### Crude Democracy: Natural Resource Wealth and Political Regimes

This book challenges the conventional wisdom that natural resource wealth promotes autocracy. Oil and other forms of mineral wealth can promote both authoritarianism and democracy, the book argues, but they do so through different mechanisms; an understanding of these different mechanisms can help elucidate when either the authoritarian or democratic effects of resource wealth will be relatively strong. Exploiting game-theoretic tools and statistical modeling as well as detailed country case studies and drawing on fieldwork in Latin America and Africa, this book builds and tests a theory that explains political variation across resource-rich states. It will be read by scholars studying the political effects of natural resource wealth in many regions, as well as by those interested in the emergence and persistence of democratic regimes.

Thad Dunning is Assistant Professor of Political Science at Yale University and a research Fellow at Yale's Whitney and Betty MacMillan Center for International and Area Studies. Dunning's previous work has appeared in *International Organization*, the *Journal of Conflict Resolution, Political Analysis, Studies in Comparative International Development*, and other journals. The dissertation on which this book is based was given the Mancur Olson Award by the Political Economy Section of the American Political Science Association (2008), for the best dissertation in political economy completed in the previous two years. Dunning's research interests lie in comparative politics, political economy, and international relations.

### Cambridge Studies in Comparative Politics

Margaret Levi University of Washington, Seattle			
Assistant General Editor			
Stephen Hanson University of Washington, Seattle			
Associate Editors			
Robert H. Bates Harvard University			
Torben Iversen Harvard University			
Stathis Kalyvas Yale University			
Peter Lange Duke University			
Helen Milner Princeton University			
Frances Rosenbluth Yale University			
Susan Stokes Yale University			
Sidney Tarrow Cornell University			
Kathleen Thelen Northwestern University			
Erik Wibbels Duke University			
Other Books in the Series			
David Austen-Smith, Jeffry A. Frieden, Miriam A. Golden, Karl Ove			
Moene, and Adam Przeworski, eds., Selected Works of Michael			
Wallerstein: The Political Economy of Inequality, Unions, and Social			
Democracy			
Lisa Baldez, Why Women Protest? Women's Movements in Chile			
Stefano Bartolini, The Political Mobilization of the European Left,			
1860–1980: The Class Cleavage			
Robert H. Bates, When Things Fell Apart: State Failure in Late-Century Africa			
Mark Beissinger, Nationalist Mobilization and the Collapse of the Soviet Sta	te		
Nancy Bermeo, ed., Unemployment in the New Europe			
Carles Boix, Democracy and Redistribution			
Carles Boix, Political Parties, Growth, and Equality: Conservative and Social			
Democratic Economic Strategies in the World Economy			
Catherine Boone, Merchant Capital and the Roots of State Power in Senegar 1930–1985	l,		

Continued after the index

# Crude Democracy

## NATURAL RESOURCE WEALTH AND POLITICAL REGIMES

## THAD DUNNING

Yale University



### CAMBRIDGE

Cambridge University Press		
978-0-521-73075-4 - Crude Democracy: Natural	Resource Wealth	and Political Regimes
Thad Dunning		
Frontmatter		
Moreinformation		

CAMBRIDGE UNIVERSITY PRESS Cambridge, New York, Melbourne, Madrid, Cape Town, Singapore, São Paulo, Delhi

Cambridge University Press 32 Avenue of the Americas, New York, NY 10013-2473, USA

www.cambridge.org Information on this title: www.cambridge.org/9780521730754

© Thad Dunning 2008

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 2008

Printed in the United States of America

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

Library of Congress Cataloging in Publication data
Dunning, Thad, 1973–
Crude democracy : natural resource wealth and political regimes / Thad Dunning.
p. cm. – (Cambridge studies in comparative politics)
Includes bibliographical references and index.
ISBN 978-0-521-51500-9 (hbk.) – ISBN 978-0-521-73075-4 (pbk.)
1. Democracy – Economic aspects. 2. Petroleum – Political aspects.
3. Natural resources – Political aspects. I. Title. II. Series.
JC423.D824 2008
321.8–dc22 2008018121

ISBN 978-0-521-51500-9 hardback ISBN 978-0-521-73075-4 paperback

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

Cover art © Elizabeth Catlett / Licensed by VAGA, New York, NY. Image Courtesy of the Yale University Library.

The Yale Program on Democracy generously provided financial support.

For my parents, Hap, Joby, and Ted

Cambridge University Press	
978-0-521-73075-4 - Crude Democracy: Natur	al Resource Wealth and Political Regimes
Thad Dunning	
Frontmatter	
More information	

## Contents

List o	of Figu	ures	<i>page</i> xi
List o	of Tabl	les	xiii
Prefa	ice and	Acknowledgments	XV
1	DOI	ES OIL PROMOTE DEMOCRACY?	1
	1.1	The Authoritarian and Democratic Effects of Natural	
		Resources	5
	1.2	Explaining Variation	15
	1.3	Method and Plan of the Book	25
2	TH	E FOUNDATIONS OF RENTIER STATES	37
	2.1	Sources of Rents	39
	2.2	Fiscal Effects: Natural Resources and Taxation	45
	2.3	Toward the Political Effects of Rents	52
3	RES	OURCE RENTS AND THE POLITICAL	
	REC	HME	61
	3.1	A Model of Coups against Democracy	64
	3.2	A Model of Democratization	88
	3.3	Discussion and Interpretation	100
4	STA	TISTICAL TESTS ON RENTS AND THE	
	REC	HME	107
	4.1	Concepts and Measures	111
	4.2	Rents and the Level of Democracy	121
	4.3	Democratic Transitions and Breakdowns	136
	4.4	Assessing the Large-N Evidence	140

Cambridge University Press	
978-0-521-73075-4 - Crude Democracy: Natural Res	source Wealth and Political Regimes
Thad Dunning	
Frontmatter	
Moreinformation	

### Contents

5	ΤH	E DEMOCRATIC EFFECT OF RENTS	148
	5.1	Case Selection: Probing the Mechanisms	149
	5.2	Venezuela: The Rise and Demise of Rentier	
		Democracy	152
6	RE	NTIER DEMOCRACY IN COMPARATIVE	
	PE	RSPECTIVE	210
	6.1	Chile: Class Conflict in a Rentier Democracy	213
	6.2	Bolivia: Rents, Revolution, and Democracy	231
		Ecuador: Oil Booms and Democratization	253
	6.4	Botswana: An African Anomaly	258
7	THEORETICAL EXTENSIONS		268
	7.1	Revenue Volatility	269
	7.2	The Dutch Disease	272
	7.3	Resource Ownership	274
8	СО	NCLUSION: WHITHER THE RESOURCE	
	CU	RSE?	278
	8.1	Crude Democracies and Crude Autocracies	279
	8.2	Resources and Democracy: A Normative Coda	289
Арр	endix:	Construction of the Simulations	293
Bibl	liograp	by	297
Ind	ex -		317

# List of Figures

1.1	Coups against democracy	page 8
1.2	Explaining variation: a conceptual overview	19
3.1	The impact of resource rents on the incidence of coups	84
3.2	A net authoritarian effect of rents: the low inequality case	85
3.3	A net democratic effect of rents: the high inequality case	86
3.4	Rents and coups: the role of resource dependence	87
4.1	The effect of oil on democracy as inequality varies	123
5.1	Venezuelan government revenues from oil, 1921–2002	157
5.2	Real education and health spending in Venezuela,	
	1951–1990	163
5.3	Total and social expenditures in Venezuela, 1990–2006	185
5.4	Education and health spending in Venezuela, 1990–2006	187

## List of Tables

4.1	Resource Rents, Inequality, and the Level of Democracy	page 122
4.2	Industrial Capital Shares by World Region	129
4.3	Rents and Democracy in Latin America	130
4.4	Rents, Inequality, and Democracy: Probit Model	133
4.5	Resource Dependence: fGLS Estimates	135
4.6	Democratic Transitions and Breakdowns: Dynamic Probit	
	Model	138
4.7	Rents and Coups: Probit Model	141

## Preface and Acknowledgments

As this book goes to press, we are living in the midst of a petroleum boom akin to the two oil shocks of the 1970s. The per-barrel price of crude surpassed \$100 in the first days of 2008, nearing in real terms the price records set during previous booms. For consumers in oil-importing countries, the rising price of petroleum represents an unwelcome cost and a source of inflationary pressure at a time of slowing economic growth. As in the earlier oil shocks, however, the sharply rising petroleum price implies an economic bonanza of epic proportions for oil-exporting countries. How will the boom affect economic and political institutions in those countries?

To analysts of the 1970s, a sustained petroleum boom could only boost the fortunes of oil-rich countries. Social-scientific theories suggested that rising national income would be good for democracy too. Yet, by the 1990s, scholars had begun to question the economic and political benefits of the first two oil shocks. Jeffrey Sachs and Andrew Warner, among others, presented research showing that the resource-rich countries had grown less, not more, than similar resource-poor countries (Sachs and Warner 1995); in another influential early discussion, Terry Karl asked why, "after benefiting from the largest transfer of wealth ever to occur without war... have most oil-exporting developing countries suffered from economic deterioration and political decay?" (Karl 1997: xv).

The answer seemed to be that a massive flow of natural resource revenues into the fiscal coffers of the state engendered perverse political as well as economic effects. Not only did natural resource booms cripple non-resource export sectors and inhibit various forms of productive economic activity, they also fostered corruption, weakened accountability, and heightened incentives for rent-seeking. Most relevant for this book, scholars began to

#### Preface and Acknowledgments

argue what has now become nearly a new conventional wisdom: natural resources promote authoritarianism.

This book challenges this conventional wisdom as applied to the development of political regimes. It does not take issue with the claim that natural resource booms may sometimes heighten corruption or weaken institutions in various ways; nor does it contradict the assertion that they may support authoritarian regimes. Yet, this book attempts to refine such arguments by pointing out the ways in which resource wealth may also bolster democracy. Oil and other forms of mineral wealth can promote both authoritarianism and democracy, I argue, but they do so through different mechanisms; an understanding of these different mechanisms can help us understand when either the authoritarian or democratic effects of resource wealth will be relatively strong. Exploiting game-theoretic tools and statistical modeling as well as detailed country case studies, and drawing on fieldwork in Venezuela as well as Bolivia, Botswana, and Chile, I build a theory that seeks to explain political variation across resource-rich states.

For resource-rich countries today, this book suggests that the current boom will have more subtle effects than the present image of an authoritarian resource curse would suggest. Only time will tell to what extent the predictions of the theory are borne out by events. Yet, in trying to explain why petroleum and related kinds of natural resources sometimes seem to provide a blessing for democracy and at other times engender an authoritarian curse, this book provides a framework for thinking systematically about the contrasting political effects of natural resource wealth during the current export bonanza.

A first book provides a valuable (if daunting) chance to acknowledge the many personal and intellectual debts incurred during its conception; it is a pleasure to have the opportunity. I was blessed to have wonderful dissertation and oral defense committees as a graduate student at the University of California, Berkeley. Peter Evans and Gérard Roland provided models of engaged scholarship and encouraged me at important moments in my graduate career. David Collier has been a superlative mentor and a source of professional and intellectual encouragement nonpareil, as so many who have worked with him can attest. I am grateful to Ruth Berins Collier for her unflagging support and her very valuable guidance as the co-chair of my dissertation committee; during my first year in graduate school, Ruth also took me on as an editorial assistant at the journal *Studies in Comparative International Development*, a socialization experience that proved not only

xvi

### Preface and Acknowledgments

fun but also instructive. Finally, as the other co-chair on my committee, Jim Robinson did so much to inspire not only this book but also my faith that social science can tackle the most difficult and important questions while continually seeking to improve the means by which it does so; this book owes a great deal to him.

I have been fortunate to benefit from the guidance of many other mentors as well. David Freedman, who has shared his time and insights more generously than I could have ever hoped, taught me much about statistics and even more about social science. Bob Powell, in addition to providing an inspiring example through his own scholarship, gave me much-needed advice at a crucial point in the development of my dissertation; he also bestowed financial assistance that allowed me the time needed to obtain an M.A. degree in economics while pursuing my doctoral degree in political science. I am grateful to others, including Henry Brady, Laura Stoker, and Steve Weber, for their help and advice during my graduate studies. Terry Karl, whose scholarship helped to motivate some of the questions that led to this book, urged me to study political science in graduate school; I am grateful for the intervention.

Many people read portions of the manuscript and/or helpfully discussed its development with me. I would like to thank Jennifer Bussell, Alex Debs, Jorge Domínguez, Jim Fearon, Justin Fox, Scott Gehlbach, Stephen Haber, Patrick Heller, Stathis Kalyvas, Steve Levitsky, Pauline Jones Luong, James Mahon, Nikolay Marinov, David Mayhew, Victor Menaldo, Francisco Monaldi, John Roemer, Michael Ross, Ken Scheve, Ian Shapiro, Alberto Simpser, Richard Snyder, Hillel Soifer, Susan Stokes, Mariano Tommasi, Erik Wibbels, and Libby Wood. Nikolay Marinov helped with the formatting of figures in LaTeX and shared his rich data set on coups, while Serguey Braguinsky pointed me to useful references, Bill Clarke gave helpful advice on presenting the results of interaction models in Chapter Three, and Michael Gilligan generously shared data. Eddie Camp, Xiaobo Lu, Kaj Thomsson, and Kyohei Yamada suffered through a presentation of the game-theoretic material in my graduate class on formal models of comparative politics at Yale and made useful comments, as did Valerie Frey and Mario Chacón; Eddie Camp served as an excellent discussant at the Yale Comparative Politics Workshop, while Mario Chacón provided valuable research assistance. Stephen Kaplan was an enriching person with whom to discuss Venezuela and other topics. I received helpful suggestions on Chapter Five from Libby Wood and participants in her qualitative methods field seminar at Yale. Stathis Kalyvas and Susan Stokes kindly gave

xvii

#### Preface and Acknowledgments

me guidance on the book's publication as well as much-appreciated advice on many other topics; in addition to moral support, Sue Stokes generously provided financial assistance through the Yale Program on Democracy. Jim Fearon graciously commented on two chapters of the manuscript that were presented at a conference on oil and governance at Stanford. I am especially grateful to John Roemer, who generously made many suggestions on the formal analysis in the third chapter, and to Michael Ross and to Erik Wibbels, who provided detailed comments on large portions of the manuscript. Jennifer Bussell and Ashley Dunning deserve some (they say all) of the credit for helping me come up with a title for the book.

No book involving field research could get researched or written without the help of many colleagues, contacts, and informants. The following individuals took their time to share with me their knowledge of Venezuelan politics or helped further my field research in other ways: Asdrúbal Baptista, Froilán Barrios, Gerardo Blyde, Mercedes Briceño, Gustavo Tarre Briceño, Rafael Gonzalez Cardenas, Jonathan Coles, Michael Coppedge, Javier Corrales, Moises Dorey, Steve Ellner, Luis Pedro España, Ramón Espinasa, Lupe Fajardo, Sergio Galvis, Gustavo García, Dorothy Kronick, Luis Lander, Daniel Levine, Christopher Mann, Osmel Manzano, Patrícia Marquez, Margarita López Maya, Luis Miquilena, María Eugenia Miquilena, Bernard Mommer, Francisco Monaldi, Richard Obuchi, Daniel Ortega, Alfredo Padilla, Alesia Rodríguez Pardo, Dick Parker, Michael Penfold, Rodrigo Penso, Mercedes Pulido, Fred Rich, Giuseppe Rionero, Francisco Rodríguez, Gustavo Romero, Samantha Sánchez, Arturo Tremont, Alfredo Torres Uribe, Ramón J. Velásquez, Alejandro Vicentini, Janine Vici-Senior, Ricardo Villasmil, and Stefania Vitale. I was fortunate to have an affiliation with the Instituto de Estudios Superiores de Administración (IESA) in Caracas, which offered me office space, administrative support, and, especially, a chance to interact with leading Venezuelan academics in a congenial environment. I owe an especially large debt to Francisco Monaldi, who helped to facilitate my field research in countless ways, provided extensive comments on my work, and, through many hours of conversation, helped me to understand much more than I otherwise would have about Venezuelan politics. I would also like to acknowledge the following individuals, who helped me on field research trips to Bolivia, Botswana, and Chile: Jorge Arrate, Lorgio Balcazar Arroyo, Willy Conradi, Ribson Gabonowe, Kenneth Good, Carlos Humud, Raúl Kieffer, Joe Matume, René Mayorga, Martin Mendoza-Botelho, Louis Nchindo, Neil Parsons, Joseph Ramos, Chris Sharp, Nicholas Terlecky, Richard White, and especially my friend

xviii

### Preface and Acknowledgments

Arnold Bauer, who generously shared a small portion (but a large quantity) of his immense knowledge of Chilean history.

I was fortunate to receive excellent comments after presenting early versions of this material at Brown University's Colloquium on Comparative Politics; Harvard University's David Rockefeller Center for Latin American Studies; Stanford University's Center on Democracy, Development and the Rule of Law; the Yale Comparative Politics Workshop; and the Wallis Institute for Political Economy at the University of Rochester, as well as in the political science departments at Columbia University, New York University, Northwestern University, Ohio State University, the University of Chicago, the University of Illinois at Urbana-Champaign, the University of Virginia, and the University of Wisconsin-Madison. Early versions of this material were also presented at the meetings of the Empirical Implications of Theoretical Models (EITM) training institute at the University of California, Berkeley in June-July 2004, as well as at the Institute on Qualitative Research Methods (IQRM) (now the Institute on Qualitative and Multi-Method Research, IQMR) at Arizona State University in January 2004. The Institute of International Studies at the University of California, Berkeley generously supported my field research.

The anonymous reviewers made many helpful suggestions that greatly enriched the manuscript. I am also especially grateful to my editors at Cambridge University Press, Eric Crahan and Lew Bateman, for skillfully steering the manuscript through the review and production process, and to Margaret Levi for accepting the manuscript for publication in the Cambridge Studies in Comparative Politics series.

Finally, I am grateful for the many friends and family members who have supported me along the way. Márcia Treidler, Jennifer Walsh, Katya Wesolowski, and many other capoeiristas taught me lessons that could not have been learned elsewhere. Friends who preserved my sanity (or tried) in graduate school include Naazneen Barma, Taylor Boas, Margaret Boittin, Mark Haven Britt, Rebecca Chen, Brent Durbin, Miguel de Figueiredo, Matt Grossman, Dave Hopkins, Rebecca Hamlin, Amy Lerman, Keena Lipsitz, Sebastián Mazzuca, Simeon Nichter, Grigo Pop-Eleches, Ely Ratner, Sarah Reckhow, Jessica Rich, Erin Rowley, Kyra Naumoff Shields, Regine Spector, Sarah Snip Stroup, and especially Jennifer Bussell. I would also like to thank Dagan Bayliss, Elvin Geng, Ahwat Schlosser, Nicholas Terlecky, and Terry Wade, who will know why, and my family: the Berwyn Dunnings, the Fredricksons, Carolyn Geiger, Nan Margadant and Gudrun Klostermann, the Vogts, Ken Sorey and Case and Jay Dunning-Sorey, and

xix

### Preface and Acknowledgments

especially my wonderful big sister Ashley Dunning, who has been a constant in the midst of change and always a source of inspiration. My cherished parents, Harrison Dunning and Jo Burr and Ted Margadant, have loved and supported me but also challenged and shaped me intellectually. For the latter reason as much as the former, this book is dedicated to them.

> Crude Democracy: Natural Resource Wealth and Political Regimes