

Family and Friends

Essays on Applied Microeconometrics

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Cover photo: The picture is of a sculpture called the Sun Voyager, which resembles a viking ship, and is a dreamboat, an ode to the sun. Intrinsicly, it contains within itself the promise of undiscovered territory, a dream of hope, progress and freedom. The photographer, Johannes Martin, is a good friend of the author. The picture was picked by two viking friends, Fredrik Sävje and Ola Lotherington Vestad.

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Dedicated to my family

Foreword

This report is a result of a research project carried out at the Department of Economics of the Stockholm School of Economics (SSE).

This volume is submitted as a doctors thesis at SSE. The author has been entirely free to conduct and present her research in her own ways as an expression of her own ideas. SSE is grateful for the financial support which has made it possible to fulfill the project.

Göran Lindqvist

Director of Research
Stockholm School of Economics

Richard Friberg

Head of the Department of Economics
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Acknowledgments

“Skalat maður rúnir rista, nema ráða vel kunní”

Egill Skallagrímsson

I owe gratitude to many people who made this dissertation possible, and in particular to my advisors, Magnus Johannesson, Paolo Sodini, David Card, and Juanna Joensen. It has been a privilege to have them as advisors and their experience, knowledge, and extensive feedback has been essential to this thesis.

At the beginning of my second year of the PhD program I had to choose a supervisor. I had no idea who to ask as I was still figuring out what I wanted to focus on in my research. I had a meeting with Magnus and we decided that he would be my official supervisor to begin with and then we would find somebody who would be a good fit for me by the end of the year. But as soon as we started working together we realized that no changes were needed. Magnus has been an excellent supervisor, always supportive and every paper in this thesis has been greatly improved by his comments and suggestions.

Paolo has been a great inspiration and my research interests are heavily influenced by his work, particularly his seminal papers in the literature on household finance. Without Paolo, this thesis would have looked very different and I am truly grateful to him for all the advice and support.

I was fortunate enough to spend the last two years of my PhD studies at UC Berkeley where David has taught me all the rules of the game and given me tons of academic and personal advice. Every time I knock on his door with a question, he has the right answer. It has been a true pleasure to have him as an advisor and co-author during my years at Berkeley and his guidance has inspired and shaped me as a researcher. He has taught me that in order for a research paper to become successful, it needs to be a combination of creativity and pragmatism. This thesis is far from being the perfect mixture, but I hope that one day I will be able to write a paper of his style.

Juanna has been a great friend from the very start of my PhD and the time she devoted to me at the beginning of my studies gave me an excellent first exposure to research. I have benefitted a lot, both personally and intellectually, from all our skype-calls, e-mails, and meetings (depending on where we are in the world) throughout the years.

I would also like to thank my co-authors. It has been a delight to work with all of you and I am looking forward to finishing our ongoing projects and working on future spin-offs.

In addition to the people I have mentioned here, there are many who have given me valuable comments on different chapters of the thesis. An incomplete list can be found in the acknowledgments of each chapter.

On a personal level, I am deeply indebted to my parents and sisters. I know that my research often sounds useless and boring to them but they are always supportive and stand by my side no matter what. To them I dedicate every accomplishment in my life, including this thesis. I want to give special thanks to all my friends at Berkeley and in Stockholm. These five years did not only give me a PhD degree but also friends for a lifetime. My friends outside academia deserve special thanks for always being there for me and providing balance in my life. Finally, I give infinite thanks to Simon for everything. There is nothing as important in life as family and friends and I am grateful for having each and every one of you in mine!

Doing a PhD in Economics is one of the best choices I have made in my life. With the help from all the great people I met along the way, this journey has led me to an academic career where I can devote my time to addressing questions that I find interesting, arising from my daily experience in society. Having such a job is, in my opinion, a privilege and I am therefore looking very much forward to this life that I am about to embark upon.

Arna Vardardottir

Berkeley, April 2014

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Chapter 1

Introduction

This doctoral thesis in economics consists of four chapters. While each chapter deals with a different subject, they are bound together by their focus on households and social interaction as well as a common methodological approach. As is typical within the field of Applied Microeconometrics, the analyses are based on micro data and on exploiting exogenous sources of variation to capture causal effects.

The first chapter of this thesis (co-authored with Tomas Thörnqvist) investigates the internal financial decision-making process of households, employing a unique panel data set containing the disaggregated wealth of the entire Swedish population over seven years. We utilize a source of exogenous variation in sex-specific labor demand to show that the distribution of decision power among spouses is a driving force behind the aggregation of spouses' preferences on financial decision making. As the decision power of female spouses increases, participation in risky asset markets decreases, the share of wealth allocated to risky investments decreases, the riskiness of the portfolio decreases, and idiosyncratic risk decreases. We also study the effect of underdiversification on household welfare. Women are more aware of the household's

limited investment skills and exert their decision power to reduce the economic cost from underdiversification.

The second chapter studies ability peer effects among teenagers. The identification relies on a fuzzy regression discontinuity approach where assignment into high-ability classes constitutes the source of identifying information. Important features of this system are that both types of classes are taught by the same teachers, they follow a common curriculum and take the same exams. Students are in general unaware of the system prior to school start as it is unofficial. In cases where they are informed of the system's existence, they do not know where the threshold lies and school switching possibilities are limited. I find significant and sizable effect on the academic achievement of students around the assignment threshold. Being assigned to a high-ability class increases academic achievement, measured by year grade and spring exam results, by 0.47 and 0.32 standard deviations, respectively.

The third chapter (co-authored with Herdis Steingrimsdottir) studies the effect of more equal sharing of childcare on marital stability and labor market outcomes by exploiting a parental leave reform in Iceland. The reform was implemented in stages and resulted in three months of parental leave that were earmarked to fathers. The first stage was carried out in 2001, when parents were given the option to add one month of paternity leave to the existing six month long parental leave which they had forgone if not used by the father, while parents who had a child prior to 2001 were not able to do this. This created large economic incentives for parents to involve fathers in caring for their children during their first months. The precise timing of the introduction of the paternal quota is used to evaluate the causal effects of paternity leave on marital stability. The results are obtained using detailed register based panel data, comparing families who had a child just before to those who had a child just after the reform. Spouses who are entitled to paternity leave are less

likely to divorce during the first years of the child's life, the period over which most divorces take place. Furthermore, the reform also reduced the earnings gap between couples.

The fourth and final chapter of this thesis also deals with peer effects but in an early tracking system. I focus on the influence of socio-economic status of class peers on academic outcomes of students in lower secondary schools employing the Swiss subsample of the PISA data. The identification relies on random variation in quality of peers across classes within schools and tracks where I employ track-by-school fixed effects in order to address the potential self-selection of students into schools and peer groups. A major improvement from previous peer effects studies based on PISA data is that I am able to identify peers at the class level. The track-by-school fixed effects approach reduces the estimated peer effects obtained from track fixed-effects by about 50%. The results still imply significant mean effects on test results in mathematics and problem solving.

