## **Contents**

Pr	List of figures Preface Acknowledgements		
In	trodi	uction	1
Pa	ırt I	Business cycles	
	Intr	oduction to business cycles	15
1	Sun	spot and Venus theories of the business cycle	18
	1.1	Jevons' sunspot theory	18
	1.2	Moore's Venus theory	26
	1.3	The decline of periodic cycle analysis	34
2	Measuring and representing business cycles		40
	2.1	Juglar's credit cycle	41
	2.2	The statistical approach of W. C. Mitchell	44
	2.3	Persons and business barometers	56
	2.4	The business cycle research institutes	64
	2.5	Statistical economics and econometrics	68
		Addendum: graphs and graphic methods	70
3	Random shocks enter the business cycle scene		73
	3.1	The experiments of Yule and Slutsky	74
	3.2	Frisch's time-series analysis	83
	3.3	Frisch's rocking horse model of the business cycle	90
4	Tinbergen and macrodynamic models		101
		The Dutch model	102
	4.2	The first League of Nations' report	108

	4.3	The second League of Nations' report	114	
	4.4	The critical reaction to Tinbergen's work	121	
Pa	rt II	Demand analysis		
	Intro	oduction to demand analysis	133	
5	Narı	rowing the data-theory gap in demand analysis	136	
	5.1	Difficulties in early statistical measurements of demand	136	
	5.2	Static theory and time-series data	142	
	5.3	Econometric models of demand	152	
	5.4	The data-theory gap under review	159	
6	The evolution of identification questions			
	6.1	The emergence of correspondence problems	163	
	6.2		169	
	6.3	The identification of two relationships	176	
	6.4	Back to the single demand curve	187	
Pa	rt III	Formal models in econometrics		
	Intr	oduction to formal models	193	
7	Erro	ors-in-variables and errors-in-equations models	194	
	7.1	Errors and the single equation	195	
	7.2		204	
	7.3	Postscript: measurement errors and the method of		
		instrumental variables	220	
8	Haavelmo's probability model		229	
	8.1	Statistics without probability	230	
	8.2	Signs of change	238	
	8.3	Haavelmo's probabilistic revolution in econometrics	242	
	8.4	The new consensus	251	
Co	Conclusion			
Re	References			
In	dex		281	