Global Markets and Government Regulation in Telecommunications

In recent years, liberalization, privatization, and deregulation have become commonplace in sectors once dominated by government-owned monopolies. In telecommunications, for example, during the 1990s, more than 129 countries established independent regulatory agencies and more than 100 countries privatized the state-owned telecom operator. Why did so many countries liberalize in such a short period of time? For example, why did both Denmark and Burundi, nations different along so many relevant dimensions, liberalize their telecom sectors around the same time?

Kirsten Rodine-Hardy argues that international organizations—not national governments or market forces—are the primary drivers of policy convergence in the important arena of telecommunications regulation: they create and shape preferences for reform and provide forums for expert discussions and the emergence of policy standards. Yet she also shows that international convergence leaves room for substantial variation among countries, using both econometric analysis and controlled case comparisons of eight European countries.

Kirsten Rodine-Hardy is an assistant professor of political science at Northeastern University, where she teaches international political economy, comparative politics, and European politics. She completed her Ph.D. in political science at the University of California, Berkeley, and spent two years at Harvard University on a pre-dissertation fellowship. She earned degrees from Brown University (AB honors and magna cum laude) and Georgetown University (MSFS in international trade and finance), and she studied at the Institut d’Etudes Politiques in Paris and at the ICPSR at Michigan University. She was a visiting assistant professor at Brown University in 2005 and 2006. She has received research support from the University of California’s Institute for Cooperation and Conflict and the Berkeley Post-Soviet Studies Program, and she has consulted for the World Bank, the Organization for Economic Cooperation and Development, and the European Union. She participates actively in the American Political Science Association, Midwest Political Science Association, and International Studies Association. She is affiliated with Harvard University’s Minda de Gunzburg Center for European Studies and the Northeastern University Center for Emerging Markets, based at the Northeastern School of Business.
Global Markets and Government Regulation in Telecommunications

KIRSTEN RODINE-HARDY

Northeastern University
In loving memory of
Paul Jay Hardy, Jr., 1961–2011
Contents

List of Figures and Tables  page viii
Acknowledgments  ix
Preface  xv

Chapter 1  Understanding Global Regulatory Reform in Telecommunications: A Paradigm Shift  1
Chapter 2  Why Change the Rules? Explaining Liberal Telecom Reform  28
Chapter 3  When and How Do Countries Change the Rules? Econometric Analysis of the Timing of Establishing Independent Regulators and Privatizing Telecom Firms  61
Chapter 4  Regulatory Reform in Central Europe: Freer Markets, European Rules  79
Chapter 5  Northern European Regulatory Reform: Liberal Reform Northern Style, “Regulation Lite”  128
Chapter 6  Explaining Change in a Globalized World: International Organizations and the Emergence of Networks and Norms  150

Appendices: Figures and Tables  163
References  177
Index  195
# List of Figures and Tables

## Figures

<table>
<thead>
<tr>
<th>Appendix</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appendix A</td>
<td>Total Number of Separate Regulators and First Privatizations (Source: ITU)</td>
<td>164</td>
</tr>
<tr>
<td>Appendix B</td>
<td>Cumulative Separate Regulators by 2005 (Source: ITU)</td>
<td>164</td>
</tr>
</tbody>
</table>

## Tables

<table>
<thead>
<tr>
<th>Appendix</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appendix C</td>
<td>The basic argument in diagram form</td>
<td>165</td>
</tr>
<tr>
<td>Appendix D</td>
<td>Countries in the dataset (183 total)</td>
<td>166</td>
</tr>
<tr>
<td>Appendix E</td>
<td>Variables list</td>
<td>167</td>
</tr>
<tr>
<td>Appendix F</td>
<td>Results: Weibull hazard ratios for telecom reform</td>
<td>169</td>
</tr>
<tr>
<td>Appendix G</td>
<td>The dependent variable: Regulatory reform in telecommunications in Central and Eastern Europe</td>
<td>170</td>
</tr>
<tr>
<td>Appendix H</td>
<td>The dependent variable: Regulatory reform in telecommunications in Northern Europe</td>
<td>172</td>
</tr>
<tr>
<td>Appendix I</td>
<td>European Regulatory Authorities (2011)</td>
<td>173</td>
</tr>
<tr>
<td>Appendix J</td>
<td>Abbreviations and Acronyms</td>
<td>175</td>
</tr>
</tbody>
</table>
The globalization of telecommunications has taken place during my lifetime, and I remember having to wait in line at the post office in France to call my parents in the United States. I also remember the excitement of the Minitel in France in the mid-1980s, and the promise of phone cards that would make calling from a phone booth both easier and cheaper. Later, back in the United States, I took a class at Georgetown University on international telecommunications with Wilson Dizard and took a tour of Intelsat’s headquarters, where I learned about international telecommunications. One of the big questions in the late 1980s was how to analyze recent market developments in Argentina and Mexico, particularly as possible examples for a new wave of Eastern European countries that entered the global markets in 1989, at the end of the Cold War. I wrote a research paper on the Hungarian telecommunications system, such as it was at the time, and I was able to do more research while in an internship on telecommunications at the Center for Strategic and International Studies (CSIS) in Washington, D.C. That year, I had the opportunity to move to Prague, where it was easier to call my parents from a phone booth in the middle of a field using an AT&T calling card than to call my friends around the corner, who were lucky enough to have a barely functional phone on their dorm room floor. After four years of working in private sector development in Central Europe while living in Prague, I spent some time working in Washington, D.C., did some short-term work with the World Bank and a few
telecommunications-related organizations, and then returned to graduate school to pursue more studies in international political economy at the University of California, Berkeley.

Observing the processes of globalization, liberal market reforms, and democratization firsthand in Central Europe, I deepened my interest in the political economy of markets and government regulations. I chose telecommunications as a lens through which to analyze governments as they interact with global markets, especially in the context of globalization, Europeanization, and liberal reforms. I observed the movement of international organizations and elites, and how bureaucrats in the former state-owned telecommunications firms transformed into new regulators for a dynamic and unfolding market, with implications for prices and availability of services for consumers, and prospects for connecting with the broader world. These new regulatory agencies, similar in form, became responsible for setting the terms for powerful international firms and ensuring the availability of products and services for a wide population. It is now possible to communicate simultaneously with friends in multiple countries, all using technology I can hold in my hand. How global markets and government regulation affect the opportunities and resources for information access and prosperity remain enduring questions for me, and form the basis for this book.

This book began to take shape as a dissertation at UC Berkeley, and I first thank my committee for their unfailing support and constructive criticism: co-chairs Beth Simmons and Steve Vogel, Henry Brady, and Howard Shelanski. I received support from the Institute on Global Conflict and Cooperation (IGCC) and the Berkeley Post-Soviet Studies Program. I also received a dissertation fellowship from Harvard University, where I spent two years finishing research and writing. I received support from the Weatherhead Center for International Affairs, and later joined Harvard’s Minda da Gunzburg Center for European Studies.

I transformed the book project during my time at Northeastern University, and I thank my wonderful colleagues there: Amílcar Barreto, Chris Bosso, Denise Garcia, Ronald Hedlund, Denise Horn, David Lazer, Suzanne Ogden, John Portz, and Michael
Tolley have provided much-needed mentorship, guidance, and encouragement. I could not ask for a more collegial environment, and I thank my entire department, as well as my students, who keep me engaged, inspired, and informed. Ian McManus, Krista Denofrio, and Beth Boorman provided amazing research assistance. I also thank the editor, Lew Bateman, and the editorial staff at Cambridge and two anonymous reviewers who made invaluable comments that strengthened the manuscript considerably. All mistakes remain my own.

I also extend thanks to all those telecom specialists, regulators, and practitioners in the Czech Republic, Slovakia, Hungary, the Netherlands, Washington, D.C., and Geneva, Switzerland, who graciously provided their time and valuable expertise during my research visits. A limited list includes Doreen Bogdan-Martin, Nancy Sundberg, Tim Kelly, Esperanza Mappantay (ITU), Diane Steinour (Department of Commerce), Irene Wu, John Giusti (FCC), and Dmitri Ypsilanti (OECD). Others agreed to be interviewed only under the condition that they not be named, and I thank them profusely.

Other academics have provided most helpful comments and critiques during conferences and meetings, including Moises Arce, Andy Baker, Sarah Brooks, David Coen, Derrick Cogburn, Barbara Connolly, Peter Cowhey, Michelle Dion, Henry Farrell, Nanette Levinson, Abe Newman, Craig Parsons, J. P. Singh, and A. Maria Toyoda.

I would like to extend special thanks to Anne Clunan and Rosie Hsueh, whose wholehearted support has helped me so much. Data gurus include Nancy Brune, Zachary Elkins, John Gerring, Tracy Gordon, Alexandra Guisinger, Sonal Pandya, and John Sides.

The following friends have provided moral support and guidance, especially the Lerret family – Anker, Dibba, Elizabeth, Mark, and Matthew. I also thank Brad Abrams, Alison Adams, Melanie Adem, Angela and Michael Allen, Elif Armbruster, Caroline Arnold, Christopher Beecroft, Pamela Beecroft, Robert and Mette Beecroft, Karlo Berger, Ruth Berry, Heather Blair, Leslie Bliss, Krista and Larry Bradley, Amey Callahan, Melani...

I thank my many communities of support, especially those members of the Circle H Ranch Hands, who provided meals, rides, humor, love, and support during some dark times. I am grateful for the ministers of Christ Church Cambridge, Mark Bozzuti-Jones, Joe Robinson, Jeff Mello, Jonathan Eden, and Stuart Forster, and the kindness and hospitality of the Sisters and associates at the Bethany House of Prayer, especially Mary Meader and Julia Slayton. I also thank those members of my other spiritual communities who prefer not to be named, for giving me the strength to live life on life’s terms.

I also thank my family, especially my incredible brother and sister-in-law, Paul and Jennifer Rodine, and my nieces Amalia and Theodora. In loving memory of my father, Dr. Elward T. Rodine,
Acknowledgments

and my grandparents, Dr. Milward T. Rodine, Elsie Rodine, the Reverend Bernard Spong, and Dr. Doris Spong. I also thank Louise Rodine Doucette, Edward Doucette, Soterios and Elizabeth Stavrou, and the rest of the Ahlbergs, Rodines, Spongs, Stavrous, and Walthers.

Finally, in memory of my beloved husband, Paul Jay Hardy, Jr. (1961–2011), for his kindness, abiding love, strength, and humor. I will keep him forever in my heart. And to our children, Eleanor and David – thank you for keeping me focused on the most important things in life – love, family, connection, humor, and music.
Preface

Ninety percent of the world market has embraced the paradigm shift of competition, privatization, and liberalization.


Forces of globalization have transformed the political and economic landscape in countries around the world, in areas ranging from economic policy to social policy. In recent years, liberalization, privatization, and deregulation have become commonplace in sectors once dominated by government-owned monopolies. Some of these shifts came with stunning speed, and on an unexpectedly global level. In telecommunications, for example, during the 1990s, more than 158 countries established new independent regulatory agencies and more than 126 countries privatized the state-owned telecom incumbent operator. Why did so many countries liberalize in such a short period of time? For example, why did both Denmark and Burundi, nations different along so many relevant dimensions, liberalize their telecom sectors around the same time?

I demonstrate how global markets affect domestic institutional innovations through a key mechanism of diffusion – through the interaction of international organizations and domestic states’ governments. I argue that international organizations – and not national governments or global market forces – are the primary drivers of policy convergence in the important arena of telecommunications regulation. I show that international organizations play a critical
role in the diffusion of domestic institutional innovations in three ways: they help create and shape preferences for reform, they provide forums for expert discussions, and they provide forums for the emergence of policy standards within the emerging regime for telecommunications regulation. Yet, I also show that international organizations and international policy convergence leave room for substantial variation among the national cases. I also carefully assess the balance between the international pressures that produce convergence and the domestic factors that account for national variations.

The Diffusion of Innovation Through Membership in International Institutions

This book addresses this important gap in the diffusion literature, as well as in conventional political economy explanations, by identifying specific actors and mechanisms associated with policy innovation in the telecommunications sector. In this regard, the diffusion of regulatory reform is said to occur when the prior adoption of a practice by one or more countries, such as the establishment of a separate regulatory authority, affects the probability of adoption in those countries that retain monopolistic, closed, telecommunications markets. The mechanisms for diffusion are critical, and this book argues that they reside in no small part in nations’ participation in international organizations. This argument builds upon some recent work in socialization theory and developments in international law (Johnston 2008; Raustiala 2002; Slaughter 2004).

Socialization through international organizations (in the three ways noted) helps explain many aspects of liberal policy adoption, from the overall direction of reform to the timing of reform enactment and some of the specific substantive regulations enacted. I argue that economic policy choice is conditioned by the choices of other countries and international organizations, but that countries do not merely receive policies “from above,” either through mechanisms of coercion or purely through top-down teaching. Yet, socialization through international organizations may not
affect all aspects of market-oriented telecommunications reform. Some of the scope conditions for this kind of argument may only apply in conditions of high uncertainty, with a substantial ideological consensus in favor of the appropriateness of the proposed policy innovations (e.g., the establishment of a new, separate telecom agency). For example, it may be that market competition best explains the spread of liberalization, and that domestic political and economic configurations coupled with a lack of global ideological consensus on privatization best explain the privatization (or lack thereof) of the state-owned telecom operator.

I first argue that international policy diffusion plays a critical role in explaining the spread and shape of liberal telecom reforms. Next, I show that international organizations are key actors and agents of diffusion in developing and promoting policies for regulatory reform in telecommunications. International organizations help create and shape preferences for reform and also provide forums for expert discussions and the emergence of policy standards within the new regime for telecom regulation.

Yet, although diffusion is one understudied factor critical to understanding the spread of liberal reforms in key policy areas, it cannot explain some policy decisions; for example, the decision to open economies to competition and to privatize the dominant state-owned firms. The pattern of implementation of liberal reforms can partly be explained by the different diffusion mechanisms working through interaction with international institutions, and partly by more conventional political economy explanations of interest groups and national institutions.

Global Markets and Government Regulation in Telecommunications sheds new light on old debates. First, this book highlights the importance and differential effects of the role of international organizations in the global spread of liberal policy reforms. Although many scholars assert the importance of international institutions, this is the first study to examine systematically how international institutions, in particular the World Trade Organization (WTO), the European Union (EU), and the Organization for Economic Cooperation and Development (OECD), play critical roles in the diffusion of liberal telecom reforms.
Second, this book recasts the long-standing debate over global convergence versus persistent national divergence in generating incentives and pressures for the emergence of common global standards while simultaneously creating significant space within which national governments and actors can craft autonomous policy responses. There is diversity within convergence. Thus, Global Markets and Government Regulation in Telecommunications is a story about common global changes with important domestic variations that go beyond “national styles of regulation” (Vogel 2006).

Third, this book bridges important literatures that too often talk past each other in assessing the current, more open global economy. Conventional political economy explanations of telecommunications policy reform focus primarily on domestic interest groups and state institutions, ignoring the importance of international organizations, international markets, and international policy diffusion (Levy and Spiller 1994; Noll and Rosenbluth 1995; Thatcher 1999). International relations scholarship focuses in general more on international organizations and member states (Checkel 2005; Finnemore 1993, 1996; Vreeland 2003), international regimes (Cowhey 1990; Sandholz 1993), or the enduring power of nation-states (Drezner 2007; Krasner 1991), and not as much on sources of global policy diffusion. For that matter, recent literature on global policy diffusion does not take into account the specific actors, mechanisms, and channels of international organizations (Levi-Faur and Jordana 2005; Simmons, Dobbin, and Garrett 2008).

This book, by contrast, focuses on the role of international organizations in the diffusion of regulatory reform, while addressing key drivers of variation at both the international and domestic levels of analysis. In doing so, it contributes to all of these literatures and prompts us to think differently about the interplay between international and national actors and institutions.

THE PUZZLE OF GLOBALIZATION

This book focuses on the global proliferation of independent regulatory agencies in telecommunications and the concomitant
spread of neoliberal policies that caused what seems, on the sur-
face, to be a wide degree of institutional convergence across a
broad range of countries. Yet, I show that, even amidst global-
ization, countries retained a considerable degree of autonomy in
the implementation of policies. This book builds on other, older
analyses of a regime for telecommunications (Cowhey 1990) and
tells a truly global story using cases from Europe.¹

The rapid and concurrent global transformation of the telecom
sector presents a puzzle that conventional political economy
accounts of institutional change do not and cannot explain. What
is needed is a new theory of how governments respond to global
pressures to create, transform, and regulate new markets and tech-
nologies, and how the international diffusion of policy ideas can
affect domestic capacity for regulation and economic policy. This
book proposes this theory: that international institutions influence
domestic state policy action in telecommunications. And, this book
not only proposes a new theory of international actor influence in
telecommunications – it has even more explanatory power than
current theories.

This is the puzzle: there is an emergence of potent international
actors in the last two decades of the twentieth century at the same
time that nations across the board are engaging in impressively
similar sector-specific regulatory change. These two phenomena
are connected, but, to date, the literature has not captured these
dynamics. This study brings it all together.

WHY SHOULD WE CARE?

Each person is a consumer of telecommunications, from our
iPhones to our laptops, and how we get access to the globalized
world is affected by political compromises in how governments
regulate technology and markets. How these rules are created and

¹ For an excellent reference of an emergent new regime in Africa, see Cogburn,
transformed affects who gets access to the increasingly globalized world and at what cost, and these are inherently important and political questions.

I demonstrate how some major international organizations, especially the WTO, EU, and OECD, played critical roles in structuring the international diffusion of domestic policy innovations, especially the introduction of competition into previously closed markets, the establishment of separate regulatory agencies, and the introduction of private sector participation. Other new actors emerged as well, including cross-border alliances of firms and networks of regulatory agencies.

Yet, despite global shifts indicating the increasing influence of these international organizations and layers of governance, the nation-state is alive and well. This book builds on other literatures (Berger and Dore 1996; Mosley 2003; Wibbels 2005) to argue that domestic national institutions continue to play a critical role even within the larger context of globalization, Europeanization, and other regional forces.

The proliferation of international institutions and their impact has become a central question in international relations, in analyzing how and when international institutions influence national policies (Martin and Simmons 1998). Many theories focus on the extent to which international institutions interact directly in their relations with states, through either a “teaching” or “learning” capacity (Barnett and Finnemore 2004; Finnemore 1993, 1996). Much less is known about how international institutions structure an environment in which new networks of subnational actors interact (Johnston 2008; Raustiala 2002; Slaughter 2004).

Telecommunications is an ideal lens through which to analyze this story of globalization and the role of international institutions, as it is a dynamic sector with global reach at the very heart of what is known to be globalization. Telecommunications affects people, firms, and governments, and how these evolving layers of governance have arisen affects known theories and policies about both international politics and markets. This is a story about globalization and the diffusion of technology and policies, with a tension between homogeneity and uniqueness. This story is
different, however, in showing diversity within convergence, particularly in the dramatic diffusion of regulatory change. All was accomplished within ten years, an astonishing pace for institutional and regulatory change.

**LIBERALIZATION, MARKET-ORIENTED REFORMS, AND RELEVANT QUESTIONS**

In the tradition of more careful conceptualization and measurement (Brady and Collier 2004), I use the term “liberal reform” in reference to more general movements and policies toward opening up new markets, lifting restrictions to markets that were closed, and allowing for new entrants. *Liberalization*, in turn, refers specifically to the lifting of ownership restrictions, quotas, and restrictions to entry and exit in the telecommunications sector. *Privatization* is a separate form of market-oriented reform, and is not always an actual market-oriented reform, as empirical research has shown that private monopolists often behave just as restrictively as state-owned monopolists. Furthermore, although deregulation seems to be an example of liberalization, it is not always clear that it leads to more open markets and less government control. Frequently, deregulation leads to *re-regulation*, or what Vogel has termed “freer markets, more rules” (Vogel 1996). By separating the concepts of liberalization, privatization, and re-regulation, we can achieve more analytical leverage to understand the contours of market-oriented reform within telecoms and, arguably, other sectors subject to the vagaries of the global market.

What is not clear is how such choices diffuse among disparate nations, or why one nation chooses a particular option over another. I argue that economic policy choice, particularly the decision to establish a separate regulatory authority for telecommunications, is partly conditioned on actions by other countries and by international organizations. I address two specific questions: how did these reforms travel? And how do governments and other actors learn to regulate “for competition”? These specific questions are important because how governments regulate the telecommunications sector has substantial implications for
overall competitiveness in the world economy, including strategic advantages in this key market sector (Bar and Borrus 1992).

How do governments learn how to regulate “for competition”? Vogel argues that, in the 1980s, what was known as deregulation actually entailed re-regulation, as governments had to introduce even more rules to enforce a freer market (Vogel 1996). This dynamic was taken to the next level in the 1990s and 2000s, as governments not only had to re-regulate sector-specific regulations but also countrywide competition rules. Many economists and practitioners advocated a shift from ex ante regulation to a more general competition authority (Shelanski 2002). The two prime examples of countries that tried this experiment, Australia and New Zealand, later reintroduced a sectoral regulator. Rather than following these two examples, most countries around the world created new regulatory bodies for telecommunications and the information economy.

Furthermore, as outlined later in my diffusion framework, policy makers and regulators joined together in several different groupings of international organizations and regulator networks to exchange best practices for telecom regulation and competition policy. These new transnational governance actors and mechanisms exert substantial influence on the scope and substance of domestic telecom regulations.