

CONTENTS

Preface	v
List of abbreviations	xiv
About the authors	xvi

Part I: Introduction

1. Introduction, by Gijsbert van Liemt	3
The context	3
The national perspective	7
The industry perspective	11
The company perspective	13
The worker perspective	18
Summary	21
2. New theories of international trade and the pattern of global specialisation, by Richard G. Harris	25
Introduction	25
Traditional trade theories: Static approaches and evidence	25
Neotechnology approaches to international trade	30
Market structure: Scale economies, product differentiation and entry deterrence as determinants of trade patterns	35
North-South trade, adjustment problems and trade-industrial policy	45
Conclusion	48

Part II: The sector studies

3. The automotive industry: The permanent revolution, by Peter O'Brien	53
Overview	53
The statistical picture	55
The forces driving reorganisation	63
Investment strategies and adjustment	67
The reorganisation of the workplace	75

Industry on the move

Government policies and industry reorganisation	79
The directions of future restructuring	81
4. The impact on employment and income of structural and technological changes in the clothing industry, by Dean Spinanger	83
Introduction	83
Recent trends in international trade, production, employment and income	85
Technology in the clothing industry: An overview of trends	98
Government intervention and its effect on income and employment	100
Adjustment strategies and their impact on income and employment	105
Some concluding remarks	114
5. The internationalisation of the aircraft industry: Substance and myth, by Daniel Todd	117
Introduction	117
The structural background	117
The extent of internationalisation	128
Spatial divisions of labour, technology transfer and internationalisation	136
Conclusion	141
6. Structural change in the world steel industry: A North-South perspective, by Bernard Keeling	149
Steel consumption	149
Production	155
International trade	157
Changing industry structure	160
Raw materials	164
Productivity and employment	165
Future trends in consumption	168
Developing countries' advantages and disadvantages	171
Conclusion	173

Part III: The case studies

7. Structural adjustment in the United States steel industry, by Kent Jones	181
Introduction	181
The sources of competitive decline	186
Resisting adjustment: The tradition of protectionism	190
Channels of adjustment: The market response	192
Conclusion	204
8. Product differentiation and process innovation in the Italian clothing industry, by Graziella Fornengo Pent	209
Introduction	209
Characteristics of the industry	209

Structure and performance	213
The location of the clothing industry	219
The case of Benetton	223
Employment and labour costs	225
Industrial policy	227
Challenges for the future	230
9. Government policy, industrial development and the aircraft industry in Indonesia and Singapore, by Pang Eng Fong and Hal Hill	235
Introduction	235
Development strategies in Indonesia and Singapore	236
The aerospace industry in Indonesia	237
The aerospace industry in Singapore	245
The role of the State and the industry's prospects	252
Conclusion	256
10. Structural change in Mexico's motor vehicle industry (1977-89), by Juan Carlos Moreno Brid	259
Introduction	259
Historical background	259
Growth via export promotion	262
Labour relations and workers' response	273

Part IV: Conclusions

11. The impact of structural change on trade unions, by Edward Sussex	281
Introduction	281
Effects of structural change on trade union membership	282
The trade union response to the membership problem	287
Further effects of structural change on trade union power	294
Conclusions	307
12. Summary and conclusions, by Gijsbert van Liemt	309
Relocation	309
Adjustment	314
Bibliography	323

List of tables

1.1 The share of major regions in world production (1967-89)	7
1.2 Trends of domestic demand in volume terms by branch of industry in the European Community, the United States and Japan	12
3.1 The locational pattern of world vehicle production, 1970-90	56
3.2 Foreign production of passenger cars by the world's leading corporations, early 1990s	57
3.3 Indicators of demand potential for passenger cars in "new" growth countries, early 1990s	59

Industry on the move

3.4	Passenger cars: Export/production ratios in selected countries, 1980-90	61
3.5	Total import penetration and Japanese import penetration in selected passenger car markets, 1980-90	62
3.6	Absorption of world vehicle exports, 1980-89	62
3.7	The evolution of employment in the passenger car industry, selected countries, 1981-88	76
3.8	Net hourly earnings of production workers in the automotive industry, selected countries, 1989	77
4.1	Factor intensity of clothing, textiles and total industry in the Federal Republic of Germany, 1973, 1980 and 1988	84
4.2	Changes in clothing exports by region, country or area, 1980-85/88	86
4.3	Import penetration ratios for the clothing, textile and manufacturing industries in North America, EC12 and Japan	88
4.4	International trade in clothing (SITC 84): World rankings of exports from selected ICs and DCs	90
4.5	Importance and performance of the clothing industry in selected countries, 1973-87	93
4.6	Employment and income in the clothing industry, 1974 and 1986	94
4.7	Employment in the clothing industry, 1980-88 and female employment shares, 1985	95
4.8	Unit export values in selected developing countries and areas, men's and women's outerwear, 1973-85	104
4.9	Capital-intensity of clothing, textiles and total manufacturing in the Federal Republic of Germany, 1970-87	108
5.1	European aircraft industry employment, 1989	119
5.2	Breakdown of United States aerospace industry employment	120
5.3	Major employers in aerospace manufacturing, 1990	123
5.4	Principal NIC Tier 1 firms	124
5.5	United States industrial R&D expenditures	125
5.6	Multinational aircraft programme	131

Appendix tables

1.	United States aerospace industry average annual employment, 1961-85	145
2.	Leading Tier 1 airframe enterprises	146
3.	Leading Tier 1 aero-engine enterprises	146
4.	National endowments of Tier 2 firms	147
5.	NIC/developing country licensed manufacture of aircraft	148
6.1	Main markets for each steel product group	150
6.2	Apparent steel consumption per head in larger countries or areas	153
6.3	Materials intensity of GDP, 1968, 1984	156
6.4	Steel consumption, production and trade by area, 1960 and 1989	158
6.5	Employment in steelmaking in OECD countries, 1974-89	166
6.6	Percentage change in employment and output in OECD countries, 1974-89	167
6.7	Hourly compensation costs for production workers in iron and steel manufacturing, 1975 and 1990	169

Appendix tables

1.	Apparent steel consumption of world, and of eight groups, 1960-89	175
2.	Apparent steel consumption in developing countries and areas, 1960-89	176
3.	Crude steel production of world, and of eight groups, 1960-89	177
4.	Crude steel production in developing countries and areas, by main producer and principal regional grouping, 1960-89	178
7.1	United States integrated producers, 1989	182

7.2	Production of raw steel and shipments and imports of steel products in the United States, 1959-90	184
7.3	Reconstituted mills: Deliveries of major mill products, 1989-90	205
8.1	Italian clothing industry: Average unit values of imports and exports	211
8.2	Some economic indicators of the Italian clothing industry	212
8.3	Growth of Italian manufacturing employment by size classes of establishments	215
8.4	Plants of the Italian clothing industry by employment classes (1971-81)	216
8.5	Some economic indicators of the Italian clothing firms with more than 20 employees (1986)	217
8.6	Employment in the Italian clothing industry by main geographical area (1971-81)	219
8.7	Some indicators of the internationalisation of the Italian clothing industry	222
8.8	Clothing employment in plants with at least 50 employees	226
8.9	Italian labour costs in a European perspective	227
9.1	Production of helicopters and planes: Indonesia	238
9.2	Principal statistics for "other transport equipment" industry	239
9.3	Indonesia's trade in aircraft and parts, 1975-89	240
9.4	A profile of IPTN, 1976-85	243
9.5	Singapore: Key statistics of aerospace/aircraft-related industries, 1977-88	246
9.6	Singapore: Principal statistics of the aerospace industry, 1980-88	247
9.7	Singapore: Details of sales (\$ million) of aerospace industry, 1980-88	250
10.1	Motor vehicle industry, production plants established in Mexico in the third phase	265
10.2	Real gross domestic product and employment: Motor vehicle and manufacturing industries and the economy, 1970-89	266
10.3	Motor vehicle industry exports from Mexico, 1970-89	268
10.4	Domestic sales of passenger cars in Mexico, 1977-90	270
10.5	Total exports by company, Mexico, 1977-86	272
10.6	Export of engines by company, Mexico, 1982-89	272
10.7	Mexico: Motor vehicle industry average daily wages in selected plants	277
11.1	Trade union membership, 1977-89	283

List of figures

3.1	Chasing the moving target: Distances to reach the world standard, early 1990s	66
4.1	Employment and production trends in the clothing industry by regions, 1979-88	97
6.1	OECD crude steel capacity and production, 1968-90	163
6.2	Labour productivity movements in certain countries, 1972-86	168
7.1	Protectionist indicators in the United States steel industry, 1964-84.	185