

Laboratory experimentation in economics

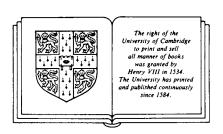


# Laboratory experimentation in economics

Six points of view

Edited by

ALVIN E. ROTH
University of Pittsburgh



#### CAMBRIDGE UNIVERSITY PRESS

Cambridge New York New Rochelle Melbourne Sydney



#### CAMBRIDGE UNIVERSITY PRESS

Cambridge, New York, Melbourne, Madrid, Cape Town, Singapore, São Paulo

Cambridge University Press

The Edinburgh Building, Cambridge CB2 2RU, UK

Published in the United States of America by Cambridge University Press, New York

www.cambridge.org

Information on this title: www.cambridge.org/9780521333924

© Cambridge University Press 1987

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 1987

This digitally printed first paperback version 2005

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

Library of Congress Cataloguing in Publication data

Laboratory experimentation in economics.

1. Economics - Experiments. I. Roth, Alvin E.,

1951 -

HB131.L32 1987 330'.0724 87-10343

ISBN-13 978-0-521-33392-4 hardback ISBN-10 0-521-33392-X hardback

ISBN-13 978-0-521-02281-1 paperback ISBN-10 0-521-02281-9 paperback



## **Contents**

Acknowledgments List of contributors		<i>page</i> vii viii
1	Introduction and overview  Alvin E. Roth	1
2	Bargaining phenomena and bargaining theory Alvin E. Roth	14
3	Equity and coalition bargaining in experimental three-person games Reinhard Selten	42
4	The psychology of choice and the assumptions of economics  Richard Thaler	99
5	Hypothetical valuations and preference reversals in the context of asset trading  Marc Knez and Vernon L. Smith	131
6	Economics according to the rats (and pigeons too): what have we learned and what can we hope to learn?  John H. Kagel	155
7	Dimensions of parallelism: some policy applications of experimental methods  Charles R. Plott	193

v



## Acknowledgments

The chapters in this volume were commissioned following a conference entitled "Laboratory Experimentation in Economics" at the University of Pittsburgh on May 16–18, 1985. I particularly want to thank President Wesley Posvar, Dean Jerome Rosenberg, and my colleague Professor Jack Ochs, all of the University of Pittsburgh, whose support was invaluable.



### **Contributors**

JOHN H. KAGEL is Professor of Economics and Director of the Center for Experimental Economics at the University of Houston. He received his Ph.D. from Purdue University in 1970. He has been a National Fellow at the Hoover Institution and an Earhart Foundation Fellow.

MARC KNEZ is a graduate student at the University of Pennsylvania. He began his collaboration with Vernon Smith when he was at the University of Arizona.

CHARLES R. PLOTT is Professor of Economics and Director of the Program for the Study of Enterprise at the California Institute of Technology. He received his Ph.D. from the University of Virginia in 1965. He has been a Guggenheim Fellow and a Fellow at the Center for Advanced Study in the Behavioral Sciences and is a Fellow of the AAAS and the Econometric Society.

ALVIN E. ROTH is A. W. Mellon Professor of Economics at the University of Pittsburgh. He received his Ph.D. from Stanford University in 1974. He received the 1980 Founders' Prize of the Texas Instruments Foundation, has been a Guggenheim Fellow and an Alfred P. Sloan Research Fellow, and is a Fellow of the Econometric Society.

REINHARD SELTEN is Professor of Economics at the University of Bonn in the Federal Republic of Germany. He received his Ph.D. in mathematics from the University of Frankfurt in 1961 and his habilitation in economics, also from the University of Frankfurt, in 1968. He is a member of the Northrhine-Westfalian Academy of Sciences and a Fellow of the Econometric Society.

VERNON L. SMITH is Professor of Economics and Research Director, Economic Science Laboratory at the University of Arizona. He received his B.S.E.E. from the California Institute of Technology in 1949 and his Ph.D. in economics from Harvard University in 1955. He has been a Ford Foundation Fellow, Fellow at the Center for Ad-

viii



Contributors ix

vanced Studies in the Behavioral Sciences, and Sherman Fairchild Distinguished Fellow (California Institute of Technology).

RICHARD THALER is Professor of Economics at Cornell University's Johnson Graduate School of Management. He received his Ph.D. from the University of Rochester in 1974. He has been a visiting scholar at the National Bureau of Economic Research in Stanford, California, and a visiting professor at the University of British Columbia.