

#### SOCIAL NORMS AND THE THEORY OF THE FIRM

For decades, the economic theory of the firm referred to as agency theory has dominated business research and education in the United States. Although agency theory has been influential in accounting, finance, and managerial economics, it lacks informal and nonfinancial controls. Douglas Stevens resolves to enhance this theory through the incorporation of social norms. Drawing on historical context related to the firm, the theory of the firm, and social norm theory related to the firm, he demonstrates the importance of social norms in the formation and development of free-market capitalism and the firm. He also describes the latest theoretical, experimental, and archival evidence to exhibit the growing body of research that incorporates social norms into the theory of the firm. These foundations enable Stevens to create a comprehensive roadmap of agency theory that will have strong implications for practice and public policy.

Douglas E. Stevens studied experimental economics at Indiana University while completing his PhD in accounting. His experimental and theoretical research demonstrates how incorporating social norms enhances the theory of the firm. His research has been published in leading academic journals including The Accounting Review; Contemporary Accounting Research; Accounting, Organizations and Society; Experimental Economics; Journal of Business Ethics; Journal of Management Accounting Research; and Behavioral Research in Accounting.





# Social Norms and the Theory of the Firm

A Foundational Approach

**DOUGLAS E. STEVENS** 

Georgia State University





# **CAMBRIDGE**UNIVERSITY PRESS

University Printing House, Cambridge CB2 8BS, United Kingdom One Liberty Plaza, 20th Floor, New York, NY 10006, USA 477 Williamstown Road, Port Melbourne, VIC 3207, Australia 314–321, 3rd Floor, Plot 3, Splendor Forum, Jasola District Centre, New Delhi – 110025, India

79 Anson Road, #06-04/06, Singapore 079906

Cambridge University Press is part of the University of Cambridge.

It furthers the University's mission by disseminating knowledge in the pursuit of education, learning, and research at the highest international levels of excellence.

www.cambridge.org Information on this title: www.cambridge.org/9781108423328 DOI: 10.1017/9781108525824

© Douglas E. Stevens 2019

This publication is in copyright. Subject to statutory exception and to the provisions of relevant collective licensing agreements, no reproduction of any part may take place without the written permission of Cambridge University Press.

First published 2019

Printed in the United States of America by Sheridan Books, Inc.

A catalogue record for this publication is available from the British Library.

Library of Congress Cataloging-in-Publication Data Names: Stevens, Douglas E., author.

Title: Social norms and the theory of the firm: a foundational approach / Douglas E. Stevens.

Description: Cambridge, United Kingdom: New York, NY: Cambridge
University Press, 2019. | Includes bibliographical references and index.

Identifiers: LCCN 2018015244 | ISBN 9781108423328 (hardback: alk. paper)
Subjects: LCSH: Industrial organization (Economic theory) | Social norms. |

Industrial sociology.

Classification: LCC HD2326 .S768 2019 | DDC 338.501-dc23 LC record available at https://lccn.loc.gov/2018015244

> ISBN 978-1-108-42332-8 Hardback ISBN 978-1-108-43745-5 Paperback

Cambridge University Press has no responsibility for the persistence or accuracy of URLs for external or third-party internet websites referred to in this publication and does not guarantee that any content on such websites is, or will remain, accurate or appropriate.



To my wife Carol

and my daughter Heather,

two special women who have blessed my life





Preface

Cambridge University Press 978-1-108-42332-8 — Social Norms and the Theory of the Firm Douglas E. Stevens Frontmatter More Information

# Contents

Pre	face	page ix
Acl	knowledgments	xiv
1	The Importance of Behavioral Assumptions in Economic Theory	1
	Introduction	1
	Friedman's Methodology of Positive Economics	2
	An Alternative Interpretation of Friedman's Position on Behavior	al
	Assumptions	8
	A Cost/Benefit Analysis to Incorporating Social Norms	12
	A Foundational Approach	16
	PART I THE FOUNDATION	
2	A History of the Firm That Incorporates Social Norms	21
	Introduction	21
	The Birth of Free-Market Capitalism in Italy and the Netherlands	23
	Free-Market Capitalism Spreads to Britain and the United States	26
	Industrial Revolutions in Britain and the United States	32
	A New Opportunism Culture Emerges	34
	The Opportunism Culture Nearly Takes Down the	
	Financial System	40
3	The Theory of the Firm	45
	Introduction	45
	The Founding of the University-Based Business School	46
	The Decay and Abandonment of Professional Norms	53
	The Increasing Influence of Neoclassical Theory and the Chicago	
	School	56
	Insights on the Firm from Adam Smith	64
	Neoclassical Theories of the Firm	69



viii Contents

4	Social Norm Theory Related to the Firm	74
	Introduction	74
	The Behavioral Assumptions of Homo Economicus	75
	The Assumptions and Implications of Agency Theory	79
	The Presence of Social Norms in The Wealth of Nations	84
	Social Norm Theory in The Theory of Moral Sentiments	91
	Recent Social Norm Theory Related to the Firm	97
	PART II THE EVIDENCE	
5	Formal Models Incorporating Social Norms into the Theory	
	of the Firm	105
	Introduction	105
	Benefits of Mathematical Modeling	106
	Essential Features of Principal-Agent Theory	110
	Challenges to Modeling Social Norms in Principal-Agent Theory	115
	A Principal-Agent Model with a Promise-Keeping Norm	118
	Other Formal Models Incorporating Social Norms into the	
	Theory of the Firm	124
6	Emerging Evidence of Social Norms in Experimental Research	129
	Introduction	129
	Benefits of Experimental Research	130
	The Development of an Experimental Methodology	134
	Findings from Experimental Studies of Neoclassical Market Theory	140
	Findings from Experimental Tests of Game Theory	144
	Findings from Experimental Tests of Principal-Agent Theory	149
	Findings from Experimental Studies of Participative Budgeting	153
7	Emerging Evidence of Social Norms in Archival Research	161
	Introduction	161
	Theory, Research Paradigms, and Paradigm Shifts	162
	A Paradigm Shift at the University of Chicago	166
	Anomalies and the New Focus on Market Inefficiency	169
	Findings Regarding Individual Processing and Trading Volume	171
	Findings Regarding the Effects of Financial Incentives	176
	Findings Regarding Culture and Social Norms	180
8	Conclusion: "Where do we go from here?"	186
	References	194
	Index	211



#### Preface

This book is the culmination of more than twenty years of research, but it reflects many insights learned from everyday life. Thus, a little background may be in order. I graduated in 1981 with an undergraduate degree in music from a small liberal arts college in southern Michigan where my father was a business professor. I had married my college sweetheart my senior year and the few music-related jobs I could find did not pay the bills. So, I tried my hand at a number of sales jobs, including restaurant supplies, insurance and investments, and commodity futures. My insurance and investment experience finally helped me land a job at a small bank in northern Indiana as a loan officer. As I strived to work my way up at the bank, however, I found that my Achilles heel was always my lack of coursework in accounting and finance. To fill this hole in my knowledge, I resigned my position at the bank in the fall of 1987 and entered an MBA program at Purdue University (Krannert). So it is that this artsy-fartsy guy ended up in business school with a bunch of engineers. After seeing a suggested reading list for MBAs, I purchased Adam Smith's classic book on economics and public policy, *The Wealth of Nations*. I carefully read every page, underlining important passages. It was my first taste of economic thought, and it ended up being a good preparation for my graduate studies in business.

My classmates and I began our MBA program at Purdue with the normal fanfare and high hopes of capturing one of the coveted manufacturing jobs that the engineer-dominated school was known for. As a former banker, I especially enjoyed our first finance class. Taught by an energetic young professor, we learned modern finance theory dominated by rational expectations and the efficient market hypothesis. One Tuesday morning, however, the normally punctual professor was mysteriously absent at the beginning of class. After what seemed like an eternity, the



x Preface

classroom door finally opened and in shuffled our young professor, his lifeless eyes glued to the floor. He reached his desk at the front of the room and slowly sat down. After gathering himself enough to speak, he stated that stock markets around the world were crashing. He mumbled something about there not being any jobs for us at the end of our program and the need for us to rethink our choice of leaving the workforce to get a graduate degree in business. Given the events unfolding on world markets, he said, the topic for the day seemed irrelevant. Eerily shaken and filled with despair, he canceled class and shuffled back out of the room.

The previous day was October 19, 1987 - what was to become infamously known as Black Monday. On that day, a panic sent stock markets around the world plummeting, beginning in Hong Kong and spreading west through Europe before crossing the Atlantic. When the panic hit the United States, the Dow Jones Industrial Average dropped 22.6% - the steepest one-day percentage drop in stock market history. None of this made sense to any of us eager MBA students. The modern finance theory that dominated our classes in accounting and finance left no room for market inefficiencies. What was unfolding on world markets, therefore, seemed beyond belief. Fortunately, the markets stabilized and recovered their precrash levels by the time we graduated in 1989. I had earned good grades and acquired an attractive job offer from Caterpillar. Therefore, I did end up with one of the highly sought-after manufacturing jobs out of Purdue. Above all, I had taken enough accounting and finance courses to sit for the CPA exam a few years later, so the hole in my knowledge had been filled. My transformation from a musician to a financial professional was complete. However, my MBA degree had only whet my appetite for knowledge. After receiving a doctoral fellowship from Coopers & Lybrand (now PricewaterhouseCoopers), I entered a PhD program in accounting at Indiana University after one summer at Caterpillar.

I found the same strong influence of modern finance theory among the faculty at Indiana. In contrast to Purdue, however, the school had a prominent group of accounting faculty who applied behavioral theory in their research. Instead of applying theory in economics assuming that individuals were fully rational, they applied theory in psychology suggesting that individuals exhibited irrational biases and heuristics in their decision making. These behavioral accounting researchers sought to explain market bubbles and crashes and other economic phenomena inconsistent with neoclassical economic theory. While thoroughly trained in rational expectations and the efficient market hypotheses, I could not forget Black Monday. Therefore, I was initially attracted to the new



Preface xi

behavioral theory in accounting. One seminar in experimental economics from Professor Arlington Williams in the economics department, however, changed all of that. A former PhD student of Vernon Smith's at Arizona, Arlie taught me that it was not necessary to abandon neoclassical economic theory in my experimental research. I learned that experimental researchers in economics were using lab experiments to test and extend neoclassical economic theory. I was hooked. I spent more and more time in the economics department honing my new research specialty in experimental economics.

It turns out that my graduate school days at Purdue and Indiana were at the height of the influence of a neoclassical theory of the firm that emerged out of the University of Chicago in the 1960s (Khurana 2007, Fourcade and Khurana 2013). From this rigorous economic perspective, managers of the firm were assumed to be self-interested opportunists motivated solely by their own wealth and leisure. This was not a real concern, however, because markets were also assumed to be fully efficient and able to discipline manager behavior that conflicted with the wishes of shareholders. From this perspective, the interests of other stakeholders of the firm such as employees, suppliers, and local communities did not matter. As is true of a fully developed research paradigm (Kuhn 1962), few researchers attempted to challenge these underlying assumptions during the heady days of the 1980s and 1990s. Top academic positions and journal editorships went to those who were steeped in the dominant paradigm out of Chicago. The powerful influence of hiring and tenure decisions, along with publication decisions at the top journals, perpetuated the paradigm. It would take nearly two more decades of conflicting evidence, including the 2000 dotcom market crash and the 2008 market meltdown, for the dominant paradigm to be sufficiently challenged.

In addition to studying experimental economics with Arlie Williams in the economics department, I studied trading volume behavior with Orie Barron in the accounting department. I soon found out, however, that my research put me at odds with the dominant paradigm from the Chicago school. If markets were fully efficient from an informational perspective, then trading volume could play little role in the financial markets. All that mattered was stock price. In fact, the dominant paradigm left no role for information asymmetry or disagreement among investors, and the market could be characterized as a single investor. To complicate things further, I developed a dissertation topic examining the effects of reputation and ethics on budgetary slack in participative budgeting. This had many faculty at Indiana wondering if I had torched my academic career by the end of my



xii Preface

doctoral program. Looking back now, I was certainly swimming against the current. Rather than receiving one of the coveted research university positions upon graduation in 1995, I began my academic career at a small public university in New England where I was given a heavy teaching load and few resources to conduct my research.

My first publication used a noisy rational expectations model to demonstrate how characteristics of analyst forecasts captured their heterogeneous beliefs and important aspects of their information environment (Barron, Kim, Lim, and Stevens 1998). It became one of the most heavily cited papers in The Accounting Review. My second publication used an experimental market setting to show that market prices and traders' subject beliefs underreacted to new information, and that trading volume reflected heterogeneous beliefs and capital gains expectations among traders (Gillette, Stevens, Watts, and Williams 1999). These early publications allowed me to secure a visiting faculty position at the University of Arizona in 1998 and an assistant professor position at Syracuse University in 1999. I was finally teaching doctoral seminars and advising PhD students in accounting. However, it would be three more years before I got my dissertation published (Stevens 2002). It was just too big a leap at the time. Recently, my research incorporating social norms into the theory of the firm has appeared in top academic journals (Davidson and Stevens 2013, Douthit and Stevens 2015, Abdel-Rahim and Stevens 2018). I have also published the first review paper of trading volume research with Linda Bamber and Orie Barron (Bamber, Barron, and Stevens 2011). Thus, in contrast to early expectations, I have been successful at publishing my research challenging the dominant paradigm out of Chicago.

Despite the strong current it generated against my research early in my career, I am grateful for the economic theory of the firm that emanated from the Chicago school. It is hard to imagine where we would be today without the rich insights garnered from that powerful theory. Rather than ignore these insights, or attempt to lay a new foundation based on behavioral biases and heuristics, my research builds upon the foundation laid by neoclassical economic theory. Over my academic career, I have had the privilege of working with prominent experimental economists while at Indiana University, the University of Arizona, Florida State University, and now Georgia State University. These economists have demonstrated that it is possible to expand neoclassical economic theory without abandoning rational expectations or the rich insights from expected utility theory. While the Chicago school used Adam Smith's second book to advance a neoclassical theory of the firm based upon opportunistic self-



Preface xiii

interest, researchers have recently returned to Adam Smith's first book to incorporate social norms into the theory. This research has expanded the descriptive validity and usefulness of the theory of the firm. However, this research effort is still young, and there is much work yet to be done.

The purpose of this book is to stimulate research incorporating social norms into the theory of the firm. I take an incremental, foundational approach that builds upon the rich insights of neoclassical economic theory. In the first half of the book, I develop a foundation for this research by presenting history and fundamental theory related to both the firm and social norms. In the second half of the book, I present theoretical, experimental, and archival evidence regarding the ability of social norms to control opportunistic behavior within the firm. Throughout the book, I also present the latest insights regarding Adam Smith from my semester in 2011 as a visiting scholar at the Adam Smith Research Foundation at the University of Glasgow. Neoclassical economists at the Chicago school relied heavily on Smith's second book when forming and defending their economic theory of the firm. Smith's first book, however, contains a comprehensive moral theory based on culture and social norms. My study of Adam Smith has convinced me that the same author to whom neoclassical researchers turned when developing the theory of the firm can be turned to again when incorporating social norms into that theory.



# Acknowledgments

I am indebted to many people who have supported my research career and influenced my thinking over the years. First of all, I owe a great debt of gratitude to my immediate and extended family. I wish to thank most of all my wife Carol, who helped an old widower get up off the mat and enjoy life again. I could never have finished this book without her unwavering love and support. I also wish to thank my daughter Heather, who has endured many years of graduate school and the death of her mother after a long battle with breast cancer. She has been with me from the very beginning of my career and has been a constant encouragement through the good times and the bad. Of course, I am also heavily indebted to my loving and supportive parents, who instilled in me a strong sense of morals and a desire to leave this world better off than I found it. Through it all, I am the same guy who majored in music and minored in philosophy/religion during my undergraduate studies and had a very difficult time choosing between graduate studies in music and business. I think I made the right choice.

I owe a special debt to my home academic institution of Georgia State University (GSU), where I have been granted generous time and resources to conduct my research. This includes summer research grants from the Robinson College of Business and the GSU School of Accountancy. I have also received generous research funding as a fellow at the Center for the Economic Analysis of Risk (CEAR) at GSU, which has come with the rich insights of the center director, Glenn Harrison. I would especially like to acknowledge the generous financial support I have received as the James E. & Patricia W. Copeland Deloitte Chair in Accountancy. My research has benefitted from conversations with accounting faculty at Georgia State and at nearby Emory University, Georgia Tech, and the University of Georgia. I would especially like to thank John Campbell, Jeff Hales, Frank Heflin,



# Acknowledgments

XV

Jason Kuang, Jeremy Lill, Michael Majerczyk, Ivo Tafkov, Kristy Towry, Greg Waymire, and Flora Zhou for their helpful insights. The talented research community in Atlanta suffered a serious loss when Bryan Church of Georgia Tech passed away suddenly last spring. His behavioral research in accounting was ground-breaking in many ways, and I shall greatly miss his friendship and insights.

Over the years, I have received invaluable help from the constructive comments of editors and reviewers of my work. I am especially indebted to the editor behind my dissertation paper at the Journal of Management Accounting Research, Harry Evans, who insisted that my dissertation was more about extending traditional agency theory than about finding another behavioral anomaly that it could not explain. He was absolutely correct, of course, and thus began my journey to extend the neoclassical theory of the firm. I am also grateful to the many other journal editors who have skillfully critiqued my work over the years, including Robert Bloomfield, Lynn Hannan, Steve Kachelmeier, Steve Kaplan, Joan Luft, Don Moser, Steve Salterio, Katherine Schipper, Mike Shields, Michael Williamson, and Rick Young. Finally, I am deeply indebted to the many anonymous reviewers who have reviewed my work, whether they recommended rejection or eventual acceptance. They will find much of their constructive criticism addressed in this book.

I owe a special debt of gratitude to my dissertation co-chairs at Indiana University, Joe Fisher and Mike Tiller. I first developed an interest in social norms under their guidance and inspiration. Of course, I never would have been able to take this journey without the training I received in experimental economics under Arlie Williams. Arlie programmed Vernon Smith's early market experiments as a PhD student at Arizona. After listening to Vernon's inspiring keynote address at a recent meeting of the Economic Science Association (Tucson, Arizona, 2016), I realized what an intellectual debt I owe him. Of course, all research in experimental economics can be traced back to Vernon's early market experiments in the 1960s. I also owe a debt of gratitude to other leading experimental economists who have crossed my path at Arizona, Florida State, and Georgia State, including David Cooper, Jim Cox, Glenn Harrison, and Mark Isaac. These economists conduct experimental research because they take seriously the underlying assumptions and predictions of neoclassical economic theory. I have also benefitted greatly from other accounting researchers trained in experimental economics, including Joyce Berg, John Dickhaut, Steve Kachelmeier, Ron King, Kevin McCabe, Don



xvi

# Acknowledgments

Moser, Bill Rankin, Jeff Schatzberg, Shyam Sunder, Bill Waller, David Wallin, and Rick Young.

I am also indebted to the many courageous researchers who have extended the boundaries of the theory of the firm. First of all, I thank Linda Bamber and Orie Barron for exposing me to trading volume research. Our review paper (Bamber, Barron, and Stevens 2011) demonstrates how far we have come yet how far we have to go to understand the large and increasing volume of trade around public financial disclosures. My recent research with Orie and Richard Schneible suggests that much of the market reaction to earnings announcements is in trading volume and not stock price (Barron, Schneible, and Stevens 2018). Thus, we really don't know as much about financial markets as we think we do. I also thank the theoretical researchers who have recently incorporated social norms into the theory of the firm, including Paul Fischer, Steve Huddart, Brian Mittendorf, Mark Penno, and Alex Thevaranjan. Your comments, insights, and models have heavily impacted my thinking. I especially thank Mark Penno for admonishing me to "go deep" in this book. I also thank Bill Mayew for making me aware of the growing literature related to social and moral norms in archival capital markets research.

I am deeply indebted to the many PhD students who have attended my doctoral seminars over the years. Many of them became my research assistants and co-authors. They include Heba Abdel-Rahim, Alisa Brink, Bruce Davidson, Jeremy Douthit, Eric Gooden, Linwood Kearney, Mark Mellon, Richard Schneible Jr., Minsup Song, James Wilhelm, and Ke Xu. Your questions and insights challenged me to go deeper and come up with better answers. I hope I also convinced you how tentative our current answers really are, and how much further research is needed to incorporate social norms into the theory of the firm. I look forward to your future contributions to the literature. Some of the content of this book has also crept into my MBA and graduate management accounting courses. I am particularly grateful for the practical implications and insights gleaned from my MBA students at New Hampshire, Syracuse, Florida State, and Georgia State.

I have attempted to expand my perspective over the course of my academic career by presenting my research at conferences and workshops in multiple disciplines, including accounting, economics, finance, and business ethics. I have also served as an anonymous reviewer for academic journals related to these disciplines. This multidisciplinary exposure has convinced me how limited my own perspective is regarding many of the research topics covered in this book. I apologize up front for the need to



### Acknowledgments

xvii

focus primarily on economics-related research. I concluded early on that incorporating social norms into the theory of the firm would require a rigorous foundation that is faithful both to neoclassical economic theory and social norm theory related to the firm. I found Christi Bicchieri's (2006) model of social norm activation, which was motivated by results in experimental tests of game theory, particularly helpful in this regard. Nevertheless, I highly value varying perspectives and have benefitted greatly from reading widely in social psychology and moral philosophy. Due to space and time constraints, and the limitations of the author, I have also focused on my own theoretical, experimental, and archival research in this book.

I want to thank two anonymous referees whose detailed comments and suggestions pushed me to include more detail regarding the theory of the firm in economics. I owe a special debt to the editorial staff at Cambridge University Press, especially Karen Maloney, Stephen Acerra, and Kristina Deusch, who walked me through the entire process of this book project from the initial prospectus to the finished product. I also owe a debt of gratitude to project manager Krishna Prasath and copyeditor Kathleen Allain. I also thank graphic artist Christian Coppoletti for his art and design work on the book cover. Finally, I would like to thank my agent D. J. Snell at the Legacy Agency, who provided much encouragement and legal advice and became a personal friend during this project.

