

INTRODUCING MACROECONOMIC MODELLING

AN ECONOMETRIC STUDY OF THE UNITED KINGDOM

P. ARESTIS and G. HADJIMATHEOU



M

Contents

<i>Introduction</i>	ix
<i>Acknowledgements</i>	xv
1 ECONOMIC MODELLING	1
Specification	3
Measurement Problems	15
Estimation	17
Model Selection	25
2 CONSUMERS' EXPENDITURE	33
Aggregate Propensity to Consume	34
Composition of Consumers' Expenditure	37
Consumers' Expenditure on Durables and Non-durables	37
Measurement Problems	38
Three Major Theories of Consumers' Behaviour	39
A Model of the Average Propensity to Consume	44
Empirical Evidence	49
Conclusions	53
3 INVESTMENT AND STOCKBUILDING	55
Volume and Composition of Investment and Stockbuilding	56
Determination of Fixed Investment Expenditure	59
Determinants of Stockbuilding	69
Determinants of Capacity Utilisation and Industrial Production	72
4 THE TRADE BALANCE	73
Import Penetration	74
Modelling Imports and Exports	78
Imports	79
Exports	82
Import Prices and Export Prices	86

5	THE MONETARY SECTOR	88
	Definitions of Money	88
	The Transmission Mechanism of Monetary Policy	92
	The Controllability of Money Stock	96
	The Rest of the Monetary Sector	99
	The Government Budget Constraint (GBC)	100
	Empirical Evidence	102
6	THE GOVERNMENT SECTOR	110
	Expanding State Activity - Theoretical Foundations	111
	Size and Composition of Government Expenditure, 1955-77	116
	Determinants of Government Expenditure	121
	Determinants of Government Revenue	125
	Empirical Evidence	126
7	INFLATION AND UNEMPLOYMENT	130
	Theoretical Considerations	132
	The Expectations Hypothesis and the Natural Rate of Unemployment	133
	Keynesian Unemployment Reconsidered	138
	Inflation-Unemployment and the Empirical Evidence	141
8	THE FULL ANNUAL MODEL IN SUMMARY FORM	150
	Summary of Instrumental-Variables Technique for the Annual Model	150
	Definition of Variables and Sources	157
	Endogenous variables	157
	Exogenous variables	159
	Some Important Features of the Model	160
9	DYNAMIC BEHAVIOUR AND POLICY CHARACTERISTICS OF THE MODEL	166
	The Meaning of Simulation	166
	Simulation Results of the Annual Model	174
	Model Behaviour and Dynamic Multipliers	185
	Policy Optimisation: The Optimal Control Approach	200
	Optimal Control in the Annual Model	205
	<i>Appendix: OLS - Estimates of Full Annual Model</i>	211
	<i>End-notes</i>	218
	<i>Bibliography</i>	226
	<i>Index</i>	242