it is highly appreciated. I am currently involved with risk model validation in the Group Risk Management department of Rabobank.

While I do not aspire to a scientific career, I have fulfilled my wish to deepen my interest in econometrics and focus on a specific subject for a prolonged period. A PhD thesis is the tangible product of a long, demanding and challenging process. The success of such a scientific achievement is recognised in the banking business, where a doctorate contributes to your reputation of being highly professional."



Empirical Studies on Corporate Policies and Financial Intermediation

Promotor: Prof.dr. C.G. Koedijk

EPS-2004-044-F&A

<http://hdl.handle.net/1765/1518>

044

This thesis investigates the impact of financial intermediaries on capital structures, corporate governance structures and the performance of firms. Throughout the world, financial intermediaries have powerful and influential positions in financial markets. The intermediaries have both the incentives and the means to influence the financial policies of the firms and initiate governance changes in underperforming management teams. On the contrary, investors have limited ability to exercise control, even though they provide debt and equity financing to firms. This thesis comprises four empirical studies. In the first study, the author analyses the impact of information asymmetry between the U.S. firms and their lenders on firms' choice of debt maturity. The second study shows how firm-bank relations in the form of shared board positions and equity ownerships influence capital structure decisions of Dutch firms. The following examination in the third study of Dutch managerial and supervisory board turnover further demonstrates the strong position of financial institutions in disciplining underperforming management. The fourth and final analysis in this thesis relates the dispersion in analyst forecasts to the differences in investor opinions and investigates how the heterogeneity of investor beliefs affects prices of European stocks.

The flexible structure of the PhD programme allowed me to choose and follow various courses given by the best people in the field

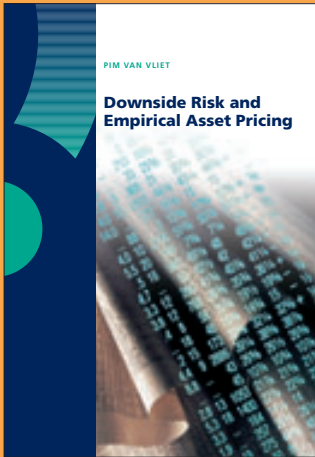


"I am now a member of the Portfolio Management team within the Real Estate Markets department of NIBC. My initial responsibilities consisted of quantitative collaboration with the asset securitisation structuring teams (CLO/CDOs, CMBS, RMBS) varying from the modelling of the transactions to the valuation of the retained first loss pieces. Recently my focus has shifted to the portfolio management of residential mortgages. The responsibilities of our team range from pricing of new mortgages to the risk management tasks.

My main motivation for beginning my PhD was the desire to deepen my knowledge of corporate finance and corporate governance. I also wanted to improve my analytical skills and ability to write well-structured and clear text, and I hoped to find out if a career in academia and research was something for me.

I found academic research rather individualistic, however my thesis did provide many insights. For instance, US firms with both positive private information, and high information asymmetry between the company and the market, signal that information by relying more on short-term debt. Moreover, a firm's choice of leverage, debt maturity and source of debt are not independent factors; and the capital structure of Dutch companies is partially determined by the strength of their ties with banks.

Doing my PhD at ERIM was a great experience. The flexible structure of the programme allowed me to choose and follow various courses given by the best people in the field. I learnt to define the (research) problem, work towards its solution in a structured way, and then clearly communicate what I had done and defend my approach."



Downside Risk and Empirical Asset Pricing

Promotor: Prof.dr. G.T. Post

EPS-2004-049-F&A

<http://hdl.handle.net/1765/1819>

049

In 2004, the Nobel prize-winning Capital Asset Pricing Model (CAPM) celebrated its 40th birthday. Although widely applied in financial management, this model does not fully capture the empirical risk-return relation of stocks; witness the beta, size, value and momentum effects. These problems may be caused by the use of variance as the relevant risk measure. This study analyses if asset pricing models that use alternative risk measures better describe the empirical risk-return trade-off. The results suggest that downside risk helps to better understand the cross-section of stock returns, especially during economic recessions.

My PhD has been very important for my career – my current job would have been beyond my reach without it



"Curiosity and a hunger for knowledge inspired me to start my doctoral research. I also knew it would give me an opportunity to specialise further in the field of finance. During my studies I realised that if you are dedicated and curious, nothing is too difficult to learn.

My thesis demonstrated the fact that investors are crash averse, and are willing to pay a premium to limit this downside risk. Contrary to perceptions, the 'old' CAPM has an empirical fit similar to currently popular multi-factor models.

To date, my work has appeared in *Journal of Banking and Finance*, *Management Science*, *Journal of Economics and Finance*, and *Financial Review*.

My PhD has been very important for my career. My current job as senior researcher at Robeco Quantitative Strategies would have been beyond my reach without it. In my job I develop innovative quantitative hedge funds and mutual funds. We started a mutual fund at Robeco based on insights from my thesis in September 2006. Recently, the link between Erasmus and Robeco has been strengthened further – we are currently sponsoring an innovative 'Neuro-Finance' project being carried out by Professor Thierry Post and his team. It is these kinds of projects, and an innate curiosity and competitive drive that keep me motivated."



Performance Evaluation of Constrained Portfolios

Promotor: Prof.dr. J. Spronk

EPS-2005-052-F&A

<http://hdl.handle.net/1765/6731>

052

Conventional performance evaluation methods strongly differentiate between the universe which is used for portfolio construction, and the universe which is used for the performance evaluation. Whilst by composing the portfolio we consider the complete opportunity set, in the last case we use a very restricted, general representation of this opportunity set: a peer group or (a) benchmark portfolio(s). In this thesis we present a conceptual framework, which allows incorporate the decision-making context of any constrained investment portfolio into the performance evaluation process. The main feature that distinguishes our methodology from conventional performance evaluation methods is that it tackles the performance at the decision-making level: the portfolio weights. We consider all possible portfolios that can be constructed given the specific investment objective(s) as well as the prescribed investment constraints, and then evaluate all these portfolios according to (a) selected performance measure(s). The performance of the investment portfolio is calculated simultaneously and then evaluated against the performance of this complete opportunity set. Consequently, our methodology extends the conventional performance metrics with the insights into the performance of all opportunities that existed at the time of the investment decision.

The most important aspect of my (PhD) process was the development of the desire (or maybe the 'habit') of striving for continuous learning

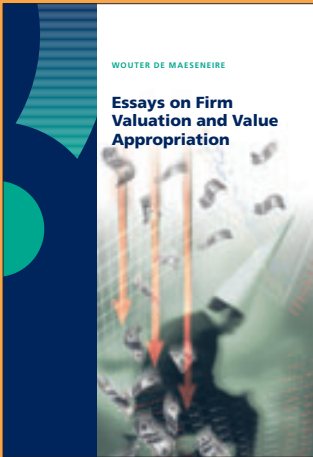


"PhD research in finance provides you with a deeper understanding of the mechanics of financial markets and the interoperations of their components; and the ability to identify driving forces and model them. But perhaps the most important aspect of this process is the development of the desire (or maybe the 'habit') of striving for continuous learning.

My main motivation for pursuing a PhD degree was my desire to extend my knowledge of finance. My thesis presents a conceptual framework for incorporating the decision-making context of any constrained investment portfolio into the performance evaluation process.

On a personal level, I learnt to quickly differentiate between important, and secondary, issues. ERIM also provided me with the opportunity to participate in several courses that were valuable for my research, and enabled me to present my ideas at different international conferences, all of which were valuable learning experiences.

I am currently an assistant professor at the Faculty of Economics, Department of Finance, Erasmus University Rotterdam."



Essays on Firm Valuation and Value Appropriation

Promotor: Prof.dr. J.T.J. Smit

EPS-2005-053-F&A

<http://hdl.handle.net/1765/6768>

053

Sophisticated valuation techniques such as adjusted present value and real options, attract ever-increasing attention from theory and practice. A huge number of papers in the academic field provide various applications of these advanced tools, for instance valuing research and development, strategic alliances and real estate. Real options have also been used for valuing mergers and acquisitions. However, notwithstanding the rich knowledge about valuation models applicable for valuing takeovers, there remains a need to further develop theories about the distribution of the value creation between the target's and acquirer's shareholders. In other words, what part of the value creation can the acquirer appropriate? Strategic management literature underlines the impact of possessing unique capabilities, and both strategic and financial literature emphasise the role of information asymmetry in explaining value appropriation in acquisitions. In this dissertation both simple and more complex valuation models are discussed and we propose a real option-game model that analyses the acquirer's value appropriation. In our valuation and value appropriation models, the specific resources and capabilities of the evaluator are considered. By explicitly taking the acquirer resources into account in the valuation analysis, and by developing a new application of a combined option-game model, this PhD thesis is taking a step in further bridging the gap between finance theory and strategic management.

The opportunity for self-development and academic freedom are major incentives for doing a doctoral degree



"I have a deep and very broad interest in corporate finance, and during a PhD you have the luxury of spending a lot of time reading articles and books. At the same time, you get training in research methodology and text writing. But the opportunity for self-development and academic freedom are major incentives for doing a doctoral degree.

From my perspective, research teaches you that perseverance and planning are vitally important. The results of my thesis show that value appropriation is totally different to value creation. Real options thinking and valuation should get much more attention than they currently do, both in the academic and business communities.

I have not yet had papers published, but I am presently involved in second round revisions for *Financial Management* and the *Journal of Business Finance and Accounting*. Since completing my thesis I have written a book on one of the main topics of my dissertation: real options (*De Maeseneire W., 2006. The real options approach to strategic capital budgeting and company valuation. 194 p., Larcier*). The methodology this describes is starting to attract the attention of an increasing number of people.

A PhD position at ERIM or any well-respected university opens many doors – I am currently an assistant professor in corporate finance at the Erasmus School of Economics Finance Department. It is intellectual development and academic freedom that keep me motivated."



Empirical Studies on Asset Pricing and Banking in the Euro Area

Promotor: Prof.dr. C.G. Koedijk

EPS-2005-058-F&A

<http://hdl.handle.net/1765/6666>

058

European capital markets have changed dramatically over the last couple of years. Due to the harmonisation of monetary and policy rules and the elimination of exchange rate risk (through the introduction of the euro) countries in the European Monetary Union (EMU) are becoming more integrated. In this thesis the author tries to determine the consequences of this integration process for asset pricing in the euro area. The most important conclusion, which is a central theme of the thesis, is that the characteristics of financial markets in the euro area have been changing. In other words, investors and researchers cannot base their expectations on the (long) historical evidence of these markets, because the structural changes have a clear impact on the characteristics of the markets. For example, the author shows that industry information has become more valuable in terms of portfolio diversification benefits than country information, especially after the introduction of the euro, which contrasts with the literature of the 90's. Therefore, investors should change their view in the euro area to a sector-based approach. Most institutional investors, which are the biggest investors in the euro area, have already changed their view into a sector-based approach. As a consequence, euro area portfolio managers are nowadays tracking sector indices instead of country indices. One of the chapters in part II of the thesis shows the implications of that change for the banking sector. Stock returns of big banks have become more correlated, while this is not the case for smaller banks. The author argues that this is not a result of a similar performance or product portfolio of these banks, but is likely the result of the change in perspective of most euro area investors. Next to these topics, the thesis also covers different asset pricing models (Fama and French three factor models for the euro area and an international asset pricing model that provides evidence of a significant risk premium for inflation risk) and an innovative measure for contagion among European banks.

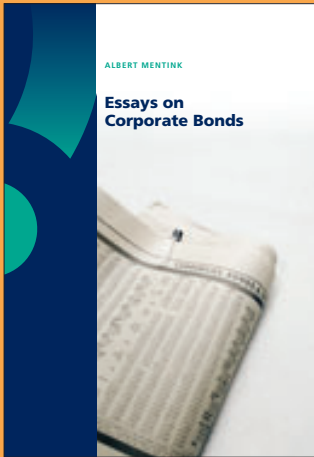
The theoretical underpinnings I learned during my PhD are essential for my career as an investment strategist



"I knew a doctoral position would be the right challenge for me, especially as I felt my earlier studies did not fully utilise my capabilities. I wanted to explore the world of financial research, both to learn more about finance and to develop an understanding of advanced econometric techniques. As a result I learned how to work with theoretical (financial) models.

The most important conclusion of my thesis is that the characteristics of financial markets in the Euro area have been changing. This means that investors and researchers can no longer base their expectations solely on the available (long-term) historical information, because regulatory changes have had a clear impact on European markets. My work has led to several publications in the *Journal of International Money and Finance*, and the European Central Bank working paper series.

My doctoral position at ERIM gave me the opportunity to become a professional in empirical finance. I am now an investment strategist at AEGON Asset Management in The Hague, where we allocate funds both on a strategic and tactical horizon to different asset classes. The theoretical underpinnings I learned during my PhD are essential for this. In my career I continue to follow my goal of uncovering the drivers of financial markets, and can therefore directly apply the knowledge I have gained."



Essays on Corporate Bonds

Promotor: Prof.dr. A.C.F. Vorst

EPS-2005-070-F&A

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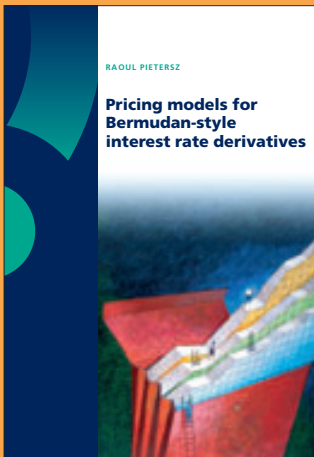
070

The introduction of the euro on January 1, 1999 created a large, single currency bond market by merging eleven separate bond markets. The euro-denominated corporate bond market has grown substantially ever since. The growth of corporate bond markets, both U.S. dollar and euro, and the defaults of large companies, such as Enron and WorldCom, spurred the development of credit risk models and their applications. More recently, modelling and estimating liquidity risk has generated a lot of research attention from both academics and practitioners. This thesis starts with an overview of the effects of the euro introduction for the Dutch fixed income market and continues with empirical research on corporate bond credit and liquidity risks. Credit risk concentrates on pricing of step-up bonds and on optimising conditional Value-at-Risk of credit bond portfolios. Liquidity risk focuses on measuring corporate bond liquidity and estimating communality in liquidity between corporate bond, government bond and equity markets.

A PhD gives you the chance to combine theory and practice and better understand and solve more complex finance problems



"The combination of writing a PhD and working in business has given me the opportunity to understand a number of practical problems more thoroughly from a theoretical point of view. I have learned how to put theory into practice, and practice into theory. This has resulted in the publication of most chapters of my thesis in journals (Journal of Banking & Finance and Journal of Derivatives) and books (John Wiley & Sons and Elsevier). Currently I still enjoy the benefits of writing a PhD as head of the Asset & Liability Management department at AEGON NL."



Pricing Models for Bermudan-Style Interest Rate Derivatives

Promotor: Prof.dr. A.A.J. Pelsser

EPS-2005-071-F&A

<http://hdl.handle.net/1765/7122>

071

Bermudan-style interest rate derivatives are an important class of options. Many banking and insurance products, such as mortgages, cancellable bonds, and life insurance products, contain Bermudan interest rate options associated with early redemption or cancellation of the contract. The abundance of these options makes evident that their proper valuation and risk measurement are important to banks and insurance companies. Risk measurement allows for offsetting market risk by hedging with underlying liquidly traded assets and options. Pricing models must be arbitrage-free, and consistent with (calibrated to) prices of actively traded underlying options. Model dynamics need be consistent with the observed dynamics of the term structure of interest rates, e.g., correlation between interest rates. Moreover, valuation algorithms need be efficient: Financial decisions based on derivatives pricing calculations often need to be made in seconds, rather than hours or days. In recent years, a successful class of models has appeared in the literature known as market models. This thesis extends the theory of market models, in the following ways: (i) it introduces a new, efficient, and more accurate approximate pricing technique, (ii) it presents two new and fast algorithms for correlation-calibration, (iii) it develops new models that enable efficient calibration for a whole new range of derivatives, such as fixed-maturity Bermudan swaptions, and (iv) it presents novel empirical comparisons of the performance of existing calibration techniques and models, in terms of reduction of risk.

I wanted to gain an advantage in the job market, and the doctoral position offered me a way to do this



"My thesis developed a new model that has opened the way for more efficient valuation of a new class of interest rate derivatives. My results have been published in the *Journal of Derivatives*, *Quantitative Finance*, the *Review of Derivatives Research*, *Risk Magazine* (twice), and the *Journal of Computational Finance* among many others. In addition to this, all the new models and methods presented in my thesis can be (and probably are) implemented in practice by the business world.

For me, starting a doctoral position offered me a way to gain an advantage in the job market. It also taught me how to write academic papers, but most importantly, it provided me with many of the skills required for my current profession: as front office desk quant for interest rate derivatives at ABN AMRO."



On Crisis, Crashes and Comovements

Promotors: Prof.dr. C.G. Koedijk
Prof.dr. M.J.C.M. Verbeek

EPS-2006-083-F&A
<http://hdl.handle.net/1765/7829>

083

Crises and crashes in financial markets are investors' worst fear. The combination of large losses, a persistent increase of price fluctuations, and a strengthening of comovements in prices causes investors great harm. While the severe consequences of crises and crashes are intuitively clear, many essential questions regarding the magnitude of the effects on specific fields in finance and the precise impact of the different factors have yet to be resolved. This dissertation provides answers to these questions from an investor's perspective. Its main conclusion reads that the tendency of crises and crashes to spread to other assets and markets as well as over time is of crucial importance for determining their impact. Traditional models for comovements underestimate the risk of joint downward movements. Persistence exacerbates the effects of a crisis and increases the costs of ignoring its possibility beforehand. Moreover, this thesis concludes that investors can expect a compensation for the grave consequences of a crash that they are unable to evade. The size of this compensation indicates that crash risk may be equally important as the traditional risk in the normal fluctuations of asset prices. Furthermore, predictions on the likelihood of a crash can be improved by studying past returns. Besides these empirical contributions, this dissertation shows how various econometric techniques, including copulas and regime-switching models, can be used innovatively for the examination of crises, crashes and comovements.

I learned to be very critical of the steps you take to solve a problem, and also arrange for an equally critical audience to give constructive feedback

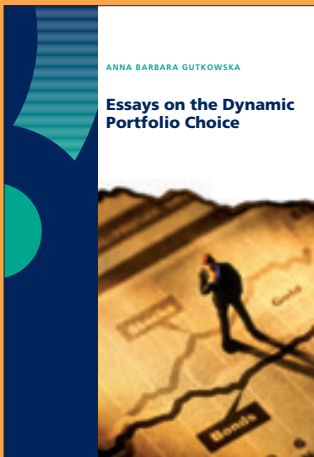


"I wanted a research function in order to apply the skills I had learned as a master's student. A PhD position gave me the opportunity to have even more influence over the main goals of my research.

While at ERIM I learned to be very critical of the steps you need to take to solve a problem, and to arrange for an equally critical audience to give back constructive feedback.

My research concentrated on crises and crashes in financial markets. I showed that the tendency of crises to spread from one financial market to another, and to last for prolonged periods, is crucial for investors. From an analytical perspective they are the two most difficult factors to take into account. To date my research has been published (twice) in the *Journal of Banking and Finance*.

The PhD at ERIM gave me the proper foundation for a continued stay in academia and provided me with the right means to develop my skills. I am now an assistant professor at the Econometric Institute (Erasmus School of Economics). This would have been impossible without a doctorate. I am still driven by the desire to become a top academic."



Essays on the Dynamic Portfolio Choice

Promotor: Prof.dr. A.C.F. Vorst

EPS-2006-085-F&A

<http://hdl.handle.net/1765/7994>

085

This thesis is concerned with dynamic optimal portfolio choice both unconstrained and constrained. The unconstrained dynamic optimal portfolio choice is meant in this thesis as trading the available financial assets in a given time interval according to the rules, which are feasible under the budget restriction and optimal according to certain criterion. This criterion in this thesis is the maximisation of expected utility from terminal wealth. The problem of constrained dynamic optimal portfolio choice is additionally restricted by the requirement that the terminal wealth must exceed zero, given constant, or deterministic/stochastic liability / guarantee. Unconstrained portfolio choice is treated in the first two chapters of the thesis, while the next two are devoted to the constrained choice. In the unconstrained portfolio choice context we consider the phenomenon of interest rate risk hedging. It is meant as complementary to mean-variance investment into the risky assets in order to protect the portfolio against the adverse changes in the short-term interest rate. We analyse the problem of interest rate risk hedging in both continuous and discrete time. We approach it with the martingale methodology supplemented by the Malliavin calculus. In the constrained portfolio choice framework we deal with the problem of asset and liability management (ALM) of the pension schemes as well as the common portfolio insurance policy known as the constant proportion portfolio insurance (CPPI). The ALM research is the simulation experiment tailored to investigate the performance of dynamic portfolio strategies in the chosen models of financial markets. The CPPI research is the analysis of empirical data, which is to answer the question of superiority of CPPI over an alternative as well as the correspondence between theoretical and empirical properties of CPPI.

I still work as a researcher because I love the freedom of being able, to a large extent, to choose a subject I am interested in for my research

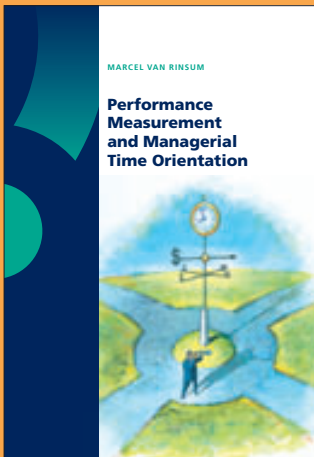


"I am an assistant professor at the Warsaw School of Economics, and starting my post-doctoral studies at Goethe University in Frankfurt in July 2007. Having a PhD from ERIM was an important factor in why I was accepted for this position.

I came to Rotterdam in 1998 as an exchange student doing my master's degree. At the end of the exchange programme I knew I would come back here to work on my PhD.

My thesis is about portfolio choice. I showed that the method introduced quite recently to the optimal portfolio choice makes the computation of optimal portfolios significantly easier in some models of the financial market. I found that dynamic investment strategies derived by the application of advanced quantitative methods are not always better in terms of risk and return than the common investment rules. Finally, I verified that the theory on constant proportion portfolio insurance does not always find its confirmation in real markets.

While working as a doctoral student, I learned that you have to start small: research naturally grows into something big. I still work as a researcher because I love the freedom of being able, to a large extent, to choose a subject I am interested in for my research. I like this freedom of choice."



Performance Measurement and Managerial Time Orientation

Promotor: Prof.dr. F.G.H. Hartmann

EPS-2006-088-F&A

<http://hdl.handle.net/1765/7993>

088

Scandals involving managers that have quickly cashed in, leaving their company in distress, regularly come to light. These managers have undertaken actions oriented towards short-term gains, such as lowering service or quality and decreasing long-term investments. These actions are taken to boost current financial performance, which commonly forms the basis for managers' evaluation and rewards. Although such actions are often dysfunctional, a short-term orientation is not always bad. For example, in case of liquidity problems, a fast increase in current financial results is required. Clearly, the adoption of a managerial time orientation that is appropriate for the circumstances is essential to a company's success. This dissertation demonstrates how the design of the performance measurement system affects the time orientation of managers. It also shows that managerial time orientation depends on individual characteristics. The results can be used as guidelines for the use of performance measures in companies, as well as for the selection of managers, dependent on the desired managerial time orientation.

My motivation for continuing to pursue research has not changed since I very first started my PhD: I still want to study topics that attract my attention

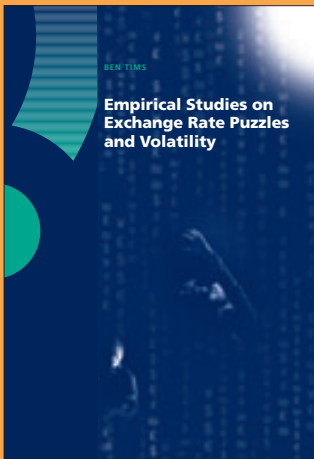


"A PhD is of great professional and personal value; for me, it was also fun! It is an important degree, particularly because it is the last and final grade one will obtain in one's career.

I decided to join the doctoral programme because I wanted to study in more depth the topics that attracted my attention during my master's. I also wanted to make a career out of working on problems that are of genuine interest to me.

The most important insight I gained was that performance measurement influences investment decisions. In particular, that managers take less short-term oriented decisions when they are being evaluated based either on leading indicators or subjectively by their superior.

At present I am working as an assistant professor in management accounting at RSM Erasmus University. My motivation for continuing to conduct research has not changed since I very first started my PhD: I still want to study topics that attract my attention and make my career out of working on problems that interest me."



Empirical Studies on Exchange Rate Puzzles and Volatility

Promotor: Prof.dr. C.G. Koedijk

EPS-2006-089-F&A

<http://hdl.handle.net/1765/8066>

089

Money makes the world go 'round but to make money go 'round the world exchange rates are of paramount importance. The theory and empiricism of exchange rate behaviour has proved to be a fascinating and relevant element of international financial economics (e.g. the introduction of the euro in 1999 is a very recent example that gives rise to important theoretical and practical issues). This thesis consists of five empirical studies related to exchange rates. The first two studies deal with the fundamental theory of Purchasing Power Parity (PPP), which postulates that goods in different countries should have the same price when expressed in the same currency. The main conclusion of these studies is that the common use of a methodology with the restriction of homogeneous mean reversion in a panel of real exchange rates can have a dramatic impact on inferences made on the validity of the PPP hypothesis. The third and fourth study focuses on the Uncovered Interest rate Parity (UIP), which is another fundamental economic theory. UIP states that the expected change in the spot exchange rate is equal to the forward premium. In this thesis both linear and nonlinear models are utilised in order to improve the explanatory power of the forward premium on the future spot exchange rate. The linear models are unable to capture the dynamics better than the benchmark random walk model. For the nonlinear models, however, UIP can not be rejected. The last study concerns the measurement of the volatility of exchange rates. The parsimonious multivariate Stochastic Volatility model is discussed that is estimated efficiently by using the distributional properties of the range-based volatility measure, which makes use of high and low prices. The estimated currency-specific volatilities that are extracted from the exchange rate volatilities are substantially different from each other and are able to pick up some of the most salient events in exchange rates that happened during the last decade. The five studies presented in this thesis offer a number of extended and enhanced empirical models that shed new light on the dynamics and determinants of exchange rates.

For me, doing research is (most of the time) equivalent to having fun. And who does not want to have fun?



"During my PhD I learned that you cannot do research on your own. Highly-skilled, enthusiastic, dedicated and socially-engaged colleagues, as well as love and support from the "home front", all play a crucial role during (and beyond) your doctoral studies.

I obtained my PhD degree fairly recently. I studied econometrics at the economic faculty of Erasmus University, before having the opportunity to join the Financial Management Department of RSM Erasmus University for my doctoral studies.

My PhD research reveals among other things that the common use of a specific methodology to test the Purchasing Power Parity (one of the most fundamental economic theories in international financial economics), can have a dramatic impact on the inferences made on the validity of this hypothesis. My doctoral thesis led to publications in the *Journal of International Money and Finance* and *Econometric Reviews*.

On completion of my doctoral degree, I accepted a position as an assistant professor of financial management at RSM. Not only do the knowledge, experience and skills gained during my years as a PhD student come into play in my teaching activities, they are essential for producing good research. For me, doing research is (most of the time) equivalent to having fun. And who does not want to have fun?"



Corporate Bond Issuers

Promotor: Prof.dr. A. De Jong

EPS-2006-092-F&A

<http://hdl.handle.net/1765/8191>

092

What are the mechanisms behind corporate bond finance? Whereas a lot of corporate finance research is focused on stocks, corporate bond finance is relatively unknown territory. In this thesis, we present four articles in which we study the costs and effects of financing with bonds. We follow corporate bond issuers from market entry, through subsequent issues to the stage where they repurchase their bonds. In addition to the firms themselves, important players are bondholders, shareholders, management and intermediaries (banks). In the first paper, bond market entry is studied and related to agency costs of equity. Central is the question whether shareholders benefit from the presence of bonds in the firm's capital structure. The second paper investigates the costs of issuing bonds (in terms of yields to maturity and fees paid to underwriters) in a bank-oriented system faced with deregulation. Are bond issues by firms with strong bank ties affected differently by regulation than those by independent firms? Whether frequent bond issuers enjoy lower yields is the subject of the third paper. Do firms benefit from enhanced reputations and better market literacy when doing repeat issues? Finally, the fourth article studies firms that repurchase their bonds, with a special focus on possible wealth transfers between bondholders and shareholders.

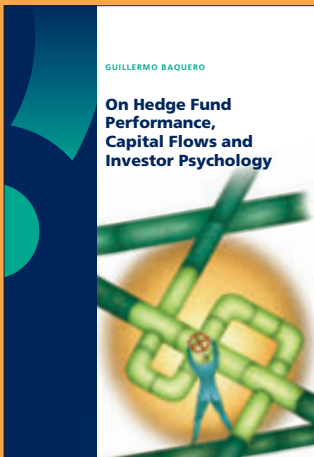
Starting my PhD at ERIM was one of the best decisions I have made in my life



"I am a corporate finance consultant for the Valuation & Strategy practice of PriceWaterhouseCoopers in Amsterdam. When I decided to start my PhD, I was unhappy in my prestigious but boring job at a multinational company and wanted to do something genuinely interesting. I joined the ERIM PhD programme in 2002, and it was one of the best decisions I have made in my life.

During my PhD I presented parts of my research at venues in Belgium, Denmark, Finland, Japan, the Netherlands, the UK and the US. The article version of Chapter 3 of my dissertation has been accepted for publication in the *Pacific-Basin Finance Journal*.

The PhD is a special experience in which you learn so much I do not know what to single out. One of the things is a thorough financial background, which suits me very well in my current job. Next to this job I am also an assistant professor of corporate finance at the Erasmus School of Economics. Why do I still work in research? Because it is fun!"



On Hedge Fund Performance, Capital Flows and Investor Psychology

Promotor: Prof.dr. M.J.C.M. Verbeek

EPS-2006-094-F&A

<http://hdl.handle.net/1765/8192>

094

In a relatively short period of time, hedge funds have become major players in the financial markets. In 2004, the estimated total reached nearly 8000 funds, and the assets under management had risen to \$1 trillion, from nearly \$100 billion in 1994. The client base for hedge funds has expanded beyond foundations and endowments to company pensions, public pensions, and to less "sophisticated" investors. However, the increasing and widespread acceptance of hedge funds as an alternative investment vehicle is disconcerting if we consider their limited transparency and the restricted liquidity conditions imposed to investors. On these grounds, serious questions arise about investors' ability to make the right investment choices in hedge funds. This book speaks to these concerns. The four essays presented here examine the investment process of investors, the underlying factors determining their choices and the implications for investors' wealth and for hedge funds' performance. Four main conclusions follow. First, that hedge fund managers exhibit, on average, persistence in their performance at quarterly horizons, justifying to some extent an active search for skilled managers; however, large informational asymmetries prevent investors from taking timely decisions and exploiting the persistence of good performing funds while incurring high opportunity costs. In contrast, investors are able to divest swiftly from the poor performers, which may have a moderating effect on the risk-taking incentives of managers. Finally, investors appear to misread the information available and overreact to persistence patterns, both at the individual fund level and at the style level. Overall, this study confirms a potentially suboptimal allocation of capital flows across hedge funds, calling for higher levels of transparency in the demand side for capital, and more cautious due diligence and increased prudence in the supply side.

Creating knowledge is a fascinating adventure... my advice is: dare to give a voice to your own ideas



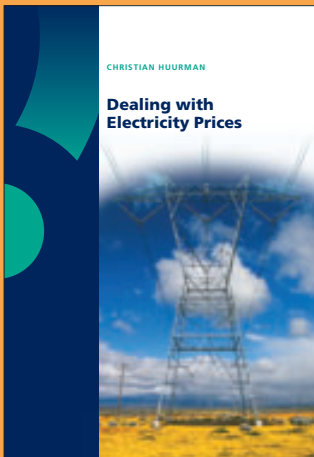
"The rewards that come from doing research are numerous. For example, it gives you the opportunity to disseminate your work in an international context, and it gives strong content and support to your role as an educator.

I became increasingly attracted to scientific research while doing my MPhil in economics in Belgium. I found excellent research conditions at ERIM, and most importantly, I met a top-class thesis advisor. These factors convinced me that committing to a long-term project was worthwhile, as quality was guaranteed.

Creating knowledge is a fascinating adventure. It is also a long-term project. While doing a PhD you inevitably go through ups and downs and it is easy to lose confidence along the way. One important thing I have learned is that, once you have a research idea, you need to really believe in it and pursue it till the end. If, at a later stage, you feel lost or face strong opposition, do not give up: the rewards might be unexpectedly close.

The second chapter of my thesis was published in the *Journal of Financial and Quantitative Analysis*, a P* journal in ERIM's list.

Since defending my PhD thesis, I have been looking into the international job market for academics. There are many good opportunities out there, and I do not doubt that my PhD from ERIM has sharply increased my potential to get an excellent position abroad. My advice to future doctoral candidates is: dare to give a voice to your own ideas."



Dealing with Electricity Prices

Promotor: Prof.dr. C.G. Koedijk

EPS-2007-098-F&A

<http://hdl.handle.net/1765/9399>

098

The 1990's witnessed the start of a worldwide deregulation process in the electricity industry. Since then, electricity prices have been based on the market rules of supply and demand. The non-storability of electricity, absence of substitutes, inelastic supply and patterns in electricity consumption, make power prices subject to mean-reversion, seasonality, frequent jumps and a complex time-varying volatility structure. Many of these characteristics cannot be observed in other commodity- or financial markets. Reforms have triggered the demand for electricity derivatives, and have led to the introduction of electronic market places where electricity can be traded on spot or forward. These markets enable market participants to allocate the price risk that they are exposed to, by selecting portfolios consisting of spot- and derivative contracts in accordance with their risk appetite. Although academic research on valuation of derivatives and portfolio theory is well-established, little is known about its applicability in electricity markets due to the aforementioned stylised facts. The scientific contribution of this research is to propose alternative methodologies for (spot- and derivative) price modelling and portfolio management in power markets. We do so by using time-series analysis, extreme value theory, panel data models and portfolio theory. Data is obtained from the most active electricity exchanges in the world. We hereby provide answers to yet unresolved issues on market efficiency, spot price dynamics, time-to-maturity effects in forward prices and structuring of the sourcing portfolio.

My PhD has been an important part of my education, and as such it has had a big impact on the way I look at the world



"It was simply matter of curiosity that inspired me start the doctoral position – I enjoy writing and conducting research.

The conclusion of my thesis shed some light on the price behaviour of electricity spot- and derivative contracts, and findings have since been published in the *Journal of Environmental Economics* and *Energy Economics*.

In my current position as an associate at Morgan Stanley, I benefit daily from the expertise and teaching skills that I gained during my ERIM period; when you deal with clients in the financial and energy industry, you have to be able to both understand the complexity of the derivatives analytics, and also to convince the client of the added value of your product in a similar way that you would write an abstract for a journal.

You get plenty of opportunity to gain experience in this doing PhD research and giving presentations at academic and practitioner's conferences."



New Insights into Mutual Funds: Performance and Family Strategies

Promotor: Prof.dr. M.J.C.M. Verbeek

EPS-2007-099-F&A

<http://hdl.handle.net/1765/9398>

099

New Insights into Mutual Funds is a bundle of four empirical studies on mutual funds. In the first two papers, we investigate persistence in risk-adjusted fund returns. We show that the returns of both equity and bond mutual funds are persistent. Funds that display strong (weak) performance over a past period continue to do so in future periods. More importantly, we demonstrate that some fund managers are able to outperform a strategy that invests in passive indexes for a short period of time. These results add new insights to long-running debates on the benefits of actively managed funds vis-à-vis passive portfolios. In the third paper, we test the cross-sectional explanatory power of multi-factor models to explain mutual fund returns. We find that performance estimates resulting from these models are biased because the factor proxies do not incorporate transaction costs and trading restrictions. We suggest that factor proxies based on mutual fund returns rather than stock returns provide better benchmarks to evaluate professional money managers. Finally, in the fourth paper we investigate the impact of fund marketing on investor flows to other funds in the family. We find that high-marketing funds generate spillovers, and enhance cash inflows to low-marketing funds in the family. An explanation of this observation is that funds with low marketing expenses are directly subsidised by family members with high marketing expenses. Our results indicate that at least part of the spillovers can be attributed to favouritism. These findings suggest that conflicts of interest between investors and fund families have been exacerbated by competition in the mutual fund industry.

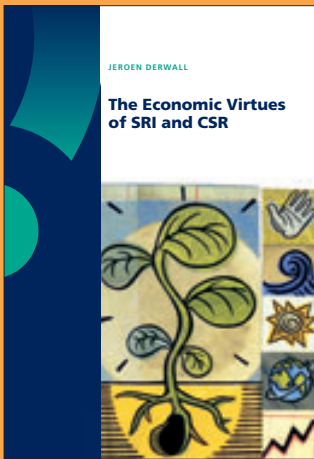
You need to get your results published quickly since competition is fierce



"For me, having a PhD creates value in my current job as an assistant professor of finance at RSM by proving me an expert on certain specialised topics.

The first two chapters of my thesis were published in the *Journal of Banking and Finance* (ERIM primary), and the third chapter has been issued a revise and submit at *Financial Management* (ERIM primary). In terms of practical application, several asset managers now offer actively-managed multi-manager funds based on persistence in mutual fund performance.

I have two main motivations for continuing to work as a researcher: first, if you leave academia, it is very unlikely that you will get your research published quickly. You need to get your results published quickly since competition is fierce and the top journals are not interested in outdated topics. I decided, after having spent a lot of time and effort setting up several research projects, it seemed a waste not getting the resulting papers published in good journals. My second reason is simple, I just enjoy doing research!"



The Economic Virtues of SRI and CSR

Promotor: Prof.dr. C.G. Koedijk

EPS-2007-101-F&A

<http://hdl.handle.net/1765/8986>

101

Financial markets and company managers are increasingly acknowledging the concepts of socially responsible investing (SRI) and corporate social responsibility (CSR), but not without reservations. These hesitations are largely attributable to ongoing debates about a potential conflict between social responsibility goals and the traditional financial objectives of investors and companies. This thesis bundles six empirical studies that deepen our understanding of the economic value of SRI and CSR. Several empirical questions underlie these studies, such as: do CSR practices improve a firm's profitability? Do financial markets value corporate social responsibility? Do SRI criteria constrain investment portfolio optimisation, or do they help investors in their hunt for underpriced securities? This thesis shows that SRI and CSR can be studied in new ways to answer these questions. We examine unique SRI stock portfolios with superior return/risk profiles, and provide a fresh look at strategies for investors in SRI mutual funds. By analysing a wide range of pathways that lead CSR to interrelated measures of corporate financial performance, we further explain whether CSR carries value-relevant information. Taken together, the six studies discuss the channels of transmission from CSR to operating performance, the cost of capital, firm value, analysts' earnings expectations, and stock return. The conclusions from this dissertation are that (i) integrating SRI criteria into portfolio construction does not negatively affect investment performance; (ii) investors can use information on firms' eco-efficiency to make investment decisions that improve the return / risk profile of their portfolios; (iii) common CSR attributes, such as corporate environmental responsibility, and human capital management, have a significant association with traditional measures of corporate performance. We recommend making CSR salient to investors in the form of extra-financial information, with an emphasis on environmental, social, and corporate governance themes.

The research that ERIM allows me to do has attracted quite some attention from practitioners



"During my PhD, I discovered that scientific research can still deliver important insights and practical applications to the investment profession. The results of my thesis have encouraged the development of new socially responsible investment strategies. For instance, a well-known investment firm managing institutional mandates (>1 trillion \$), has started an investment strategy inspired by Chapter 3 of my dissertation. My PhD research has also fuelled the launch of the European Centre for Corporate Engagement (ECCE), which helps practitioners and scholars understand how businesses and financial markets can promote sustainable development by considering environmental, social and corporate governance (ESG) issues.

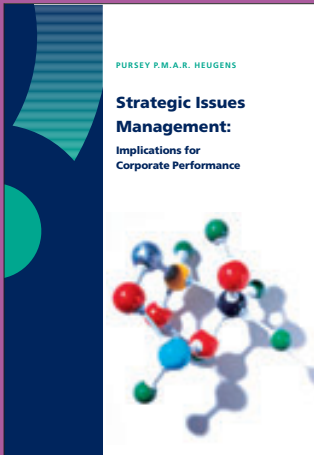
I embarked on a PhD degree because I felt it was time to enhance my 'learning curve'. ERIM's PhD programme was the ideal way to achieve this objective, while staying linked to the finance field. So far, chapters of my thesis have been published in the *Financial Analysts Journal*, and the *Journal of Business Ethics*. During my PhD trajectory I also performed research outside the scope of the dissertation, which got published in the *Journal of Banking and Finance*, and the *Pacific-Basin Finance Journal*.

I now have different academic jobs at RSM Erasmus University and at Maastricht University, and have a strong network within the finance profession.

A PhD researcher strengthens his/her scientific creativity by building a network that reaches beyond the academic domain. The research that ERIM allows me to do has attracted quite some attention from practitioners."

Strategy

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Strategic Issues Management: Implications for Corporate Performance

Promotors: Prof.dr.ing. F.A.J. van den Bosch
Prof.dr. C.B.M. van Riel

EPS-2001-007-STR
<http://hdl.handle.net/1765/358>

007

Protecting the corporate reputation and safeguarding primary transformation processes are of key interest to all commercially operating organisations, but require careful management of critical events and dependencies. This thesis reports two studies pertaining to the introduction process of genetically engineered foods in the Netherlands, focusing on the measures taken by the Dutch food industry to accommodate this highly salient issue. Both studies demonstrate that strategic issues management activities can help managers protect the corporate reputation against potentially harmful developments and obtain a more favourable strategic position vis-à-vis their companies' direct competitors.

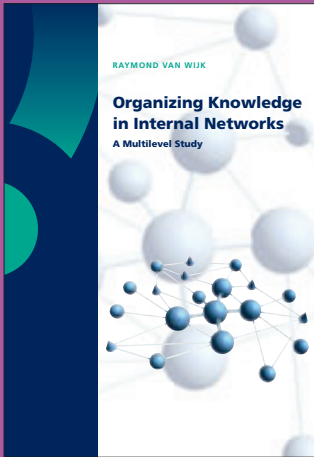
There is no greater joy in life than knowing that you can spend the whole day thinking about issues that are important to you personally



"Ever since I was five or six I wanted to become an academic. The kids in my school class used to call me 'the professor'. Needless to say, I was chased around the schoolyard at times. As a PhD student you get to read many articles, visit interesting places, and interact with really smart people. But the most valuable experience for me was learning how to mix ambition with realism and pragmatism. I discovered that companies confronted with reputation crises cannot expect to manage these without investing in serious relationships with societal and business stakeholders first – much like it makes more sense to take up exercising and balance your diet before your first cardiac arrest than after it ... I taught executive crisis and issues management classes and seminars for eight years during and after my PhD, as part of the Corporate Communication Centre's Master of Corporate Communication programme, as well as in various in-company settings, e.g. with Shell and Unilever. I do not flatter myself with the idea that I have made a significant impact on the work routines of communication managers, but some of them must have picked up some fresh insights.

The PhD position at ERIM meant a lot for me. I met a lot of people who are still good friends and colleagues, and I developed the professional norms that still guide the decisions I make everyday with respect to research and teaching. The programme also gave me a good start in the job market. My first employer, Concordia University of Montreal, probably would not have even invited me for an interview if I had not had the 'ERIM' and 'Erasmus' brands on my CV. Since my graduation, I have published in quite a few international journals, including *Academy of Management Review*, *Organization Studies*, and *Journal of Management Studies*.

I am now an associate professor at RSM. To me there is no greater joy in life than knowing that you can spend the whole day thinking about issues that are important to you personally."



Organizing Knowledge in Internal Networks: A Multilevel Study

Promotor: Prof.dr.ing. F.A.J. van den Bosch

EPS-2003-021-STR

<http://hdl.handle.net/1765/347>

021

Organising knowledge is fundamental to the competitive success of firms. Recent research shows that many firms experience difficulty in transferring and integrating knowledge across their organisational units, and that its remedy requires that firms change their organisation forms. This PhD study seeks to examine how internal network forms of organising influence the organisation and integration of knowledge. Employing a longitudinal case study method and two questionnaires, four studies are conducted in which the effect and performance implications of both corporate-level and business-level elements shaping knowledge integration in internal networks are examined. The results demonstrate that firms improve the integration and organisation of knowledge by adopting sets of complementary elements characteristic of internal networks at the corporate level, as well as through the contribution of internal networks in developing the capacity to absorb knowledge at the business level.

The PhD set the stage for my current career in academia



"During my master's degree I got to love doing research work. I started reading articles that went beyond what was compulsory for the courses I took, and so when the opportunity to do a PhD arose, I took it.

My doctorate experience was about knowledge sharing. I learnt that how companies organise their knowledge assets has a major influence on their performance. In the same way, I learnt that, in academia, this is the most important thing: working with leading international scholars is very valuable.

I have several papers published and several under consideration at various international journals including *Journal of Management Studies* and *Organisation Science*. Part of my thesis has also been used by Rabobank.

The PhD set the stage for my current career in academia as an assistant professor. It hones your academic skills and creates the background for further developing them: which I am still doing today! My motivation for what I do is intrinsic in the work itself – it has to be, otherwise any rational person would choose another career."



Intelligent Adaptation: Organizational Dynamics of Cognition and Action in the Changing Dutch and U.S. Banking Industries

Promotors: Prof.dr.ing. F.A.J. van den Bosch
Prof.dr. H.W. Volberda

EPS-2003-026-STR
<http://hdl.handle.net/1765/1037>

026

The ability to anticipate environmental developments is crucial for firms to survive in the long run. Despite a ubiquity of research into how adaptation takes place, there is still a lot to be understood. This study applies a cognitive perspective to explore the dynamics of adaptation within two large financial services providers in different national contexts. From the cases emerge a number of patterns concerning the link between perceptions and business beliefs of decision-makers, interrelations between structure and action, and the role of middle managers in top-down organisational adaptation processes. The study suggests that the explicit multi-level consideration of both surface-level actions and underlying cognitive dynamics can help managers adapt their organisations effectively to changing environments.

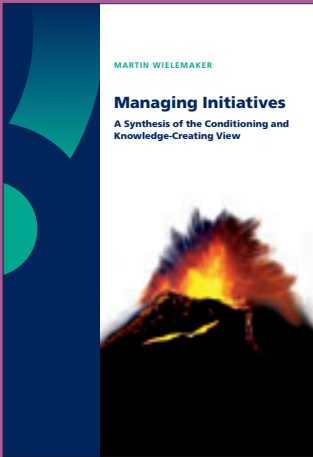
I still love being involved in research and have definitely found my area of interest



"Taking up the doctoral position was the most challenging step I could imagine after my studies. While researching I discovered the joy of persistence, of making things happen, and of making choices. My PhD taught me the importance of belief and perception in human decision-making.

Having a PhD is a definite advantage in my career, but most times I forget I even have it! I have my own company in South Africa, in the field of higher education, and in the eyes of some people it gives credibility to what I do.

I still love being involved in research and have definitely found my area of interest. Having a PhD can also open many doors that you may like opened."



Managing Initiatives. A Synthesis of the Conditioning and Knowledge-Creating View

Promotors: Prof.dr. H.W. Volberda
Prof.dr. C.W.F. Baden-Fuller

EPS-2003-028-STR
<http://hdl.handle.net/1765/1042>

028

Initiatives are an important source of renewal for the competitive advantage of firms. Research shows that many firms have difficulty incorporating them into their existing activities, particularly because of their explorative nature. This study has sought to shed light on the issue by combining two perspectives that previously have barely been integrated: the condition and knowledge creation perspectives. The interchange between organisational conditions and knowledge creation has been investigated through a case study method in 24 initiatives in three firms, namely Ericsson Telecommunication, KLM Cargo, and Van Ommeren. The results of the study show that management can have a strong influence on the progression of initiatives by manipulating the organisational conditions and knowledge base.

For me, the international contacts I established at Erasmus were what brought me across the ocean

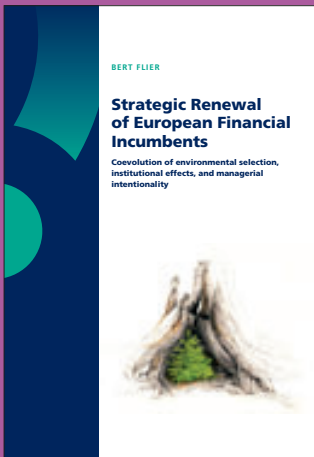


"I love the freedom to pursue the interests that I have, which is the obvious benefit of working in academia. It is also good to know that perhaps these insights will make a difference to those operating in the business world.

I chose to pursue a PhD because I was intrigued by the tension between innovation and the appropriation of its benefits that occurred in the businesses I was working in at the time. The doctoral position offered me the chance to take an in-depth look at such issues. Findings from my research were published in the *International Studies on Management and Organization* and *Organization Development Journal*.

Getting organised and prioritising your day (rather than getting sidetracked by other exciting yet trivial endeavours) were some of things I learnt during my time as a doctoral student.

It was also a setting in which many international contacts were developed, such as through conferences, publications, and job opportunities – in fact, the international contacts I established during my PhD at Erasmus were what brought me across the ocean to work as an associate professor at the University of New Brunswick."



Strategic Renewal of European Financial Incumbents: Coevolution of Environmental Selection, Institutional Effects, and Managerial Intentionality

Promotors: Prof.dr.ing. F.A.J. van den Bosch
Prof.dr. H.W. Volberda

EPS-2003-033-STR
<http://hdl.handle.net/1765/1071>

033

How do incumbent firms and environments coevolve and how are firm level adaptation and selection at industry level interrelated? Can and do large established organisations renew themselves to adapt to their environment? Three single-lens theories, relating to environmental selection, institutional theory, managerial intentionality, and a coevolutionary perspective are used to investigate strategic renewal of incumbent European financial services firms. We derive propositions and distinguish between three dimensions of strategic renewal to develop metrics that investigate our propositions in a multi-level, multi-country, longitudinal study of the European financial services industry. The results suggest the following clues for further investigation. From an environmental selection perspective, we find financial incumbents have a preference for exploitation renewal actions. Country institutional environments appear to explain to what extent financial incumbents prefer internal and/or external renewal actions. Managerial intentionality seems to explain outlier behaviour and firm-specific frequency and timing of renewal actions. From a coevolutionary perspective, interaction effects contribute to explain deviations from predictions derived from the single-lens theories applied in this thesis.

My research has made me realise that knowing how to deal with people is just as important as knowing how to handle data



"I developed a vested interest in strategic renewal while working as a student assistant at RSM Erasmus University. However I was not totally happy with my understanding of the field, so applying for a doctoral position seemed the obvious thing to do.

What I have discovered is that the more we learn, the more we realise how little we actually know. Being involved with the research process has taught me to trust my data as much as I distrust it, and has made me realise that knowing how to deal with people is just as important as knowing how to handle data. I have also come to see that companies have limited scope to change their own destiny: typically, managerial intentions are overestimated, and natural selection forces have a bigger say in survival outcomes than most managers assume.

By the time of my thesis defence, major parts had already been published in *Long Range Planning* and the *Journal of Management Science*. Results of my studies have also been presented to practitioners in my field (financial services), and used for executive teaching.

I am now an assistant professor in the Department of Strategy and Business Environment at RSM Erasmus University. My PhD provided me with such a thorough understanding of strategic management that I now teach both bachelor and master students. My ambition is to build on the insights I have derived from my thesis, and to deepen my understanding of large firms' (in)abilities to shape their destiny – a topic I see as the holy grail of strategy research."



Leadership and the Inflection Point: A Longitudinal Perspective

Promotors: Prof.dr. H.W. Volberda
Prof.dr. H.R. Commandeur

EPS-2004-042-STR
<http://hdl.handle.net/1765/1302>

042

Once in a while, many corporations of this world are threatened by changes in their markets and environment that threaten their existence. These changes can be characterised by their severity, their sudden occurrence and by their origins outside the company, which usually makes it impossible to predict them. They are life-threatening and call for a dramatic change in the strategy and structure of the corporation. The deregulation of air transport was such an event. The rapid expansion of the telecommunications industry with the simultaneous introduction of new wide-band technologies was another. The same can be said for the enlargement of the European Union and the addition of a number of low wage-cost countries. This book focuses two aspects of the inflection point. The first is the leadership viewpoint – it looks at the transition from the perspective of the CEO and his executive board, and considers what they can, and cannot, do. The second is the longitudinal perspective – it does not consider an inflection point as a single event, but rather a process that unfolds over a number of years. This book provides an analysis of what the leadership of a firm can do in each of the development phases of an inflection point. It also tests these ideas against a case example, the transition of the publishing industry into the Internet era.

I think more people should consider doing a PhD after fifteen or so years of practical experience



"At the time I did my PhD I had twenty years of consulting experience behind me and I thought it was time to stop and think about what I had done and how it related to what has been written – to relate my experience in practice, to the theory.

Studying for my doctoral degree was a fun experience, one of the most exciting periods in my life in fact. It was great to work with my supervisors and gave a lot of perspective to my experience in the profession. As a result, I think I am now a better consultant.

I think there is a great deal of opportunity at ERIM for people interested in post-experience education; I also think more people should consider doing a PhD or MBA after fifteen or so years of practical experience. It is quite normal in the legal professions – yet in business it is still not done. I can highly recommend it, it adds a great deal.

I am now re-entering consultancy, and starting my own consultancy firm along with some contacts from McKinsey."



Ambidextrous Organizations: A Multiple-level Study of Absorptive Capacity, Exploratory and Exploitative Innovation, and Performance

Promotors: Prof.dr.ing. F.A.J. van den Bosch
Prof.dr. H.W. Volberda

ESP-2005-055-STR
<http://hdl.handle.net/1765/6774>

055

Balancing and synchronising exploration and exploitation is fundamental to the competitive success of firms in dynamic environments. Despite the importance of reconciling exploration and exploitation within organisations, however, relatively little empirical research has examined this challenge facing numerous organisations. This study develops a multi-level framework and explores how ambidextrous organisations can successfully cope with both types of innovations across organisational units. It not only examines performance implications of organisational ambidexterity, but also investigates how organisational units develop exploratory and exploitative innovations. Results indicate that the most effective ambidextrous organisations balance exploratory and exploitative innovation by separating both types of activities in different organisational units. Moreover, findings demonstrate that organisational units require different types of combinative capabilities to influence their absorptive capacity, and subsequently, their exploratory and exploitative innovations.

The PhD position enabled me to travel around the world and meet all kinds of interesting people

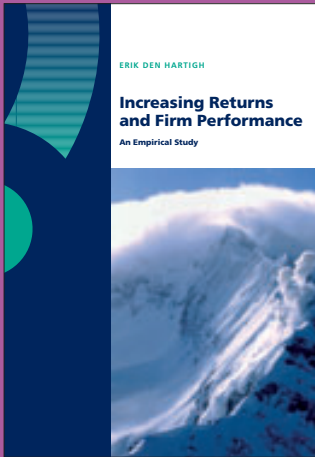


"My doctoral studies enabled me to combine rigorous research with business relevance. I was able to expand on the initial findings of my master's thesis, and to develop important management recommendations for improving the innovativeness and financial performance of Dutch organisations. Moreover, the PhD position enabled me to travel around the world and meet all kinds of interesting people.

Research has taught me that perseverance is more important than brains. My thesis provided new insights as to how organisations can improve their absorptive capacity, i.e. their ability to acquire and exploit new external knowledge, and balance exploratory and exploitative innovations.

Different parts of my thesis have been published in top-tier international journals such as *Academy of Management Journal*, *Journal of Management Studies*, and *Management Science*. The Rabobank Group implemented a couple of my recommendations concerning the coordination of multi-client projects. Several recommendations have also been adopted to improve knowledge sharing within and across local banks in the Netherlands.

As a result of my PhD I have been able to develop myself as a professional scholar and enlarge my networks within academia. I am currently an assistant professor and EUR research fellow in the Department of Strategic Management at RSM Erasmus University."



Increasing Returns and Firm Performance: An Empirical Study

Promotor: Prof.dr. H.R. Commandeur

EPS-2005-067-STR

<http://hdl.handle.net/1765/6939>

067

This thesis is about increasing returns: positive feedback effects in markets and firms. Positive feedback means that success causes further success and failure causes further failure. There are two market-based mechanisms of increasing returns, network effects and social interaction effects, and two firm-based mechanisms of increasing returns, scale effects and learning effects. Empirical research into the relations between these mechanisms and into the consequences of increasing returns for firm performance is relatively scarce. The aim of the researcher with this thesis is to fill part of this gap. Concepts taken from economics and management sciences are used, building on the industrial organisation theory of the firm. Three empirical studies were conducted for which new measurement models were constructed and tested and for which primary and secondary data was collected and analysed. The results show that the presence of increasing returns in the market influences firm performance, but always through the realisation of increasing returns in the firm. This means that in an increasing returns market, management is an important factor determining firm performance. It is therefore essential for managers to understand the mechanisms of increasing returns in their markets and firms and for them to be able to act strategically upon those mechanisms. This will enable managers to exploit business opportunities arising from increasing returns and to avoid pitfalls, which should result in better firm performance.

One of the measurement instruments from my thesis has been applied to many large Dutch companies listed on the AEX



"The most important things I learned during my doctoral thesis were how to carry out research in a systematic way, and how to combine a research job with a consulting job. My research shows that 'increasing returns' can be measured, and that their presence in companies and markets has a tangible impact on company performance.

What has kept me motivated is a deep-seated interest in the subject matter. The PhD helped me to acquire my current position as an assistant professor in the Department of Technology, Strategy and Entrepreneurship at the Technology, Policy and Management Faculty of Delft University of Technology. It also gives me academic credibility when I am dealing with companies. One of the measurement instruments from my thesis (firm-level Verdoorn's law) has been applied to many large Dutch companies listed on the AEX, generating favourable reactions from management. Other concepts from the thesis have also been adopted by various other companies.

I have since been published in the *European Management Journal* and have a forthcoming piece in the Network encyclopaedia, with more papers in progress."



Making Sense of Formalization in Interorganizational Relationships: Beyond Coordination and Control

Promotors: Prof.dr.ing. F.A.J. van den Bosch
Prof.dr. H.W. Volberda

EPS-2006-075-STR
<http://hdl.handle.net/1765/7326>

075

Strategic alliances, buyer-supplier relationships, joint ventures and other forms of interorganisational cooperation increasingly stand at the basis of the competitive advantage of organisations. Although formalisation – in the form of contracts, rules and procedures – is considered to be of significant importance for these relationships, an integrative framework of its role has hitherto remained absent in the literature. Drawing on conceptual developments, an in-depth case study and survey data, this study provides such a framework. Six main research findings emerge. First, tensions between the need and the ability to formalise can be reduced by investing in information processing and sensemaking. Second, formalisation has functions beyond coordination and control, such as increasing legitimacy and enabling sensemaking. Third, managers are not only occupied with the “right” degree of formalisation, but also with managing tensions between its functions and dysfunctions. Fourth, the contribution of formalisation to interorganisational performance declines, when it is accompanied by standardisation, due to a reduction in the degree of “mindfulness” by contracting parties. Fifth, levels of formalisation and trust in early stages of cooperation have a large impact on the evolution and performance of interorganisational relationships, with intermediary levels of both governance forms exhibiting more positive effects than extreme levels. Finally, decisions on formalisation are contingent upon the use of other governance mechanisms, which may substitute or complement each other. These findings and the integral framework to which they are connected promise to enrich the understanding that researchers and practitioners have of the role of formalisation in interorganisational relationships, and enable them to utilise formalisation so that it contributes to performance.

Doing a PhD seemed to be a perfect challenge – one that would enable me to work in a stimulating intellectual environment alongside a lot of bright people

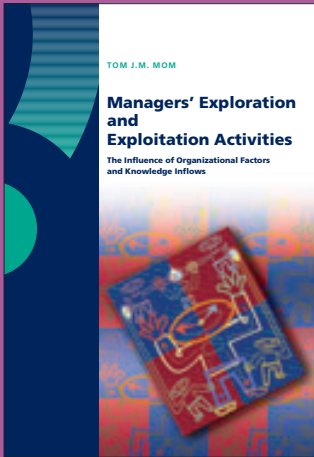


"I felt the need to deepen my thinking and did not want to end up in an office job at the age of 23. Doing a PhD seemed to be a perfect challenge – one that would enable me to work in a stimulating intellectual environment alongside a lot of bright people.

The doctoral position has taught me to count my blessings. If I receive negative feedback or do not make the progress I anticipated, I simply focus on the projects in which I do succeed, the issues that fascinate me, and the people that make me happy: my wife, children, family and friends, as well as colleagues around the world that provide me with inspiration. It has also shown me the need for perseverance – you do not begin and end with a good idea, but must follow it through with meticulous effort.

My thesis is in the process of being published commercially, and some of my work has appeared in *Group & Organization Management*, and *Organization Studies*.

I am driven by fascination, discovery, invention, creativity, curiosity, and the challenge of publishing a piece of work that other people read and assess as being valuable for increasing their own understanding. The doctorate has allowed me to continue my research and formed the basis of an academic career – I am now an assistant professor at the Vrije Universiteit Amsterdam."



Managers' Exploration and Exploitation Activities: The Influence of Organizational Factors and Knowledge Inflows

Promotors: Prof.dr.ing. F.A.J. van den Bosch
Prof.dr. H.W. Volberda

EPS-2006-079-STR
<http://hdl.handle.net/1765/7981>

079

In order to be successful over time, firms in a dynamic environment are challenged to explore new possibilities to achieve congruence with the changing business environment, and to exploit old certainties to secure efficiency benefits. However, both researchers and managers struggle to understand how firms may manage and organise exploration and exploitation. This study delivers a contribution by investigating managers' exploration and exploitation activities, and by developing and testing hypotheses on the influence of organisational factors and managers' knowledge inflows on managers' exploration and exploitation activities. Results indicate that organisational factors not only directly influence managers' exploration and exploitation activities, but also indirectly through their influence on managers' knowledge inflows; i.e. knowledge inflows mediate the relationship between organisational factors and exploration and exploitation at the manager level. We contribute to current literature on exploration and exploitation and to management practice by focusing on the manager level of analysis. We add the importance of knowledge flow configurations to the literature on organisational factors' influence on exploration and exploitation. Furthermore, we illustrate which, and how, configurations of organisational factors enable or inhibit managers to explore, to exploit, or to combine both.

Doctoral research challenges you to be creative, entrepreneurial, efficient, and an expert – all at the same time



"Doctoral research challenges you to be creative, entrepreneurial, efficient, and an expert – all at the same time. I began my thesis in order to develop an in-depth understanding of strategic management, but I soon realised my work was relevant for both the scientific and the managerial communities. The research taught me how managers can become successful in both exploration and exploitation.

My PhD has also given me exposure to the international scientific world. I have a forthcoming paper in *Journal of Management Studies*, and several others are in preparation. The results of my thesis have been applied in an international financial services firm – to measure the influence of their intranet in terms of efficiency and innovation, and adapt certain aspects of it accordingly – and also in an international electronics company – to adapt incentive systems, bringing them in line with the differing levels of environmental dynamism faced by managers.

Today I am an assistant professor of strategic management at RSM Erasmus University."

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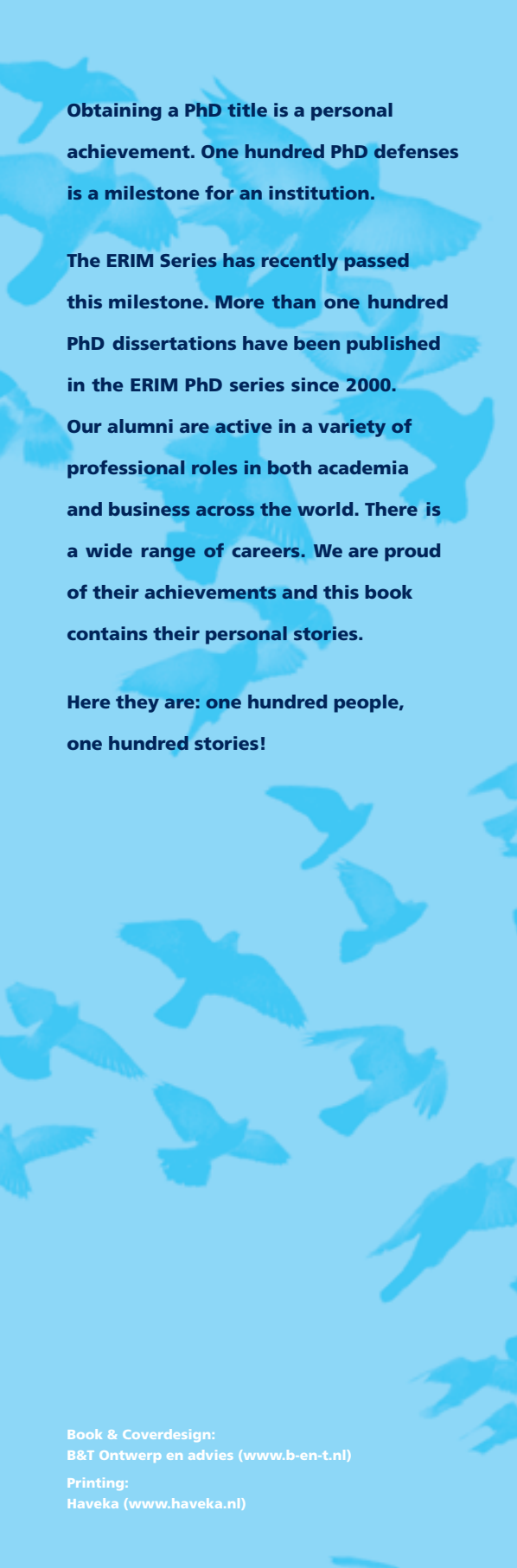
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