Contents

Preface ix

1 East Asian models of development 1
1.1 Introduction 1
1.2 “Stage approach of comparative advantage” and the “flying geese” model 2
1.3 A linked development path in East Asia 4
1.4 Trade-investment nexus and the changing pattern of trade in East Asia 6
1.5 The role of technology in international trade 6
1.6 The purpose of this book 9

2 Catching up or falling behind hypothesis I: trade competitiveness between the leader and followers on all manufactured exports 14
2.1 Trade competitive edge and RCA rankings 14
2.2 Same year RCA indexes between Japan and followers 18
2.3 Same year RCA indexes between first-tier countries 19
2.4 Same year RCA indexes between second- and first-tier countries, mainly Korea and Taiwan 22
2.5 Same year RCA indexes between second-tier countries 22
2.6 RCA between the NICs in 2000 with Japan from 1960 to 2000 27
2.7 ASEAN and China in 2000 with Japan, Korea, and Taiwan from 1960 to 2000 27
2.8 Correlation coefficient of country’s own RCA ranking in 2000 with its RCA rankings in previous years from 1960 32
2.9 Industrial development and trade diversification 32
2.10 Summary 37

3 Catching up or falling behind hypothesis II: trade competitiveness on exports by technology levels between the leader and followers 40
3.1 The changing composition of export commodities 40
3.2 RCA indexes for the four product groups based on levels of production technology same year between Japan and its followers 48
3.3 RCA indexes for four product groups based on production technology levels among the first tier of the NICs 56
3.4 RCA indexes for four product groups based on production levels between the first-tier and second-tier countries 60
3.5 Do developing Asian countries compete with each other on technology exports? 66
3.6 Did the first tier of the NICs in 2000 catch up to the level of technology of Japan in 1962–2000? 75
3.7 ASEAN and China in 2000 compared with the first tier of the NICs in 1962–2000 83
3.8 ASEAN and China in 2000 compared with Japan in 1962–2000 89
3.9 How rapid were the structural shifts on exports of technology products? 97
3.10 Specialization vs. diversification in technology product exports 110
3.11 Summary 119

4 Trade similarity index and the level of development 122
4.1 Similarity indexes between Japan and its followers as well as among its followers 123
4.2 Similarity indexes and per capita income between Japan and its followers 129
4.3 Similarity indexes and per capita income among the first tiers of the NICs 130
4.4 Similarity indexes and per capita income between the first tier and the second tier of followers 131
4.5 Similarity indexes and per capita income among the second tier of followers 132
4.6 Regression model on export similarity indexes 133
4.7 Summary 137

5 The dynamics of changing trade structures: export sophistication index 148
5.1 The weighted average of sophistication index scores between 1990 and 2000 150
5.2 The percentage distribution of manufactured exports by levels of product sophistication 152
## Contents

5.3 Manufacturing fragmentation and the shifting comparative advantage 159  
5.4 The shifting trade sectors due to fragmentation of manufacturing production between 1990 and 2000 162  
5.5 The changing market shares in high-sophistication products: the trend of “de-sophistication” 165  
5.6 Shifting sophistication of export commodities in a disaggregate index by four-digit SITC 170  
5.7 Summary 179  

6 Sources of export growth: a constant market share analysis 189  
6.1 Classification of export commodities and market distribution 191  
6.2 From economic take-off to the turbulent 1970s in the world economy 194  
6.3 The 1980s: from world recession to the Plaza Accord 199  
6.4 Sources of export growth in the 1990s 206  
6.5 The beginning of the 21st century 209  
6.6 Summary and conclusions 214  

7 Trade–investment nexus and intra-industry trade 219  
7.1 Foreign direct investment flows since the 1980s 221  
7.2 Theoretical underpinnings and empirical studies on the FDI–trade nexus 226  
7.3 Empirical analysis of intra-industry trade in East Asia 232  
7.4 FDI and trade on parts and components 271  
7.5 Summary and conclusion 282  

8 Is East Asia a “natural trade bloc”? The trade complementarity index, the intensity index, and the bias index 300  
8.1 The trade complementarity index, the intensity index, and the bias index 302  
8.2 Trade intensity index 305  
8.3 Trade complementarity index for all export commodities 310  
8.4 Complementarity index for manufactured products 315  
8.5 Regression model on \( C_{ij} \) 319  
8.6 Empirical results 321  
8.7 Pooling the \( C_{ij} \) in the three major markets 322  
8.8 Summary and conclusion 323  

9 East Asian economic integration and its impacts on regional and global economies 348
9.1 Proliferation of regional trading arrangements 349
9.2 Theoretical model on East Asian economic integration: Krugman–Baldwin’s hub–spoke thesis revisited 355
9.3 Trade complementarity, FDI–trade nexus, and market potential for East Asia 360
9.4 Political economy of economic integration in East Asia 362
9.5 Scenarios of possible paths 368
9.6 Conclusion: toward an emerging East Asian economic community? 373

10 Conclusion 377
10.1 Global imbalances and the limit of an export-led growth strategy 378
10.2 Re-evaluating the global value chain and production network 380
10.3 Location advantages and mobile capital from abroad 384
10.4 Innovation and industrial development 386
10.5 Trade facilitation and the emerging trade blocs 388
10.6 Toward an open regionalism 390

Index 395