Die „Edition KWV“ beinhaltet hochwertige Werke aus dem Bereich der Wirtschaftswissenschaften. Alle Werke in der Reihe erschienen ursprünglich im Kölner Wissenschaftsverlag, dessen Programm Springer Gabler 2018 übernommen hat.

Weitere Bände in der Reihe <http://www.springer.com/series/16033>

Nadja Trhal

Experimental Studies on Partnership Dissolution, R&D Investment, and Gift Giving

Nadja Trhal
Wiesbaden, Germany

Bis 2018 erschien der Titel im Kölner Wissenschaftsverlag, Köln
Dissertation Universität zu Köln, 2009

Edition KVV
ISBN 978-3-658-24666-2 ISBN 978-3-658-24667-9 (eBook)
<https://doi.org/10.1007/978-3-658-24667-9>

Springer Gabler

© Springer Fachmedien Wiesbaden GmbH, part of Springer Nature 2009, Reprinted in 2019

Originally published by Kölner Wissenschaftsverlag, Köln, 2009

This work is subject to copyright. All rights are reserved by the Publisher, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, reuse of illustrations, recitation, broadcasting, reproduction on microfilms or in any other physical way, and transmission or information storage and retrieval, electronic adaptation, computer software, or by similar or dissimilar methodology now known or hereafter developed.

The use of general descriptive names, registered names, trademarks, service marks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use.

The publisher, the authors and the editors are safe to assume that the advice and information in this book are believed to be true and accurate at the date of publication. Neither the publisher nor the authors or the editors give a warranty, expressed or implied, with respect to the material contained herein or for any errors or omissions that may have been made. The publisher remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

This Springer Gabler imprint is published by the registered company Springer Fachmedien Wiesbaden GmbH part of Springer Nature

The registered company address is: Abraham-Lincoln-Str. 46, 65189 Wiesbaden, Germany

Meinen Eltern

Acknowledgements

Financial support by the Deutsche Forschungsgemeinschaft DFG is gratefully acknowledged.

First of all, I am greatly indebted to my first supervisor, Axel Ockenfels, for his motivating support, encouragement and advice.

I am also very grateful to Matthias Sutter for making the efforts of being my second supervisor and for his valuable comments and suggestions.

I thank my co-authors Donja Darai, Jens Großer, Thomas Kittsteiner, Axel Ockenfels and Ralf Radermacher for fruitful discussions and common work.

I thank my colleagues for their support in various ways and for being such a good company. I benefitted a lot from the very friendly working environment and from discussions with all my former and current colleagues Michael Bartels, Jeannette Brosig, Ben Greiner, Veronika Grimm, Jens Großer, Burkhard Hehenkamp, Lyuba Ilieva, Felix Lamouroux, Felix Müsgens, Xavier del Pozo Somoza, Alexander Rajko and Peter Werner. I thank Imke Jungjohann for looking after all of us.

I thank the whole student staff for valuable assistance and help and especially Julian Conrads, René Cyranek, Christoph Feldhaus, Johannes Mans, Andreas Pollak, Karin Ruëtze and Thomas Wolfgarten for excellent research assistance in the lab. A great help was Felix Lamouroux who programmed two experiments for this thesis.

Many thanks are due to my friends and my family for sharing good and bad days with me and for keeping fingers crossed.

I especially thank Carsten for being there for me no matter what.

I am deeply indebted to my parents for their invaluable support and help in all possible ways.

Cologne, May 2009

Nadja Trhal

Table of Contents

I	Introduction	1
II	Partnership Dissolution Mechanisms	5
II.1	General Introduction.....	5
II.2	Related Literature.....	8
II.3	Partnership Dissolution with Independent Private Values.....	11
II.3.1	Introduction.....	11
II.3.2	The Model.....	14
II.3.3	Experimental Design and Procedures.....	19
II.3.4	Experimental Performance of the Dissolution Mechanisms...	20
II.3.4.1	Efficiency.....	20
II.3.4.2	Payoffs.....	23
II.3.4.3	Individual Bidding/Proposing Behavior.....	23
II.3.5	Conclusions.....	27
II.4	Partnership Dissolution with Interdependent Valuations.....	28
II.4.1	Introduction.....	28
II.4.2	Partnership Structure, Dissolution Mechanisms and Efficiency.....	32
II.4.3	Experimental Design and Procedures.....	35
II.4.4	Experimental Results.....	37
II.4.4.1	Efficiency.....	37
II.4.4.2	Payoffs.....	43
II.4.4.3	Individual Behavior.....	49
II.4.5	Conclusions.....	53
II.5	Appendix to Chapter II.....	58
III	The Influence of Patents and Subsidies on R&D Investment Incentives	77
III.1	Introduction.....	77

III.2	The Model.....	81
III.2.1	Market Stage.....	83
III.2.2	R&D Investment Stage.....	84
III.2.3	Distributional Effects.....	85
III.2.4	Experimental Setup: Equilibrium Predictions and Hypotheses.....	87
III.3	Experimental Design and Procedures.....	89
III.4	Experimental Results.....	91
III.4.1	R&D Investments.....	91
III.4.1.1	Investment Dynamics.....	92
III.4.1.2	Individual Investment Decisions.....	95
III.4.2	Cost Structure, Prices and Profits.....	100
III.4.2.1	Cost Structure.....	100
III.4.2.2	Prices and Mark-Ups.....	101
III.4.2.3	Profits.....	105
III.4.3	Welfare and Distributional Effects.....	107
III.5	Conclusions.....	109
III.6	Appendix to Chapter III.....	112
IV	The Impact of Responsibility on Gift Giving	129
IV.1	Introduction.....	129
IV.2	Experimental Design and Procedures.....	134
IV.3	Results.....	136
IV.3.1	Gift Giving and Behavioral Types – Allocation Matters.....	137
IV.3.2	The Impact of Responsibility – Process Matters.....	139
IV.3.3	The Impact of Responsibility on Safety Choosers and Risk Choosers.....	141
IV.3.4	Impact of Responsibility on Expectations of Actions.....	144
IV.4	A Cross-Cultural Comparison – Evidence from Germany and India....	146
IV.5	Discussion and Conclusions.....	149
IV.6	Appendix to Chapter IV.....	152
V	Conclusions	163
	Bibliography	167

List of Tables

II.1	Mean efficiency.....	21
II.2	Panel probit regression IPV.....	22
II.3	Mean payoffs.....	23
II.4	Proposals and bids.....	24
II.5	Categories of proposal setting/bidding behavior.....	26
II.6	Procedure in each round.....	37
II.7	Mean efficiency INT and IPV.....	38
II.8	Panel probit regression INT.....	41
II.9	Mean payoffs INT.....	43
II.10a	Gains from trade.....	46
II.10b	Gains from trade – Intermediate types.....	46
II.11	Categories of proposal setting/bidding behavior INT.....	52
II.12	Choosers’ decision.....	53
II.A1	Panel probit regression IPV with CCM as base category.....	72
II.A2	Panel probit regression INT with CCM as base category.....	73
II.A3	Gains from trade – Different ranges of types.....	73
III.1	Treatment parameters.....	88
III.2	Experimental predictions.....	88
III.3	Average observed and predicted R&D investments.....	92
III.4	OLS regression results.....	94
III.5	Discrete symmetric and asymmetric Nash equilibrium investment levels.....	97
III.6	Observed (predicted) cost structure in the Bertrand markets.....	101
III.7	Average of lowest prices observed (predicted) in the Bertrand markets.....	103
III.8	Average mark-ups in the Bertrand markets.....	104
III.9	Average market profits per high and low cost firms.....	105
III.10	Average observed and predicted round profits.....	106
III.11	Average welfare effects.....	108
III.A1	Discrete symmetric and asymmetric Nash equilibrium investment levels.....	123

III.A2	OLS regression results with <i>CR1</i> as base category.....	123
III.A3	OLS regression results with <i>SUB</i> as base category.....	124
IV.1	Means of gift giving.....	137
IV.2	Types of gift giving behavior.....	139
IV.3	Means of gift giving of <i>A</i> -players and <i>B</i> -players.....	141
IV.4	Means of gift giving and means of expected gifts in the ST.....	144
IV.5	Means of gift giving and of expected gifts in the RT of <i>A</i> -players.....	145
IV.6	Means of gift giving and of expected gifts in the RT of <i>B</i> -players.....	145
IV.7	Means of gift giving in India and Germany (in rupees).....	147
IV.8	Means of gift giving of <i>A</i> -players and <i>B</i> -players in India.....	148
IV.A1	Means of gift giving and means of expected gifts in the ST (India).....	159
IV.A2	Means of gift giving and of expected gifts in the RT (India).....	159

List of Figures

II.1	Scatter plots – Valuations and bids/proposals.....	25
II.2	Mean efficiency per round.....	42
II.3	Mean payoffs per round – proposer and chooser.....	44
II.4	Scatter plots – Private signals and bids/proposals.....	49
II.A1	Average net-payoffs of bidders and proposers over rounds.....	74
II.A2	Average net-payoffs of bidders and proposers with intermediate types over rounds.....	74
II.A3	Scatter plots – True valuations and bids/proposals.....	75
III.1	Observed and predicted R&D investments over rounds.....	92
III.2	Investment frequencies.....	95
III.3	Dynamic view on investment level choices – <i>NO</i>	98
III.4	Dynamic view on investment level choices – <i>SUB</i>	98
III.5	Dynamic view on investment level choices – <i>PAT</i>	99
III.6	Average market price.....	102
III.A1	Individual investment behavior.....	125
III.A2	Average lowest prices for each cost structure over rounds.....	126
IV.1	Directions of the means.....	140
IV.A1	Options in the RT (Germany)	160
IV.A2	Options in the RT (India)	160