## Contents

List of figures	x
List of tables	xi
Acknowledgements	xiii
Introduction	1
Opening Pandora's jar	1
Overview of the nature and structure of the book	2
Part I A sketch of the argument	7
1 The limits to growth in organic economies	9
The views of the classical economists	10
The energy constraint	13
Production and reproduction	17
Conclusion	21
2 The transition from an organic to an energy-rich economy	26
Agricultural growth, industrial growth, and	
transport improvements	28
Manpower productivity in agriculture	33
The energy revolution	36
Conclusion	47
Part II Favourable developments	53
3 Agricultural change and urbanisation	55
Urban growth	58
The consumer revolution	68
The agricultural system	73
The rise in agricultural output	78

vii

viii Contents

	The London effect	88
	Conclusion	90
4	Energy and transport	91
	The history of energy consumption	91
	Coal production and transport provision	101
	Other improvements in transport facilities	108
	Conclusion	110
5	Occupational structure, aggregate income, and	
	migration	113
	Occupational structure and migration	113
	Occupational change and aggregate income	127
	Aggregate income trends and migration	135
	Conclusion	138
6	Production and reproduction	140
	The components of population change	144
	England in a wider setting: the concomitants of	
	faster population growth	152
	Regional diversity	163
	Conclusion	172
	Retrospect of Part II as a whole	175
Pa	rt III What set England apart from her neighbours	179
7	The timing and nature of change in the industrial	
	revolution	181
	Preliminary considerations	181
	Relative growth rates	187
	The escape from the constraints of an organic economy	193
	The changing character of the growth surge	196
	Why the growth surge continued	198
	A summary of the character and timing of the changes which took place	205
o	•	
8	Modernisation and the industrial revolution	211
	Introductory comment	211
	England and the Netherlands	216

Contents ix

The relationship between industrialisation and	
modernisation	225
National entities and lopsided growth	228
Conclusion	232
Part IV Retrospective	237
9 The industrial revolution and energy	239
The energy revolution	239
Pandora's jar again	245
Appendix	251
Bibliography	258
Index	268