Volume Title: Annals of Economic and Social Measurement, Volume 6, number 3

Volume Author/Editor: NBER

Volume Publisher: NBER

Volume URL: http://www.nber.org/books/aesm77-3

Publication Date: July 1977

Chapter Title: Introduction to the Special Issue on Control Theory

Chapter Author: Edison Tse, David Kendrick

Chapter URL: http://www.nber.org/chapters/c10551

Chapter pages in book: (p. i - ii)

INTRODUCTION TO THE SPECIAL ISSUE
ON CONTROL THEORY

BY EDISON TSE and DAVID KENDRICK

Co-Editors of the Special Issue
Peggy Mills, Assistant to the Editors

The Fifth NBER Stochastic Control Conference was held in Palo Alto, California on May 26–28, 1976. This conference was sponsored by the Conference on the Computer in Economic and Social Research of the NBER with funds provided to the NBER by the National Science Foundation.

Most of the papers were submitted in response to an announcement and call for paper circulated in February 1976. Forty-seven papers were presented on applications and methods in control theory. This and the previous volume contain about a third of the papers presented at the conference. Six papers are included in this volume.

William Conrad's paper is concerned with the effect of measurement errors in macroeconomic variables on the determination of optimal levels of fiscal and monetary policy. Conrad's paper is followed by Kent Wall's comment which indicates how measurement error problems have been handled in the control literature.

Morf and Kailath present some recent results in least-squares estimation theory including rapid computational methods which may prove particularly useful in work on large macroeconometric models.

Carl Palash has written about his experiments with the specification of the criterion function. Since this is a matter of substantial controversy we have asked David Livesey and Franklin Shupp to publish comments on the Palash article.

Donald Sant's article provides a clear and detailed derivation of generalized least squares applied to time varying parameter models. Tom Cooley's short comment following Sant's article provides additional references on previous work on this problem.

D. D. Siljak's article is in the tradition of general equilibrium models and provides new results on stochastic stability in competitive equilibrium.

David Sworder's article provides a control policy which minimizes the worst possible cost of operation in stochastic control problems.

We would like to take this opportunity to thank those referees who

reviewed the articles submitted. The referees are

Masanao Aoki
Brian Arthur
Rick Ashley
Yaakov Bar-Shalom
Martin Baughman
D. Brito
Peter Caines
Gregory Chow
Thomas Cooley
Roger Craine
J. B. Cruz, Jr.
M. Desai
Peter Frick
Kenneth Garbade
Vince Geraci
Richard Gilbert
Roger Gordon
Don Hanson
Art Havenner
Mike Kennedy
Woo Sik Jung

Leon Lasdon
David Luenberger
David Livesey
Steve Marcus
Jerry Mendel
C. Negoita
Fred Norman
Carl Palash
David Peterson
Robert Pindyck
Donald Sant
Alexander Sarris
D. Sengupta
Franklin Shupp
Bruno Sitzia
H. O. Stekler
P. A. V. B. Swamy
James Sweeny
David Sworder
Steve Turnovsky
Kent Wall