

Tomorrow 3.0

Transaction Costs and the Sharing Economy

With the growing popularity of apps such as Uber and Airbnb, there has been a keen interest in the rise of the sharing economy. Michael C. Munger brings these new trends in the economy down to earth by focusing on their relation to the fundamental economic concept of transaction costs. In doing so Munger brings a fresh perspective on the “sharing economy” in clear and engaging writing that is accessible to both general and specialist readers. He shows how, for the first time, entrepreneurs can sell reductions in transaction costs, rather than reductions in the costs of the products themselves. He predicts that smart phones will be used to commodify excess capacity, and reaches the controversial conclusion that a basic income will be required as a consequence of this new “transaction costs revolution.”

MICHAEL C. MUNGER is a Professor in the Department of Political Science and the Department of Economics at Duke University. He studied for a PhD under Barry Weingast and Douglass North (1993 Nobel Prize) at Washington University in St. Louis. After working at the US Federal Trade Commission, Munger taught at Dartmouth, Texas, and North Carolina before moving to Duke in 1997. He edited the journal *Public Choice* from 2005 to 2009.

CAMBRIDGE STUDIES IN ECONOMICS, CHOICE,
AND SOCIETY

Founding Editors

Timur Kuran, Duke University

Peter J. Boettke, George Mason University

This interdisciplinary series promotes original theoretical and empirical research as well as integrative syntheses involving links between individual choice, institutions, and social outcomes. Contributions are welcome from across the social sciences, particularly in the areas where economic analysis is joined with other disciplines such as comparative political economy, new institutional economics, and behavioral economics.

Books in the Series

TERRY L. ANDERSON and GARY D. LIBECAP *Environmental Markets: A Property Rights Approach*

MORRIS B. HOFFMAN *The Punisher's Brain: The Evolution of Judge and Jury*

PETER T. LEESON *Anarchy Unbound: Why Self-Governance Works Better Than You Think*

BENJAMIN POWELL *Out of Poverty: Sweatshops in the Global Economy*

CASS R. SUNSTEIN *The Ethics of Influence: Government in the Age of Behavioral Science*

JARED RUBIN *Rulers, Religion, and Riches: Why the West Got Rich and the Middle East Did Not*

JEAN-PHILIPPE PLATTEAU *Islam Instrumentalized: Religion and Politics in Historical Perspective*

TAIZU ZHANG *The Laws and Economics of Confucianism: Kinship and Property in Preindustrial China and England*

ROGER KOPPL *Expert Failure*

CAROLYN M. WARNER, RAMAZAN KILINÇ, CHRISTOPHER W. HALE, and ADAM B. COHEN *Generating Generosity in Catholicism and Islam: Beliefs, Institutions, and Public Goods Provision*

Tomorrow 3.0

Transaction Costs and the Sharing Economy

MICHAEL C. MUNGER
Duke University



CAMBRIDGE
UNIVERSITY PRESS

Cambridge University Press
978-1-108-44734-8 — Tomorrow 3.0
Michael C. Munger
Frontmatter
[More Information](#)

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/9781108427081

DOI: 10.1017/9781108602341

© Michael C. Munger 2018

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 2018

Reprinted 2018

Printed and bound in Great Britain by Clays Ltd, Elcograf S.p.A.

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

ISBN 978-1-108-42708-1 Hardback

ISBN 978-1-108-44734-8 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 Donna Gingerella,
who showed me how to love,
e
to Skippy Squirrelbane,
who showed me how to live*

*No one claimed that any of their possessions was their own,
but they shared everything they had.*

Acts 4:32

Contents

Preface	<i>page</i> ix
Acknowledgments	xv
1 The World of Tomorrow 3.0	1
2 Division of Labor, Destruction, and Revolution	25
3 The Middleman/Sharing Economy	49
4 The Answer Is “Transaction Costs” – Uber Sells Triangulation, Transfer, and Trust	71
5 Jobs, Work, and Adaptation	107
6 The Day after Tomorrow	131
References	154
Index	169

Preface

There is a lovely apocryphal story, generally told about Dwight D. Eisenhower during his time as president of Columbia University: The school was growing, necessitating an expansion of the campus, which produced a very hot dispute between two groups of planners and architects about where the sidewalks should go. One camp insisted that it was obvious – self-evident! – that the sidewalks had to be arranged thus, as any rational person could see, while the other camp argued for something very different, with the same appeals to obviously, self-evident, rational evidence. Legend has it that Eisenhower solved the problem by ordering that the sidewalks not be laid down at all for a year: The students would trample paths in the grass, and the builders would then pave over where the students were actually walking. Neither of the plans that had been advocated matched what the students actually did when left to their own devices. There are two radically different ways of looking at the world embedded in that story: Are our institutions here to tell us where to go, or are they here to help smooth the way for us as we pursue our own ends, going our own ways?

Kevin Williamson, 2013

The story above is true, even though it likely never happened. The “truth” lies in its core insight that permissionless innovation is, or should be, what institutions seek to promote. As Lu Xun put succinctly: “Originally there was no path – yet, as people are walking all the time in the same spot, a way appears.”

There is a simple logic to the “way” that is appearing all around us: reduced *transactions costs* foster *permissionless innovation* to make more efficient use of *excess capacity*. The result is that more people can get cheaper, better access to the stuff we already have. Markets are, or *can be*, a form of sharing, because people often just want to use things, not (necessarily) to own them. This has always been true to some extent – I never owned the huge factory machines

X PREFACE

that made my clothing; I simply shared them for a few seconds at some point, and then gave them back – but the rate of change and the expansion of sharing today is unprecedented. If you want to know why at present we own rather than share, the answer is transaction costs. And that is all going to change.

THE ARGUMENT

A simple summary of an entire book can be misleading because it is simple, and a summary, and therefore leaves out both details and the steps in the argument. Nonetheless, it is worthwhile to provide a map, if only to help the reader identify where each step in the larger argument is located in the hilly terrain to come.

The history of growth, and destruction, in economics has centered on complex voluntary interdependencies caused by the division of labor and specialization. I can produce far more widgets if I do nothing but practice my widget-making skills, while you produce corn, and Jones over there produces only clothing. There is lots more stuff in the world if each of us specializes, but we will only do that if we can rely on being able to acquire, by exchange or some other form of cooperative sharing, the stuff we ourselves do not produce. Until recently, much of this specialization has centered on skills in production and finding ways to make more stuff.

But now that is changing. In the past 20 years – dating the change roughly from eBay’s expansion in 1997, after beginning as “AuctionWeb” in 1995 – entrepreneurs have for the first time been able to specialize in selling not more stuff, but reductions in transaction costs for access to existing stuff. One could argue, with some merit, that the oldest organizations that specialized solely in selling reductions in transaction costs were marketplaces, or “Souqs,” in northern Africa and western Asia. Until the recent disastrous events in Syria, the al-Madina Souq in Aleppo had been open for business for well over 4,000 years.

The al-Madina is a (partly) covered area that extends over 10 kilometers in terms of the storefronts and open-air stalls that open

onto streets and alleys. You can find almost anything there. The reason merchants sell there is that they know you can find other things there as well. That does not seem to make sense: it seems like merchants would want to be off by themselves, far from any competition. Why would a fruit merchant want to be in a place where there are hundreds of other fruit merchants? The answer is transaction costs: gathering many sellers into one large physical area reduces the effort required for “comparison shopping” for customers.

The notion of a “market” as a means of reducing transaction costs long meant a physical place where people knew to gather to buy and sell. But one thing that the Sears catalog was clearly selling was a reduction in transaction costs: farmers in rural areas who might not otherwise have access to any specialized products could, if they waited a couple of months, obtain from Sears anything from clothing to food preparation tools to cars or houses. Sellers of commodities contacted Sears (as they now contact Amazon) to list their products for sale, gathering in a “place” that was in a sense virtual rather than real. Of course, the virtual space was not online but lived in the pages of a thick catalog. Still, that was the place to go. So while the differences I am talking about are real, there are plenty of examples in the past if you know where to look.

And that is the key to understanding the contribution of this book: the sustained thesis is that the single key fact in explaining the disruption of the economic system in the past 20 years or so is the sharp reduction in the transaction costs of commodifying many things that we have never before thought of as commodities. Lower transaction costs facilitate a hybrid form of “collaborative consumption.” If you own something, you can extract some of this unused value by renting it out. If you own almost nothing, you can still enjoy much of the value of ownership by renting from someone else. But this more intensive use of existing resources can only happen if transaction costs – the sum of what I will call triangulation, transfer, and trust – convert unused stuff into usable excess capacity. To make

xii PREFACE

a long story short, both the sharing economy and the middleman economy are *sort of* new, but only in intensity and rapidity of change.

That does not mean that reducing transaction costs has never been important before. To the contrary, reducing transaction costs has been an important source of creating value since the very first transactions. After all, “length of braided vines three miles away, across a mountain” is much less valuable than “length of braided vines in my hand, ready to use to tie bundle of wood.” So a crucial part of transactions, and in fact an essential part of the competition to sell things, has always been the transaction costs. The reason is that, to consumers, all costs are transaction costs. Reducing the cost of physical production by 10 percent is no different from reducing the cost of delivery and convenience of use by 10 percent, from the point of view of the consumer.

Consequently, economists have long highlighted reductions in transaction costs as a focus of economic innovation and competition. Joseph Schumpeter (1934, 66) listed “types” or categories of innovations that entrepreneurs focused on, and transaction costs are important aspects of three of them:

- (1) a new good, or an old good with a qualitatively different level of quality
- (2) a new technique for producing or handling the product
- (3) the opening of a new market, or recognition of a new use for the product
- (4) improvements in security or reductions in costs of raw materials or partly-manufactured goods up the supply chain
- (5) the conception and execution of a new system or organization for manufacturing or delivering the good.

But Schumpeter saw the transaction costs elements as something that helped the entrepreneur sell the *product*, though to his credit he recognized that low transaction costs were an essential part of the product themselves.

This theme of institutional innovation and the form of delivery and measurement was echoed by other economists, including Commons (1931) and Chandler (1977). But for the most part – there

are exceptions, such as firms that specialize in accounting audits or management consulting – the innovations in transaction costs were attached to a product or service. What has happened in the last 20 years is that many firms simply offer to sell reductions in transaction costs without knowing what products or services will be sold as a result.

That means that what we are seeing are the early signs of a revolution being driven along two quite different dimensions. The intersection of these dimensions explains the growth of the new economy to date; where they are far apart, we learn why many sectors are yet unaffected.

The two dimensions are (1) the sharing economy and (2) the transaction costs or middleman economy.

The *sharing economy* is

- (1) entrepreneurship applied to reducing transaction costs rather than reducing production costs
- (2) working through new software platforms
- (3) operating on smart, portable hardware
- (4) connected over the web.

Software programs in the sharing economy are both system (executing instructions) and application (storing, retrieving, and interpreting information entered by users). Software will play the same role in producing reductions in transaction costs that robots and automation have played in reduction production costs in the ownership economy. Software will displace human workers, reducing both actual prices and implicit costs, and expanding the set of things that we think of as commodities.

The *middleman economy* arises from the ability to sell reductions in transaction costs to enable mutually beneficial exchange in commodities, services, and activities that may not even have been conceived as commercial until now.

This means that there are two variables of concern: excess capacity and transaction costs. Excess capacity is the unused time or

xiv PREFACE

space to do more. Excess capacity is expensive, but we may not notice the cost because it can only be measured by things not done.

Transaction costs are the expenses, including time, inconvenience, and actual payments required to use the item, and the problems involved in trusting others to deliver on their promises and not to rob us.

The value proposition in the new economy is selling access to excess capacity. As transaction costs are driven by new software applications, it is more expensive to hold or store consumer and producer durables, precisely because new software applications makes it cheaper to use them.

My storage unit, my garage, my kitchen cupboards, and my closets are all full of useful stuff. I am not using them; in fact, I am paying to store them. But in many cases, someone *else* would pay to use them. Excess capacity of durable goods is variable with respect to the transaction cost – triangulation, transfer, and trust – of reassigning their temporary use.

Of course, when I look at my closet or garage, I do not see “excess capacity,” I see storage of valuable items. But those suits, shirts, my car, my mower, all those things could be being used by someone else. Lowering transaction costs raises the opportunity cost of idle durable goods. Still, that does not translate into “excess capacity” until we found a way of selling reductions in transaction costs.

And now, because of the combination of portable smart communication devices, a set of software apps that run on those devices, and a network to connect those devices, we have found a way. That is why tomorrow will be different.

Acknowledgments

This book grew out of a conversation I had with Russ Roberts on his podcast show, *EconTalk*, in 2014. Our discussion was so interesting that I realized there were big holes in the way that I thought about the developing economy in which sharing excess capacity and mobile apps selling reductions in transaction costs were going to transform the world. In writing the book, I have received helpful comments and suggestions from thousands of people, in conversations and seminars in Australia, Austria, Canada, Chile, Czech Republic, France, Germany, Slovakia, and at least two dozen colleges, universities, and professional meetings in the United States. Thanks to all of you who suffered through the early versions, and my apologies for not being able to implement all of your great ideas.

There are a number of people who made very extensive and detailed comments. I have likely forgotten some. But at a minimum, thanks to Jonathan Anomaly, Petr Barton, Darren Beatty, Philip Booth, Sam Bowman, Paul Burgess, Bruce Caldwell, Arthur Carden, Carlos Carvalho, Scott de Marchi, Richard Durana, Michael A. Gillespie, Kevin Grier, Daniel Gropper, Victoria Heid, Susan Hogarth, Libby Jenke, Clemens Kauffmann, Lynne Kiesling, Jason McDonald, Kevin Munger, Yaël Ossowski, Richard Salsman, Josef Sima, Ed Tower, John Transue, Mario Villareal-Diaz, Roy Weintraub, and Stan Winer. Curtis Brim of Duke University's Political Science Department made numerous suggestions on content, and was primarily responsible for preparing the index. Margaret Puskar-Pasewicz edited the prose into something closer to English, and was cheerful about some difficult deadlines. And thanks to Peter Boettke and Timur Kuran, editors of the Cambridge University Press series, "Cambridge Studies in Economics, Choice, and Society,"

xvi ACKNOWLEDGMENTS

as well as the anonymous reviewers and the production staff at Cambridge University Press, who managed to handle everything remarkably efficiently. Finally, thanks to Shaun King and the folks who lent their arms for the cover. Several people have asked “Why are there no ‘persons of color’ in the photo?” Don't be so sure. Seeing everything in black and white makes you miss the shades.