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## **Political economy: Institutions, competition, and representation**

Proceedings of the Seventh International Symposium in Economic Theory and Econometrics

Edited by

WILLIAM A. BARNETT Washington University in St. Louis MELVIN J. HINICH University of Texas NORMAN J. SCHOFIELD Washington University in St. Louis



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### Series editor's preface

The contents of this volume comprise the proceedings of the conference, "Political Economy: Institutions, Competition, and Representation," held at Washington University in St. Louis on May 22–25, 1991. The objective was to present some of the recent developments in political economy and political science formal theory, along with recent applications of the two closely related areas of theoretical research. Advances in the interface between economics and political science have rendered this area of research very productive in recent years. An introductory overview of the papers in the volume was contributed by Norman Schofield, who is one of the co-editors of the volume and one of the co-organizers of the symposium. The overview includes his personal perspective regarding the conference papers and symposium topics.

Two interesting themes are especially evident in this volume. One is the important role in political economy of research on conflict and communication between government and voters; the other is the possible importance of mathematical chaos in modeling political economy. In economic theory, it is now well known that chaos can appear for some parameter settings in even the most classical dynamic models of growth with continuously cleared perfect markets, rational expectations, and Pareto-optimal solution paths.<sup>1</sup> At present, the only confirmed empirical discovery of chaos in economic data is with Barnett's Divisia monetary aggregate data (Barnett and Chen 1986, 1988a,b).<sup>2</sup> The chapter by Barnett in this volume provides theoretical speculations in political economy that may explain

<sup>&</sup>lt;sup>1</sup> In the case of overlapping-generations modeling, see e.g. Grandmont (1985). In the framework of a Ramsey-type optimal-growth model with infinite lifetimes, see e.g. Boldrin (1989).

<sup>&</sup>lt;sup>2</sup> Also see Barnett and Choi (1989). The Barnett and Chen discovery was produced by applying nonparametric algorithms used in the experimental physics literature. Those results have been replicated and confirmed by DeCoster and Mitchell (1991). The findings have been further confirmed with conventional statistical testing methods by Barnett and Hinich (1992a,b), using bispectral methods in the frequency domain. Additional tests by

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the source of that chaos. In particular, it is found that dynamic gaming between the central bank and the private sector may be relevant to understanding Barnett and Chen's empirical discovery. Further speculations regarding the relevancy of chaos to political economy in general can be found in Schofield's introductory overview and in Ordeshook's Chapter 4 of this volume.

Part I contains overviews of relevant research in the field and general insights into that literature. The rest of the volume is divided into four parts, spanning the scope of the technical papers presented in the conference. Part II concerns representation and voting; Part III, political institutions; Part IV, political competition; Part V, information acquisition by government; and Part VI, government behavior.

Thanks are due to Barry Nalebuff (Yale University), Barry Weingast (Hoover Institution), Howard Rosenthal (Carnegie-Mellon University), Ian Shapiro (Yale University), Kenneth Shepsle (Harvard University), Mary Olson, John Nachbar, Murray Weidenbaum, Anne Sholz, Paul Rothstein, Gary Miller, Robert Parks, Krisha Ladha (Washington University in St. Louis), John Ledyard (California Institute of Technology), and Rebecca Morton (Texas A&M University) for their participation in the conference. I am particularly grateful to Howard Rosenthal and Douglass North, who substantially assisted the editors in the organization of the conference, and to Annette Milford of the Center in Political Economy for her assistance in running the conference and for help in preparing the manuscript.

The conference that produced this proceedings volume is the seventh in a conference series entitled *International Symposia in Economic Theory* and Econometrics. The proceedings series is under the general editorship of William Barnett. Individual volumes in the series generally have coeditors, and the series has a permanent Board of Advisory Editors. The symposia in the series are sponsored by the  $IC^2$  Institute at the University of Texas at Austin and are cosponsored by the RGK Foundation.<sup>3</sup> This seventh conference was also cosponsored by the Faculty of Arts and Sciences of Washington University in St. Louis along with the Center in Political Economy and the Center for the Study of American Business at that university, as well as the Department of Economics and the Graduate School of Business at the University of Texas at Austin.

The first conference in the series was co-organized by William Barnett and Ronald Gallant, who also co-edited the proceedings volume. That

Barnett, Gallant, Hinich, and Jensen (1992), including the use of recent neural net methods, have narrowed down the number of monetary aggregates passing the chaos tests.

<sup>3</sup> IC<sup>2</sup> stands for Innovation, Creativity, and Capital.

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volume has appeared as the volume 30, October/November 1985 edition of the *Journal of Econometrics* and has been reprinted as a volume in this Cambridge University Press monograph series. The topic was "New Approaches to Modeling, Specification Selection, and Econometric Inference."

Beginning with the second symposium in the series, the proceedings of the symposia appear exclusively as volumes in this Cambridge University Press monograph series. The co-organizers of the second symposium and co-editors of its proceedings volume were William Barnett and Kenneth Singleton. The topic was "New Approaches to Monetary Economics." The co-organizers of the third symposium, which was on "Dynamic Econometric Modeling," were William Barnett and Ernst Berndt; and the coeditors of that proceedings volume were William Barnett, Ernst Berndt, and Halbert White. The co-organizers of the fourth symposium and coeditors of its proceedings volume, which was on "Economic Complexity: Chaos, Sunspots, Bubbles, and Nonlinearity," were William Barnett, John Geweke, and Karl Shell. The co-organizers of the fifth symposium and co-editors of its proceedings volume, which was on "Nonparametric and Semiparametric Methods in Econometrics and Statistics," were William Barnett, James Powell, and George Tauchen. The co-organizers and proceedings co-editors of the sixth symposium, which was on "Equilibrium Theory and Applications," were William Barnett, Bernard Cornet, Claude d'Aspremont, Jean Gabszewicz, and Andreu Mas-Colell.

The co-organizers of the seventh symposium, which produced the current proceedings volume, were William Barnett, Melvin Hinich, Douglass North, Howard Rosenthal, and Norman Schofield. The co-editors of this proceedings volume are William Barnett, Melvin Hinich, and Norman Schofield. The eighth symposium in the series was part of a large-scale conference on "Social Choice, Welfare, and Ethics." That conference was held in Caen, France on June 9–12, 1993. The co-editors of that proceedings volume will be William Barnett, Maurice Salles, Norman Schofield, and Hervé Moulin.

The intention of the volumes in the proceedings series is to provide refereed journal-quality collections of research papers of unusual importance in areas of currently highly visible activity within the economics profession. Because of the refereeing requirements associated with the editing of the proceedings, the volumes in the series will not necessarily contain all of the papers presented at the corresponding symposia.

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