### Formal Models of Domestic Politics

Formal Models of Domestic Politics offers the first unified and accessible treatment of canonical and important new formal models of domestic politics. Intended for students in political science and economics who have already taken a course in game theory, the text covers eight classes of models: electoral competition under certainty and uncertainty, special interest politics, veto players, delegation, coalitions, political agency, and regime change. Political economists, comparativists, and Americanists alike will find models here central to their research interests.

The text assumes no mathematical knowledge beyond basic calculus, with an emphasis placed on clarity of presentation. Political scientists will appreciate the simplification of economic environments to focus on the political logic of models; economists will discover many important models of politics published outside of their discipline; and both instructors and students will value the numerous classroom-tested exercises.

Scott Gehlbach is Professor of Political Science, Lyons Family Faculty Fellow, and Romnes Faculty Fellow at the University of Wisconsin-Madison; Senior Research Fellow at the International Center for the Study of Institutions and Development at the Higher School of Economics, Moscow; and Research Associate of the Centre for Economic and Financial Research at the New Economic School in Moscow. A specialist in Russia, Professor Gehlbach has made fundamental contributions to the study of economic reform and other issues in political economy. Known for employing a wide range of research methods in his work, Gehlbach is the author of the award-winning Representation through Taxation: Revenue, Politics, and Development in Postcommunist States (Cambridge Studies in Comparative Politics) and numerous articles in top journals, including the American Political Science Review, the American Journal of Political Science, and the Journal of Politics. His work has been supported by two Fulbright-Hays Fellowships and many other grants. Professor Gehlbach received his Ph.D. in political science and economics from the University of California-Berkeley.

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# Formal Models of Domestic Politics

**SCOTT GEHLBACH** University of Wisconsin–Madison



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To Masha

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## Preface

This book is an introduction to formal models of domestic politics. It is based on a course I have taught at Wisconsin since 2004 (and at Harvard in 2012), and I expect that readers of the text will have the background that students in my course have had: a semester of game theory at the level of Osborne (2004) or McCarty and Meirowitz (2007) and familiarity with basic differential and integral calculus. My course is in the Political Science Department but has always attracted a few economists, and I anticipate that the book will similarly be useful to scholars in both disciplines.

Notwithstanding this claim to interdisciplinarity, a primary goal in writing this book has been to strip away some of the economics from well known models of political economy. I cut my teeth in graduate school on Persson and Tabellini (2000), from which I learned much, but I quickly learned that I would need to teach a lot of economics if I were to use that text in a political science course. More generally, formal models of domestic politics are as likely today to appear in economics as in political science journals, and some translation is necessary if they are to be accessible beyond the economics discipline. Conversely, there are numerous important models published in political science journals that are not well known among economists; this text provides an introduction.

Other than Persson and Tabellini (2000), the only other contemporary texts covering related material are McCarty and Meirowitz (2007) and Austen-Smith and Banks (2005), but these serve purposes different from my own. (Two earlier texts—Ordeshook, 1986, and Morrow, 1994—predate many of the models covered here.) As already indicated, McCarty and Meirowitz (2007) is primarily a game theory text, albeit one targeted to political scientists; my book is intended for students who know some game theory and want to learn particular classes of models.

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#### Preface

Austen-Smith and Banks (2005) provides a thorough treatment of select strategic models of politics, but it assumes a far stronger technical background than does this book. (I do not cover social choice theory, which is the topic of Austen-Smith and Banks, 1999.) Finally, my aim is different from that of Weingast and Wittman (2006) and various other handbooks, which are superb resources but not textbooks per se.

In writing what is essentially the first textbook of its type, I have faced some choices. In principle, I could have attempted an exhaustive but cursory summary of several decades' work, leaving readers to go back to the original papers once they had discovered a model to their liking. I opted instead for the other extreme: a hopefully careful treatment of canonical models of domestic politics, together with some important models from the more recent literature. The field is vast, and I apologize to the authors of papers not covered. In some cases (e.g., the rapidly proliferating work on nondemocratic politics), it was my judgment that the literature was just too fresh for an authoritative treatment. I fully anticipate that many instructors will find certain models missing, and I expect that some of them will choose to supplement this text with other readings.

That said, most graduate students do not have the background to fully absorb the typical research paper in formal theory. In economics, textbooks have long served as a bridge between introductory training and the literature. In similar fashion, I have endeavored to extract the essential insights from sometimes intricate models so that they could be presented and solved in the classroom. (A useful exercise is to have students choose one or two of the original papers to see what has been lost in the textbook treatment.) There is not an equation here that has not been written on a blackboard. Similarly, all exercises—some of them also based on research papers—have been tested in problem sets and exams. A solutions manual is available to instructors upon request.

The text is organized around eight classes of models, each of which constitutes a single chapter: electoral competition under certainty and uncertainty, special interest politics, veto players, delegation, coalitions, political agency, and regime change. Instructors wishing to rely solely on this book should find more than enough to fill a semester. Very roughly speaking, the material in later chapters is more difficult than what comes before. In a few places, I have further set off sections that in my judgment are more demanding than a preceding discussion of the same topic. Such material, which might be omitted from an introductory course, can be identified by italicized section titles.