

Lecture Notes in Economics and Mathematical Systems

Managing Editors: M. Beckmann and H. P. Künzi

141

Mathematical Economics and Game Theory

Essays in Honor of Oskar Morgenstern

FB Mathematik TUD



58271276

Edited by R. Henn and O. Moeschlin



Fachbereich Mathematik
Technische Hochschule Darmstadt
Bibliothek

Inv.-Nr. B 16 023

Springer-Verlag
Berlin · Heidelberg · New York 1977

C O N T E N T S

List of Contributors

R. Henn O. Moeschlin	The scientific work of Oskar Morgenstern	1
-------------------------	--	---

PART I: GAME THEORY

C. Berge	Vers une théorie générale des jeux positionnels	13
D. Bierlein	Erweitertes Sattelpunktkriterium und ϵ -Rand-Spiel	25
W.A. Brock	Differential games with active and passive variables	34
E. Kofler G. Menges	Stochastic linearisation of indeterminateness	53
W.F. Lucas	The existence problem for solutions	64
G. Owen	Values of games with a priori unions	76
W. Richter	Core, Lindahl equilibria and revelation of preferences	89
J. Rosenmüller	Remark on the transfer operator and the value-equilibrium equivalence hypothesis	108
W. Rupp	ϵ -Gleichgewichtspunkte in n-Personen- spielen	128
R. Selten	A simple game model of kidnapping	139
I. Ståhl	An n-person bargaining game in the extensive form	156
L.G. Telser	An extreme application of core theory	173
E. Vilkas	Optimality and dynamics in coalitional games	181

PART II: UTILITY THEORY AND RELATED TOPICS

P.C. Fishburn	Expected utility theories: a review note	197
H. Föllmer	The Bernoulli principle and the Dirichlet problem	208
S. Fuchs-Seliger	Bemerkungen zur Widerspruchsfreiheit der Axiome in der Theorie der revealed preference	217
W. Krelle	Dynamic utility functions	226
A. Wieczorek	On representations of social preferences - an algebraic approach	234
E.W. Zachow N. Schmitz	Eine Axiomatisierung des erwarteten Nutzens	250

PART III: ECONOMIC MODELS

D. Fischer	Externalities and interdependence in a von Neumann growth model	261
G. Gabisch	International trade and game theory in a context of economic growth	290
V.L. Makarov	Economic equilibrium under technological changes	308
D. Pallaschke	Infinite-dimensional von Neumann models	312
I. Sohn	Some variations on the Mardon model	322

PART IV: ECONOMIC THEORY

Y. Amihud	On the consumer demand theory under uncertainty	343
K. Ballarini P. Kischka	Anwendung eines verallgemeinerten Periodizitätsbegriffes in makro-ökonomischen Modellen	356
M.J. Beckmann	A paradox in consumption theory	365
G. Bol	An application of the theorem of Whitney in joint production theory	370
W. Eichhorn H. Funke F. Stehling	Spieltheoretische Behandlung der Preisbildung vor und nach Unternehmenszusammenschlüssen	376
W. Roedding	A new approach to modelling some economic problems	388
A. Schotter	Economically efficient and politically sustainable economic contraction	400
R.W. Shephard	Dynamic indirect production functions	418
F.R. Shupp	Dynamic limit pricing in a mature market	435
C. Tisdell	Coalitions and clubs - aspects of their formation and economic efficiency	446

PART V: ECONOMETRICS AND STATISTICS

S.P. Burley	An econometric study of copper market dynamics	459
-------------	--	-----

B.H. Goldstein H. Kogelschatz	Bemerkung zur Abschätzung des Wertes bei Stop-Problemen	466
H. Hauptmann	On the identifiability of continuous time economic models . . .	473
C. Hild	Eine Bemerkung zur Anwendung der MINIQUE-Methode	487
E.P. Howrey	The use of preliminary data in economic time-series prediction . . .	493
M. Straub	Minimaxschätzungen bei Vorbewertung	505
G. Tintner A. Sondermann	Statistical aspects of economic aggregation	516
H. Wold	On the transition from pattern cognition to model building	536

PART VI: DIFFERENT TOPICS

S.W. Becker R.L. Weil	Determination of risk preferences to facilitate customer-portfolio manager interactions	553
S.J. Brams	When is it advantageous to cast a negative vote ?	564
H. Brems	A bond-share portfolio maximizing von Neumann-Morgenstern utility of present real worth under inflation	573
O. Hagen	Utility and morality	588
A. Jaeger	A plea for preordinators	605
M. Suzuki M. Nakayama	The cost assignment of the cooperative water resource development - A game theoretical approach -	616

A D D E N D U M

K.J. Arrow	The Genesis of Dynamic Systems Governed by Metzler Matrices	629
J. Łoś M.W. Łoś	Extremal Properties of Equilibria in von Neumann Models	645
M. Shubik	Banks, Insurance and Futures Markets of a Trading Economy with Money, Exogenous Uncertainty and an Optimal Bankruptcy Rule	668
L.W. Mc Kenzie	A New Route to the Turnpike	683

A BIBLIOGRAPHY OF THE WORK OF OSKAR MORGENSTERN	695
---	-----