

**A Critical Evaluation of the Flying Geese
Paradigm:
the evolving framework of the model and its
application to East Asian regional development and
beyond**

Shigehisa Kasahara

© Shigehisa Kasahara 2019

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission by the author.

ISBN 978-90-6490-112-6

A Critical Evaluation of the Flying Geese Paradigm: the evolving framework of the model and its application to East Asian regional development and beyond

Een kritische evaluatie van het model van de vliegende ganzen:
de ontwikkeling van het model en de toepassing op regionale ontwikkeling in
Oost-Azië en daarbuiten

Thesis

to obtain the degree of Doctor from the
Erasmus University Rotterdam
by command of the Rector Magnificus

Prof.dr. R.C.M.E. Engels

and in accordance with the decision of the Doctorate Board

The public defence shall be held on
Thursday 19 December 2019 at 16.00 hrs

by

Shigehisa Kasahara
born in Fukui, Japan

International
Institute of
Social Studies



Erasmus University Rotterdam

Doctoral Committee**Doctoral dissertation supervisors**

Prof.dr. A.S. Bedi

Dr. A.M. Fischer

Other members

Prof.dr. P. Korhonen, Jyväskylä University

Prof.dr. P. Golub, American University of Paris

Prof.dr. W. Hout

Contents

List of Figures

List of Tables

Acronyms

Acknowledgements

Abstract

Samenvatting

Thesis

1	Introduction to the Study1
1.1	Introduction	
1.1.1	Preliminary Notes: The rise of manufacturing in East Asia	
1.1.2	Model-building of East Asian development: Background	
1.1.3	Perceptions towards the Flying Geese Paradigm	
1.1.4	Geoeconomic Caveats: Conceptualizing Asia	
1.2	Research Objectives: Questions and Methodology	
1.2.1	Conventional history of Economic Thought	
1.2.2	Research Questions	
1.2.3	Research Methodology	
1.3	Structure of the Dissertation	
2	Evolution of the Flying Geese Paradigm:	
	Part I: Akamatsu's Original Model and Its Refinements	20
2.1	Introduction	
2.2	Background of Japan's Post-Feudal (Meiji) Industrial Development	
2.3	Flying Geese Paradigm proposed by Kaname Akamatsu	
2.3.1	Kaname Akamatsu: His Initial Framework and Its Evolution	
2.3.2	Departure from Akamatsu's Initial Model	
2.3.3	Akamatsu's Flying Geese Paradigm: Essential Elements	
2.4	Refinement (Modification) of Akamatsu's Flying Geese Paradigm: "Primary" M-P-X sequence	
2.4.1	Reverse Imports (M)	
2.4.2	Consumption (Domestic Demand) (C)	
2.4.3	Competitiveness	
2.4.4	Alternative Measures to Calculate Competitiveness	
2.4.5	Analytical Conclusion on Calculating Competitiveness	
2.4.6	Industrial Upgrading	
2.5	Policy implications	
2.6	Chapter Summary	
3	Evaluation of the Flying Geese Paradigm:	
	Part II: Modern Versions	65
3.1	Introduction	

- 3.2 Product Cycle (PC)
 - 3.2.1 Preliminary Note: Technology Gap Theory
 - 3.2.2 Vernon's Product Cycle (PC) Theory
 - 3.2.3 Effects of FDI on the Original M-P-X Sequence
- 3.3 Modern PF Paradigm as a Catch-up Product (Industry) Life Cycle Model
 - 3.3.1 Eclectic Model
 - 3.3.2 Synthetic Multi-Country-Multi-Product Model
- 3.4 Integration/Snowball Paradigm
 - 3.4.1 Snowballing Integration in East Asia
 - 3.4.2 FDI as a Key Channel of Regional Integration
 - 3.4.3 Characteristic Element of "Openness"
- 3.5 United States-Centric Flying Geese Paradigm
- 3.6 Regional Production Network Model
 - 3.6.1 Emergence of Regional Production Networks from the Mid-1980s
 - 3.6.2 Microeconomic Concepts: Fragmentation, Agglomeration
 - 3.6.3 Implications of Regional Production Networks on the FG Paradigm
- 3.7 Chapter Summary

4 Critique of the Flying Geese Paradigm

Part I: Validity as a Generic Model of Late Industrialization

95

- 4.1 Introduction
 - 4.1.1 What is meant by a generic model?
 - 4.1.2 Criticisms of the FG Paradigm: Classification of Issues
- 4.2 Level-of-analysis Problems
 - 4.2.1 Methodological Nationalism
 - 4.2.2 Identity of "Geese"
- 4.3 National development
 - 4.3.1 M-P-X Sequence
 - 4.3.2 Export-led Development
 - 4.3.3 Technology Acquisition
 - 4.3.4 Agents (Drivers) for Restructuring
 - 4.3.5 Role of the State
 - 4.3.6 Industrial Policy and Comparative Advantage
 - 4.3.7 FDI for National Industrial Upgrading
 - 4.3.8 Competitiveness in the National Context
- 4.4 Regional Development and Integration
 - 4.4.1 Life cycle
 - 4.4.2 Competitiveness in a Regional Context
 - 4.4.3 Regional Hierarchy
- 4.5 Sustainability of the FG paradigm
 - 4.5.1 Replicability of National Development Experience
 - 4.5.2 Sustainability of Dialectics
 - 4.5.3 Consideration of Demand Side
- 4.6 Chapter Summary

5 Critique of the Flying Geese Paradigm

- 5.1 Introduction
 - 5.2 Recapitulation of the Postwar East Asian economic development
 - 5.2.1 Japan
 - 5.2.2 1st-tier NIEs: South Korea, Taiwan, Singapore and Hong Kong
 - 5.2.3 2nd-tier NIEs: Malaysia, Thailand and Indonesia
 - 5.2.4 China
 - 5.2.5 Overseas Chinese Communities (Chinese diaspora)
 - 5.3 The United States (US)
 - 5.3.1 Initial posture of the US foreign policy
 - 5.3.2 Rising intolerance, criticisms, pressures
 - 5.4 The FG paradigm as an East Asian Regional Development Model
 - 5.4.1 The M-P-X sequence in East Asia
 - 5.4.2 Demand-related issues in East Asian Industrialization
 - 5.4.3 FG paradigm and the Developmental State: Compatibility Question
 - 5.4.4 Emulation of Earlier Industrializers
 - 5.4.5 Life Cycle (product, market, enterprise, and industry)
 - 5.4.6 Sustainability of East Asian development: Dialectics
 - 5.4.7 Fallacy of Composition in East Asian manufacturing
 - 5.4.8 Level-of-analysis problems in East Asia
 - 5.4.9 Other Issues: Currency stability, Migration, WTO Regime, Porous Regionalism, Japan-China Rivalry
 - 5.5 Chapter Summary
-
- 6 Discourse Transition of the Flying Geese Paradigm:
The Emergence of a China-centric Model**
 - 6.1 Introduction
 - 6.2 Transition from Japan Centricity to China Centricity
 - 6.3 Japan-centric Model: Basic Elements (a Quick Review)
 - 6.3.1 Japan Centricity
 - 6.3.2 Japan's Development Model
 - 6.4 China's Rise and the Flying Geese Paradigm
 - 6.4.1 Domestic Application vs International Application
 - 6.4.2 Semi-sequential Phases of Different Policy Orientations/
Emphases
 - 6.4.3 Development Guidelines for the "Go West" Phase
 - 6.4.4 FG paradigm at the "Go Out" Phase
 - 6.4.5 Belt and Road Initiative (BRI)
 - 6.5 China-centric model
 - 6.5.1 Prelude to the Reference of the FG Paradigm
 - 6.5.2 World Bank's Hinting of China's Flying Geese
 - 6.5.3 Explicit Reference to the FG Paradigm
 - 6.6 Comparative Analysis: Japan Centricity and China Centricity
 - 6.6.1 East Asian Hierarchy
 - 6.6.2 Industrial Policy: Conforming or Defying Comparative Advantage

6.6.3	Open Regionalism	
6.6.4	Manufacturing Activities via External Stimulus	
6.6.5	Trickle-down Effect (Industrial Relocation/Diffusion)	
6.6.6	Scale of Operation	
6.6.7	Policy-implications	
6.7	Chapter Summary	
7	Conclusion	184
7.1	Introduction	
7.2	Intellectual lineage of the FG paradigm	
7.2.1	Prewar FG Paradigm: A National Catch-up Model	
7.2.2	Postwar FG Paradigm: A Regional Development Model	
7.2.3	Prewar Model vs Postwar Model: A Analytical Comparison	
7.3	Critique of the FG Paradigm: A Selective Recapitulation	
7.4	Discourse Transition: A Consequence of China's Emergence	
7.4.1	Domestic FG Paradigm	
7.4.2	Go Global Policy	
7.4.3	Belt and Road Initiative: The Latest Framework for the China-centric FG Paradigm	
7.5	Last Words: Caveats	

Appendices

8	Nine East Asian Economics: A brief historical profile (Supplement to Chapter 1)	199
8.1	Introduction: Background Profile	
8.2	Japan	
8.3	1 st -tier NIES: Subgroup 1 and Subgroup II	
8.3.1	South Korea (Subgroup 1)	
8.3.2	Taiwan (Subgroup 1)	
8.3.3	Singapore (Subgroup 2)	
8.3.4	Hong Kong (Subgroup 2)	
8.4	2 nd -tier NIEs	
8.4.1	Malaysia	
8.4.2	Thailand	
8.4.3	Indonesia	
8.5	China	
8.6	Empirical Profile	
8.6.1	Overall Profile	
8.6.2	Overall Growth of Recent Performance	
8.6.3	Relative Weight of Economic Performance	
8.6.4	Per Capita GDP	
9	Modernization of the Japanese Cotton Industry: A brief description of Meiji period (Supplement to Chapter 2)	236
9.1	Introduction	

9.2	Initial Rise of Import of Raw Cotton, Cotton Yarn, and Cotton Fabric	
9.3	Import Substitution of Cotton Yarn	
9.4	Import Substitution of Cotton Fabric	
9.5	Import Substitution of Textile Machines and Dyeing	
9.6	Outward FDI in Cotton industry	
9.7	Chapter Summary	
10	Investment Development Path: A Brief Note on Its Conceptual Development (Supplement to Chapter 3)	244
10.1	Introduction	
10.2	Net Outward Investment Position	
10.3	Relevance to the FG Paradigm	
11	Regional Production networks of the Japanese automobile industry: A brief description of the postwar Thailand (Supplement to Chapter 3)	250
11.1	Introduction	
11.2	Thai Automobile Sector	
11.3	Japanese automakers in Thailand	
11.4	Chapter Summary	
12	Empirical research on the FG paradigm: A literature survey and new findings (Supplement to Chapter 5)	256
12.1	Introduction	
12.2	Hypotheses	
12.2.1	Hypothesis I: Fundamental Product/Sector Specific M-P-X-(M') Sequence	
12.2.2	Hypothesis II: Intra-sector/industry Sequence of Product Upgrading	
12.2.3	Hypothesis III: Inter-industry Sequence	
12.2.4	Hypothesis IV: Inter-economy (regional) Sequence	
12.2.5	Overview of Analytical Research on Hypotheses I, II, III	
12.3	Formal Tests of the FG Paradigm	
12.3.1	Survey Findings (based on trade data)	
12.3.2	Analytical Questions for Hypothesis IV	
12.4	List of Representative Empirical Research	
	Bibliography	271
	Brief Biography	331

List of Figures

- 1.1 East Asian Nine
- 2.1 Akamatsu's FG Paradigm: An Early Graphic Presentation of Import, Production and Export of different woolen products
- 2.2 Akamatsu's FG Paradigm: A Primary Pattern of Import-Production-Export (M-P-X) Sequence of Cotton Thread and Cotton Cloth
- 2.3 Akamatsu's FG Paradigm: The Stylized Primary Pattern of a Set of Import-Production-Export (M-P-X) Sequence
- 2.4 Akamatsu's FG Paradigm: The Stylized Secondary Pattern of Intra-Sectoral and Inter-Sectoral Shift of a Set of Import-Production-Export (M-P-X) Sequence
- 2.5 Akamatsu's FG Paradigm: The illustration of Inter-Sectoral Linkages between Capital goods and Consumer goods (as graphically stylized by Kojima)
- 2.6 Trade Specialization Indices (TSIs) for Commodity Groups at Different Stages of Development
- 2.7 Modern FG Paradigm: The M-P-X-M' Sequence
- 2.8 Yamazawa's Refinement of Akamatsu's Primary M-P-X sequence
- 2.9 Derivation of Competitiveness (from the M-P-X-M' sequences)
- 2.10 Production/Consumption Contour as a Competitiveness index (based on a M-P-X-M' sequence)
- 2.11 Contour of Trade Specialization Index (TSI): A Stylized Example
- 2.12 Contour of revealed comparative Advantage (RCA) Index: A Stylized Example
- 2.13 Competitiveness Contours and Average Cost: A Stylized Example of Single-Country-Single Product/Sector Framework
- 2.14 Competitiveness Contours: A Stylized Example with Single-Country-Multiple Product/Sector Framework
- 2.15 Average Unit Cost: A stylized example of Single-Country-Multiple-Product/Sector Framework
- 2.16 Inter-sectoral Linkage between Consumer Products and Machinery to Produce Them

- 3.1 Vernon's Product Cycle Theory: A Graphic Presentation of Production and Trade
- 3.2 Kojima's "Single-Country-Two-Industries" Model with Reverse Import and Offshore Production
- 3.3 Modern Catching-up Product Cycle Paradigm: Inter-Economy Sequence in Term of Competitiveness
- 3.4 Modern Catching-up Product Cycle Paradigm: Inter-Economy seen in Terms of Average Unit Cost
- 3.5 Modern Product Cycle Paradigm: Synthetic Multiple-Country-Multiple-Product Model
- 3.6 Regional Integrative Development Model: Multiple-Country-Multiple-Product Framework
- 3.7 Regional Integrative Snowballing Model with Intra-Regional Efficiency-seeking FDI Flows
- 3.8 US-Centric FG Paradigm: Shifts of Exports from East Asian Economies to meet US Excess Demand
- 3.9 Changes of Production Structure due to Expanding Institutional Networks
- 4.1 Average Unit Cost: Multiple-Ccountry-Single-Product (sector/industry) Framework
- 8.1 East Asian Nine: Aggregate GDP (Nominal \$ Million)
- 8.2 East Asian Nine: Relative Weight of GDP (percentage)
- 9.1 Akamtsu's M-P-X Sequences: Various Configurations
- 10.1 Relations between FDI Flows and Income Levels (per capita): Four stages of investment development path (IDP)
- 10.2 Investment Development Path (IDP): Net outward investment position
- 10.3 NOI Per Capita vs. GDP Per Capita: An Illustration with 2004 Data
- 10.4 Macro-IDP (Long Term) as An Envelope Curve of Meso-IDPs (Short-Term)
- 10.5 Distorted Meso-IDPs (due to Inhibition in Inward FDI)
- 12.1 Empirical Tests of the Flyinhg Geese Paradigm

List of Tables

- 2.1 Trade Specialization indices at different stages of development
- 2.2 Shares of Products of Different Categories in Total Manufactured Exports (percentage) & Changes of Their Shares over time (1995-2017) (percentage points)
- 8.1 East Asian Nine: General Profile
- 8.2 East Asian Nine: Per Capita GDP (Nominal)

Acronyms

1st-tier NIEs	First-tier NIE (South Korea, Taiwan, Singapore and Hong Kong)
2nd-tier NIEs	Second-tier NIEs (Malaysia, Thailand and Indonesia)
ADB	Asian Development Bank
AIIB	Asian Infrastructure Investment Bank
AMF	Asian Monetary Fund
ASEAN	Association of South East Asian Nations
BOI	Board of Investment (Thailand)
BRI	Belt and Road Initiative (China)
BRICS	Brazil, Russia, India, China and South Africa
C = P – X +M	consumption = production – export + import
CAFTSA	China-ASEAN Free Trade Agreement
CIC	Chinese Investment Corporation
CKD	“complete knocked down”
CMI	Chiang-Mai Initiative
EU	European Union
FDI	foreign direct investment
FG Paradigm	flying geese paradigm
FOCAC	Forum of China-Africa Cooperation
FVA	foreign total value added
GATT	General Agreement on Tariffs and Trade
GEACPS	Greater East Asian Co-prosperity Sphere
GDP	gross domestic product
HT	high technology
IDP	investment development path
IMV	Innovative International Multi-purpose Vehicle (Thailand)
IT	information technology
KMT	Nationalist Party (Taiwan)
LDP	Liberal Democratic Party (Japan)
LT	low technology
LTA	Long-term Arrangement (of textile trade) (1962)
M; M’	import; reverse import
MFA	the Multi-Fibre Arrangement (1974)
MITI	Ministry of International Trade and Industry (Japan)
M-P-X sequence	import-production-export sequence
MT	medium technology
NAFTA	North America Free Trade Agreement
NDB	New Development Bank (BRICS)

NIEs	newly industrializing economies
NOIP	net outward investment position
ODA	official development assistance
OEM	original equipment manufacturing
P, P'	domestic production, offshore production
PPP	purchasing power parity
R & D	research and development
RB	resource based
PC theory	product (life) cycle theory
RCA	revealed comparative advantage
RSCA	revealed symmetric comparative advantage
SCO	Shanghai Cooperation Organization
SEZs	special economic zones
SMEs	small and medium-sized enterprises
SOE	state-owned enterprise
STA	Short-Term Arrangement (of textile trade) (1961)
TAIA	Thai Automobile Industry Association
TFP	total factor productivity
TICAD	Tokyo International Conference for African Development
TNC	transnational corporation
TSI	trade specialization index
TVE	Township and Village Enterprise
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
US	United States of America
WTO	World Trade Organization
WWII	World War II
X	export
X + M	total trade (export + import)
X - M	net export (export – import)

Acknowledgements

In the mid-1980s, I finished all the in-class requirements for MA and PhD degrees in Economics at the Graduate Faculty of the New School for Social Research, New York City, and reached the status of ABD (All but Dissertation). In my days at the New School, an MA degree required 10 economics courses and an MA thesis, and a PhD degree required another 10 courses, the comprehensive examinations (written and oral) of two specialized areas – my case: international economics (trade) and monetary economics (money and banking) – and a PhD dissertation. If students took all 20 courses for the MA and PhD degrees, they could receive a MA degree automatically without having written an MA thesis. I could reach the ABD status for my PhD degree (having completed the course requirements and passed the comprehensive examinations); however, I failed to progress thereafter. This was because I began to work for the United Nations (UN) in 1987, and more critically was transferred in 1989 to Geneva, Switzerland. My work in Geneva (UNCTAD Headquarters) was research oriented, and its environment was more academic rather than bureaucratic.

As my career in international civil service constantly exposed me to development debates, I used to regard myself as well-prepared at any moment for commencing a PhD life again. When I actually began my PhD research in 2013, the exact year of my official retirement from the UN, my overly optimistic idea was that I would be able to produce a reasonably decent dissertation manuscript quickly, say, in half a year or so. Being much older than all of my PhD peers (and most of the faculty members), I also felt that I could not afford to spare much time, either. Thus, I was at full blast from the outset, staying at the office virtually all day until the closing time late at night seven days a week, and after a year ... I collapsed and was taken to hospital. My mind and body could not take the constant, self-imposed pressure. When I slowly recovered from the ailment, I had to go back periodically to Geneva to cope with various family issues there. In September 2016 I encountered the loss of my mother who was counting the days of my return to Japan. I was in a hurry again, struggling with the fear that I would be getting too old to market myself in academia. When the full draft seminar in 2017 was cancelled at the very last moment, I was devastated. I then faced a painful period of self-doubt.

I did not know about Max Spoor, the promoter of my PhD research, until I began my research at the ISS. He is an expert on rural agrarian development and my research topic is urban industrial development. What a contrast! Max was away for his field research during much of my first year at the ISS (2013-14). When he returned, he was willing to check – meticulously and thoroughly – what I had produced. Max cautioned that I should not be overindulgent with research. Seeing me busy looking into journal articles and books day after day, he told me that I appeared like either a writer drafting a magna carta (if not a telephone directory) or simply a procrastinator wasting time. In any case, he did read all of my submitted materials and returned them with many comments. He tried to

push me through the PhD process as the promoter even after his official retirement, but the above-mentioned cancellation of the full draft seminar in 2017 derailed our plan.

It was Andrew Fischer – the co-promoter of my PhD dissertation research – that guided me through the ISS PhD program. Andrew used to take his MA students to the UN Office in Geneva on field trips, and on one particular occasion – actually a few years before my retirement from the UN in 2013 – my colleague could not make himself available for a briefing to the visiting students. So I was asked to give a briefing on his behalf. This was the first time that I came to know Andrew and his MA students, and we have since maintained contact. Andrew helped me resuscitate my inner desire to pursue an academic life. In any case, over the past several years, he has provided me with his feedback on my manuscript at different stages.

Arjun Bedi took over Max’s role as my research promoter in 2018. I was then slowly repairing my academic commitment damaged by the cancellation of the full draft seminar in 2017. Arjun has been a no-nonsense supervisor, expecting results rather than excuses from his advisees. His constant encouragement have facilitated the rapid revamping of the dissertation text and the progress towards its finalization.

Last several years, particularly since 2017, my research interests – i.e., a comprehensive critique of the flying geese (FG) paradigm – have somewhat changed. This was because I began to witness the FG paradigm, as a model of development discourse, becoming much bigger in scale than the once popular Japan-centric model for East Asian development. It was Max that initially got me interested in Chinese “internal” dynamics. Thanks to him, I was exposed to journal articles on “Lewisian Turning Point” (the exhaustion of cheap workers migrating from rural to urban areas) in China’s coastal regions, and from there I came up with the idea of domestic industrial diffusion/relocation, as a partial supplement – if not the replacement – of domestic labour migration. In the 2010s Chinese researchers began to refer to “Globalization with Chinese characteristics”. As noted above, here the FG paradigm in the framework of a China-centric model has also been taken up in a geo-economic context much greater than East Asia. And I came to regard the Belt and Road Initiative (BRI) not merely as a grand Eurasian infrastructure development project (particularly promoting transport/shipping connectivity), but also as a scaling-up (or externalization) of the domestic FG paradigm. The advancement of the conceptual framework since 2017 has brought me a new round of intellectual excitement. And I owe Max a great deal for this progress.

Beyond the above-mentioned supervisory members of my dissertation, other ISS faculty members have read, as internal examiners, my dissertation manuscript at different stages of completion. I am grateful to Georgina Gomez, Wil Hout, Mansoob Murshed, Howard Nicholas and Oane Visser. A few PhD colleagues – Eri Ikeda, Zuleika Sheik, Johan Spamer and Brandon Sommer – have read parts

of my PhD dissertation at different stages of progress, and shared their constructive ideas upon reading. Outside the ISS community, many academic colleagues have helped me in different ways. For historical research, I must thank Dr. Tadashi Ohtsuki in Japan for making his unpublished PhD dissertation (Ohtsuki 2010) available to me. His dissertation, which deals with historical research relating to the initial period of the FG paradigm in the 1930s, informed me much of the prewar intellectual context that engendered the model. Furthermore, I would like to thank Dr. Saori Shibata (Leiden University, the Netherlands), Dr. Pekka Korhonen (University of Jyväskylä, Finland) and Dr. Philip Golub (the American University in Paris, France) for their willingness to be external examiners of this dissertation. These external examiners are all experts of East Asian development of the past and present.

I must express my appreciation to Zuleika Sheik, my PhD colleague, who did such a superb English-editing job on my dissertation manuscript. Though I was reasonably confident about my writing, she could still pick up errors in the manuscript. I used to speak out my ideas related to the FG paradigm to my residence neighbours over numerous dinners at our communal kitchen, and they responded with their insights: Luis Artavia-Mora, Beatriz Campillo Carrete, Deo Houndolo, Emile Smidt and Yazid Zahda. I owe thanks to many PhD peers – particularly those the Political Ecology Research Group – who have kept collegial relations with me and prevented my inner stress from growing out of control: Daniela Andrade, Ana Badillo Salgado, Sanchita Bakshi, Cynthia Bejeno, Zoe Brent, Natacha Bruna, Marina Cadaval Narezo, Emma Cantal, Renata Cavalcanti Muniz, Sanghamitra Chakravarty, Mausumi Chetia, Maria Dafnomili, Luciana Duarte, Dala Duo, Andrea Floridi, Jacqueline Gaybor Tobar, Azucena Gollaz Moran, Adwoa Gyapong, Salomey Gyamfi Afrifa, Kenji Kimura, Seohee Kwak, Huei-Ling Lai (Lynn), Gina Ledda, Yanbai Li, Rod Mena Fluhmann, Elyse Mills, Tefera Negashi, Delphin Ntanyoma, Angelica Maria Ocampo Talero, Jimena Pacheco, Dennis Penu, Blas Regnault, Brenda Rodriguez Cortes, Claudia Rodriguez Orrego, Daniele Rossi Doria, C. Sathyamala, Yukari Sekine, Amod Shah, Birendra Singh, Tamara Soukotta, Lize Swartz, Richard Toppo, Salena Tramel, Benedict Yiyugsah, (Susie) Xu Ye and Farzane Zarepour .

For the past several years, I have shared an office with Alberto Alonso-Fradejas, and I have solicited his views in many things (academic and non-academic). Alberto has always been a reliable, intelligent sounding board. While I was still struggling in the PhD process, many peers successfully obtained their PhD degree. Many of them urged me to follow their footsteps quickly: Alberto Alonso-Fradejas, Ome Chattranond, Binyam Demena, Gebregziabher, Eri Ikeda, Eunjung Koo, Ben McKay, Maria Gabriela Palacio Ludena, Natalia Mamonova, Siu Sue Mark, Tefera Negashi, Thi Mai Lan Nyuyen, Juan David Parra Heredia, Ben Radley, Holly Ritchie, C. Sathyamala, Atsushi Sano, Christina Schiavoni, Zemzem Shigute Shuka, Tsegaye Shegro, Ratha Thuon, Fasil Taye, Sara Vigil, Enzama Wilson and Yunan Xu. You are my heroes.

I am also thankful to the previous and present Rectors, Leo de Haan and Inge Hutter, who have accepted and kept me as a PhD researcher at the ISS. Though I have been exempted from taking most of the PhD courses, I have encountered many wonderful ISS faculty members (past and present) on various occasions, such as conferences, seminars, personal discussions, friendly chats, etc. Many of their research pieces (books and journal articles) have also been inspiring to me. They include: Murat Arsel, Peter van Bergeijk, Kees Biekart, Jim Bjorkman, Jun Borrás, John Cameron, Andrew Fischer, Des Gasper, Julien Gerber, Jeff Handmaker, Wendy Harcourt, Helen Hintjens, Roy Huijsmans, Cris Kay, Karim Kniou, Peter Knorringa, Lee Pegler, Ashwani Saith, Irene van Staveren, Thanh-Dam Truong, Rolph van der Hoeven, Natascha Wagner and Ben White. I am grateful to Almas Mahmud who has coached me in improving the skill of academic presentation.

Many administrative staff members, past and present, have helped me make my ISS life comfortable and productive. I would like to thank, among others, Ank van der Berg, Sharmini Bisessar-Selvarajah, Martin Blok, Dita Dirks, Tamara Harte, Robin Koers, Nadya Kramers, Irene Lopez, Jane Pocock, John Sinjorgo, Susan Spaa, Feroza Tedja and Vlada Tchirikova. Friedl Marincowitz of the office for *Development and Change* has been always personable and friendly, and my only regret is that I have failed to submit a draft article to the office for publication in the prestigious journal. I have also been helped by the IT support office technicians – most importantly Sheraz Malik – who have solved many headaches caused by computer-related troubles. Despite its seemingly modest size, the ISS library has proven to be a resourceful and generous institution to me, accepting many of my purchase requests of new books. I am very grateful to librarian colleagues who have always treated me very kindly: Ave Baxa, Lidwien Lamboo, Joy Misa, Saskia Scheffer, Cathelijne van der Ree, and Hans van Werven.

Perhaps, I am not exactly a socially active PhD researcher. I have come to the ISS office virtually every day, but I have seldom dined at the school canteen. And for that matter, I have not visited the Butterfly Bar as a regular customer for evening drinks. But whenever I have, Sandy Kamerling has welcomed me with a charming smile. I would also like to give my warmest regards to our colleagues at the ISS reception, particularly, André Blokzijl, Gennaro Di Maio, Gita Gardrji and Maja Bihari, who have always been very understanding. These receptionist colleagues have seen my good and bad times more than anybody else since I began my academic life here. All in all, I have been very fortunate, being surrounded by many compassionate people. I also thank Sareeta, Luis and Suzana for keeping our office tidy, although I tend to be messy. I regret that I cannot list all of the wonderful colleagues and peers by name here.

Bob Thomassen, my practice partner in judo, is one of the very few local friends that I have made outside the ISS community. My physical condition has no longer been good enough to provide him with a good workout, but he has always been my willing (and tough) practice partner. Bob, do you remember the day a few years ago when we practiced judo at the ISS Attic and scared the hell out of

accidental visitors who were walking in there? In any case, you have made my life in the Hague a lot more enjoyable (and a bit more painful) than I had expected. Thank you very much.

I have kept contact with some of my former colleagues of the UNCTAD headquarters, Geneva, particularly, Candy Catala, Michael Lim and Anida Yupari. They still welcome me whenever I visit them. It is painful to notice at each of my periodic visits that my favourite colleagues are steadily retiring from the UN. I am grateful to my colleagues at the Geneva office of the School of International Training (SIT), including Dr. Gyula Csurgai (Academic Director), Dr. Heikki Mattila (Academic Advisor) and Ms. Aline Dunant (Academic Coordinator). Their trust has made it possible for me to go back to Geneva periodically to give an intensive lecture on multilateral development diplomacy to a group of students from American universities participating in the Geneva programme of study abroad. I also thank you to Ian Frank, my professional counsellor in Geneva, who has helped me sort out problems and organize my ideas.

I wish my parents were still alive to witness that their son has kept his promise (though with a very long delay) to complete the PhD degree. I woefully miss them both. Last but not least, I would like to dedicate this dissertation to Hiromi and Reine. Thank you for your confidence in me regarding finishing this demanding academic journey.

ABSTRACT

The Flying Geese (FG) began with the original model in the 1930s delineating the catch-up process of a singular late industrializer, namely Japan, from the late 19th century, and has since evolved into a prototype development framework of collective catch-up process of national economies as a regional group (such as East Asia). It has also evolved as an intellectual guideline that *early* industrializers may deploy in their diplomatic discourse with *late* industrializers. This Asian model underlines the generally positive nature of Centre-Periphery interplay, which is in clear contrast with critical perspectives of the Latin American structuralist school. This dissertation addresses the FG paradigm by reconstructing its intellectual lineage by undertaking some primary archival research (in Japanese) from the prewar period, together with an extensive literature review of major scholastic works in the postwar period, particularly after the 1960s on the East Asian development performance. The thesis highlights how the evolutionary process has transformed many parts of the model, and critically discusses various conceptual problems associated with different versions of the model.

The rise (and fall) of the model's appeal, particularly as a regional development model for East Asia (and beyond), has been attributable to the varying degrees of intensity and zeal with which its proponents have advocated the model. The model has gone through a "subsided period" twice, first, after Japan's defeat in World War II (WWII) (until the early 1960s), and second, after the burst of the country's financial bubble in the early 1990s (until the 2000s). After each hiatus, nonetheless, the model has revived. The first revival (from the 1960s to the early 1990s) may be attributed to Japanese researchers and policy-makers dealing with Japan's industrial reforms in the context of East Asian development, and the second revival (from the 2000s to the present) to new researchers on China's industrialization and development diplomacy. The change of the FG proponents has also affected some aspects of the model, while keeping some of its core elements intact.

The analysis in this thesis compares and contrasts the Japan-centric model and the China-centric model. It argues that whereas the Japan-centric model dealt with the national (domestic) and regional (East Asian) development processes in a sequential fashion, the China-centric model now deals with two processes in a very compressed fashion. In fact, the contemporary model admits the simultaneous occurrence of the "internal" industrial diffusion within China and the conventional "external" (cross-border) industrial diffusion. Furthermore, China's overall development trajectory encompasses a much wider area than East Asia, as its need for large external resources and markets for its own development has obliged this emerging economy to widen the scope of its foreign economic policy. The geographical sphere to which the FG paradigm applies under China's initiative is fluid, and certainly much greater than East Asia.

As far as the functional validity of the FG paradigm for East Asia is concerned, the emergence of China in the dynamic context of the region (and beyond) is a mixed blessing. This is because the sustained function of the model depends, most importantly, on the existence of a hierarchy of development achievement – or technology gap – among constituent regional economies. Here, a major fear is "flattening" of the regional hierarchy, either due to the very slow pace of industrial upgrading of leaders (most notably Japan but the 1st-tier NIEs as well) or due to the very rapid catch-up of followers (most of all China), may frustrate the presumed "orderly" industrial upgrading of the region. Certainly, the rapid expansion of China's economic performance contains the danger of "middle-income trap" for some East Asian economies, particularly the 2nd-tier NIEs, which may suffer from "premature deindustrialization".

EEN KRITISCHE EVALUATIE VAN HET MODEL VAN DE VLIEGENDE GANZEN: DE ONTWIKKELING VAN HET MODEL EN DE TOEPASSING OP REGIONALE ONTWIKKELING IN OOST-AZIË EN DAARBUITEN

SAMENVATTING

Het oorspronkelijke model van de 'vliegende ganzen' (VG) uit de jaren 30 van de vorige eeuw beschreef de inhaalslag van een land waar de industrialisatie pas laat (eind de 19e eeuw) begon: Japan. Het is sindsdien uitgegroeid tot een prototypisch ontwikkelingskader voor de collectieve inhaalslag van nationale economieën als een regionale groep (zoals Oost-Azië). Het is ook een intellectuele leidraad geworden die vroeg geïndustrialiseerde landen kunnen gebruiken in hun diplomatieke discours met laat geïndustrialiseerde landen. Dit Aziatische model onderstreept het over het algemeen positieve karakter van de wisselwerking tussen centrum en periferie, en daarin wijkt het duidelijk af van de kritische perspectieven van de Latijns-Amerikaanse structuralistische school. In dit proefschrift wordt de intellectuele herkomst van het VG-paradigma gereconstrueerd aan de hand van primair archiefonderzoek (in het Japans) uit de vooroorlogse periode in combinatie met een uitgebreid literatuuroverzicht van belangrijk wetenschappelijk werk uit de naoorlogse periode, in het bijzonder na de jaren zestig van de vorige eeuw, waarin de ontwikkeling van de Oost-Aziatische landen centraal staat. Dit proefschrift laat zien hoe veel onderdelen van het model in de loop van de tijd zijn getransformeerd en behandelt diverse conceptuele problemen die aan verschillende versies van het model kleven.

De wisselende populariteit van het model, met name als regionaal ontwikkelingsmodel voor Oost-Azië (en daarbuiten), is toe te schrijven aan fluctuaties in de mate waarin het model door zijn aanhangers werd gepropageerd. Het model is twee keer op een 'zijspoor' beland. De eerste keer was na de nederlaag van Japan in de Tweede Wereldoorlog (tot het model begin jaren zestig weer in zwang kwam), en de tweede keer was na het uiteenspatten van de financiële zeepbel in Japan begin jaren negentig (en duurde tot begin 2000). Na elke onderbreking is het model echter weer nieuw leven ingeblazen. De eerste opleving (vanaf de jaren zestig tot begin jaren negentig) was dankzij Japanse onderzoekers en beleidsmakers die zich bezighielden met de industriële hervormingen in Japan tegen de achtergrond van de Oost-Aziatische ontwikkeling. De tweede opleving (van de jaren 2000 tot nu) kwam door nieuw onderzoek naar de industrialisering en ontwikkelingsdiplomatie van China. Het feit dat het VG-model andere pleitbezorgers kreeg had gevolgen voor bepaalde aspecten van het model, terwijl een aantal kernelementen behouden bleef.

In dit onderzoek wordt het op Japan gerichte model vergeleken en gecontrasteerd met het op China gerichte model. In het proefschrift wordt betoogd dat de nationale (binnenlandse) en regionale (Oost-Aziatische) ontwikkelingsprocessen in het op Japan gerichte model op een sequentiële manier werden behandeld, terwijl de twee processen in het op China gerichte model nu op een zeer gecompliceerde manier worden behandeld. De hedendaagse versie van het model beschrijft namelijk dat de 'interne' industriële verspreiding binnen China en de conventionele 'externe' (grensoverschrijdende) industriële verspreiding gelijktijdig plaatsvinden. Bovendien omvat het algehele ontwikkelingstraject van China een veel groter gebied dan Oost-Azië, aangezien de grote behoefte van het land aan externe hulpbronnen en markten voor zijn eigen ontwikkeling deze opkomende economie noodzaakte de reikwijdte van het buitenlandse economisch beleid uit te breiden. Het op China gerichte VG-paradigma bestrijkt een rekbaar geografisch gebied dat zeker veel groter is dan Oost-Azië.

Wat de functionele geldigheid van het VG-paradigma voor Oost-Azië betreft, is de opkomst van China in de dynamische context van de regio (en daarbuiten) niet onverdeeld gunstig. Dit komt doordat de blijvende functionaliteit van het model vooral afhangt van het bestaan van een hiërarchie in prestaties op het gebied van ontwikkeling – of technologische kloof – onder de verschillende regionale economieën. Een grote vrees is hier dat de 'afvlakking' van de regionale hiërarchie, hetzij door het zeer trage tempo van de industriële ontwikkeling van de koplopers (vooral Japan, maar ook andere nieuwe industrielanden van de eerste generatie), hetzij door de zeer snelle inhaalslag van de volgelingen (vooral China), de veronderstelde 'ordelijke' industriële ontwikkeling van de regio in de weg kan staan. De snelle economische ontwikkeling van China brengt voor sommige Oost-Aziatische economieën het gevaar met zich mee van een 'middeninkomensval'. Dit geldt vooral voor de nieuwe industrielanden van de tweede generatie, die last kunnen krijgen van 'voortijdige de-industrialisatie'.

CHAPTER 1

Introduction to the Study

1.1 Introduction

Contemporary East Asia is praised as a region of industrial development where many national economies have rapidly expanded their manufacturing activities. One popular model that purportedly explains the region's dynamism is the “flying geese” (FG) paradigm (雁行形態論, *gankou keitai ron*). The model's name was formulated in the 1930s when Japan – the only non-Western society that had successfully launched its late industrialization before 1914 (Rodrik 2013: 142) – was expanding its geopolitical/geoeconomic interests beyond its insular territory and its colonies (Taiwan and Korea). The FG paradigm has since then evolved into a model to depict the typical cross-border diffusion of industrial activities in East Asia (and beyond). According to its modern versions, the region's more advanced economies have progressively specialized into technologically advanced, new manufacturing sectors, and ceded to their less developed neighbours those obsolescent products/sectors in which they are losing competitiveness (comparative advantage). Through this process, old products/sectors revive their productive activities – or repeat their life cycle – in follower economies. Reportedly, East Asian economies have moved *harmoniously* upward in a collective catch-up process facilitated by this industrial trickle-down effect.

This dissertation presents a discussion on the FG paradigm, in a fashion of “history of economic thought” in light of the development history of East Asia. It is done from what may be called a critical perspective, although this perspective – which is also *pluralistic* in nature – may be neither identified with, nor confined within, conventional schools of economics. The pluralist effort here helps clarify the intellectual lineage of the FG paradigm family, by considering (i.e., choosing or discarding) various concepts, perspectives and models that have contributed to its evolution. Significantly, the dissertation also examines the model as a policy guideline for public decision-makers (politicians and bureaucrats) as well as for manufacturing firms striving in changing national, regional and global contexts. What is especially pertinent in contemporary development discourse lies in two sets of facts: first, the major proponent of the FG paradigm has shifted from Japan to China; and second, the geographical area of its application has also been widened from East Asia to Eurasia (and beyond). The model has shown its remarkable “flexibility” in adopting to different situations.

1.1.1 Preliminary Notes: The Rise of Manufacturing in East Asia

East Asia has witnessed the spatial diffusion and relocation of manufacturing, typically from some of the more advanced economies in the region to some of the less advanced ones. Purportedly, structural upgrading in individual national economies in the region has avoided the situation of excessive concentration of producers engaged in a narrow range of manufacturing activities (Suehiro 2009: 75-

76; see also Das 1996: Chapter 4). As a result, the region's economies have deepened their interdependence, taking advantage of the benefits of the positive effects arising from economic interactions.

The level of industrialization of a country affects its trade composition. In the late 19th century, Japan, a non-Western late industrializer, was at the earliest stages of industrial development, exporting predominantly primary products: raw silk, silk cocoon, and tea, together with limited manufactured products. In the early decades of the 20th century, Japan exported its manufactured products heavily to its “captured” markets, i.e., colonies, namely, Taiwan and Korea. In addition, Manchuria, a vast resourceful land of Northeast Asia – presently part of China and Russia – was also an important area for Japan's industrialization as well as military advancement. Needless to say, at that time Japan imported from Western industrial economies many manufactured products, including consumer goods, machinery and equipment. During much of the 1930s and the first half of the 1940s, Japan was engaged in wartime mobilization, and its trade beyond with its overseas colonies and conquered territories was limited (partly due to the economic sanctions imposed by the Western powers).

It was only after restoring its independence with the San Francisco Treaty in 1952 that Japan began the project of re-establishing bilateral diplomatic relations with its neighbours, by means of war reparation payments to Burma (1954), the Philippines (1956), Indonesia (1958) and South Vietnam (1959). Reportedly, these reparations often took the form of shipping out obsolescent technology and industrial plants to them (Cai 2008: 71; de Miguel 2013: 100; Hook et al. 2012: 216; Korhonen 1994a: 78).¹ It was also with considerable assistance from the United States (US) in the 1960s that Japan (re)established diplomatic relations with its former colonies, South Korea and Taiwan now as “independent countries”.²

Japan also faced difficulties in postwar multilateral diplomacy; for instance, it had to wait until 1956 to join the United Nations (UN). Meanwhile, the country acquired a provisional membership of GATT (the General Agreement on Tariffs and Trade) in 1953, but many of its member countries refused to deal with it. Even after 1955 when the country was accepted as a full member, many European members remained passive, if not totally negative, toward the country (Korhonen 1994a:

¹ The reparations allowed Japanese firms to re-enter East Asian markets and helped them re-create business linkages with local economies. However, Japan could not forge workable relations with its large neighbour, China, as the latter was absorbed by its civil war (1945-1949), the Korean War (1950-1953) and the Cold War confrontation with the Western bloc (to which Japan belonged) until the 1970s.

² South Korea and Taiwan were preoccupied with their domestic governance issues and remained ambivalent about establishing diplomatic relations with Japan. The loss of these two colonies (as a source of raw materials and human resources) played an important role in motivating Japan to normalize relations with Southeast Asia (Brooks & Orr 1985: 324).

74). From the 1960s to 1980s, postwar researchers increasingly recognized Japan as an industrialized trader, and the hierarchical structure among the region's economies became more clearly pronounced.

The FG paradigm, perhaps thanks to its simplicity, has some intuitive appeal. Its prediction on East Asia seems to have been born out by the patterns of industrial transformation of many economies in the region. Japan, the East Asian technology leader, has made progress in its manufacturing, shifting production/export activities from textiles, shipbuilding, steel and chemicals in the 1950s and 1960s, to automobiles and electric/electronic home appliances in the 1970s and 1980s; and then to high-tech sectors including computer and information technology (IT) in the 1990s and 2000s. Over time, some of Japan's firms in "obsolescent" sectors have gone abroad, and remaining firms in these sectors have upgraded their production activities at home. Those offshored activities have utilized less costly factors of production abroad, perhaps most importantly low-wage labour.

Overseas diffusion from Japan began vis-à-vis some of the 1st-tier NIEs (such as South Korea, Taiwan, Singapore and Hong Kong) as early as the 1960s, but more extensively in the 1970s when, for instance, South Korea's shipbuilding overtook Japan's (see Deyo 1989). In the 1980s, Japan made a further locational shift involving the 2nd-tier NIEs (Malaysia, Thailand and Indonesia), as they became major exporters of electronic products (Malaysia) and 1-ton pick-up trucks (Thailand). And as it is well known, the relocation came to target China in the 1980s and 1990s, as it joined the regional hierarchy and began to export natural resources, together with limited resource-based and labour-intensive products. China has since moved up the production ladder, manufacturing more complex and sophisticated products. For example, China has recently surpassed South Korea and Japan in shipbuilding. Nevertheless, researchers have continued to debate the extent to which China has raised its capacity to produce capital- and skill-intensive, sophisticated products.

Some of the 1st-tier NIEs were already engaged in some offshore production in the 1970s, and this trend gathered momentum in the 1980s. Hong Kong was the first to take advantage of China's Open Door policy that commenced in the early 1980s, and the colony's business advance into China was followed by Taiwan's. The trend of foreign exchange appreciation of their currencies in the late 1980s further intensified the 1st-tier NIEs to invest in some of the 2nd-tier NIEs and China. Clearly, the restructuring became a widening and deepening phenomenon of intra-regional linkages, with trade and FDI serving as key vehicles of business opportunities (Awanohara 1989: 9).

Can it be generalized that industrial diffusion occurs first domestically and then internationally? Indeed, this seems to be obvious, as industrial diffusion occurs domestically, i.e., within early industrializers, and in due course it occurs internationally, i.e., from early to late industrializers. As for late industrializers, however, the sequence is opposite. They typically observe the initial external stimuli from abroad (about new products and their production processes), and then internal diffusion follows

as the domestic adaptation of these stimuli progresses. In any case, the FG paradigm used to be concerned more with international diffusion rather than with domestic one, at least until China, an economy with an extremely large and diverse domestic market, came to play the role as a large FG member. In the case of China, domestic industrial diffusion has been as important as international diffusion. Here a pertinent issue is the extent to which the domestic diffusion of specific manufacturing activities must be completed before the international (outward) diffusion begins; the dissertation provides an extensive discussions on issues related to China in Chapter 6.

According to the FG paradigm, the continued process of industrial restructuring in a national economy implies that an increasing number of its manufacturing sectors is likely to emigrate. The process of industrial restructuring therefore tends to induce a “snowball effect” of proliferation, involving a growing number of firms and sectors as well as national economies. It is assumed here that the cost of restructuring productive activities in each national economy remains moderate, not causing the major issue of structural unemployment resulting from a “skills gap”, i.e., a mismatch between the skills offered by workers and the skills required for industrial upgrading.

The latest version (model) of the FG paradigm, which this dissertation refers to, is the “production network” model (or more often called “global value chains”) resulting from the practice of production fragmentation. This model highlights “partial” rather than “total” relocation of production activities, where offshore production handles only fragmented segments within the whole production/assembly operation for a particular final product. In this case, “premature” international diffusion may commence before the “completion” of the domestic diffusion process. Hence, modern researchers stress the importance of intra-sectoral (and often intra-firm) trade among regional economies, involving raw materials, parts, components and finalized products, as well as machinery and equipment related to their production and assembling. Economies engaged in such trade are those that are sectorally integrated and embedded in regionalized value chains.

1.1.2 Model-building of East Asian Development: Background

The history of analytical research by Japanese scholars on their country’s modern industrial development can be traced back to the early decades of the 20th century. In the 1930s the relocation/diffusion process of Western industrial activities to East Asia was formulated into a model for the first time by Japanese economist Kaname Akamatsu (see Akamatsu 1935). Akamatsu then argued that Japan’s catch-up process, as manifested in its changing production and trade patterns, presented a generalized model for late industrializers, which he metaphorically referred to as the FG paradigm. Allegedly, the model became part of Japan’s pan-Asianist project – before and during World War II (WWII) – lending intellectual legitimacy to its foreign policy discourse towards East Asia (Furuoka 2005; Korhonen 1994; Suzuki 2014). Japan then expressed its commitment to this project – a reactive, defensive response – with its self-imposed role as the “liberator” of Asia from Western

colonialists.³ Allegedly, however, Japan's harsh wartime subjugation of many parts of East Asia did not help popularize the model abroad. In retrospect, the country's war defeat distorted (if not nipped) its budding intellectual popularity. During several years of the postwar period, the country remained alienated as a "virtual pariah state" (Hook et al. 2012: 106). While the FG paradigm, as an intellectual thought, remained "grounded", Akamatsu and his follower researchers continued to work on the model in the 1950s and 1960s (e.g., Akamatsu 1958), but virtually all of their outputs were in Japanese, except Akamatsu (1961; 1962).

By the early 1970s, Japan's recovery from wartime destruction and further development had begun to draw the attention of Western researchers. A series of dramatic international events during that decade⁴ brought forth significant effects on the country's economy and thus affected its foreign policy. In short, Japan embarked on what is known as "resource diplomacy", building amiable relations with its overseas resource suppliers. In the second half of the 1970s, Japan reformulated its foreign policy – based on the concept of "comprehensive security" under the banner of the Fukuda Doctrine⁵ – to utilize official development assistance (ODA) as a major tool for its foreign policy particularly towards Southeast Asian economies⁶ (de Miguel 2013; Haddad 1980; Yano 1978). In 1979, Japan also designated China as a priority aid recipient and began to allocate increasing development finance to it;

³ In the early 20th century Japan promoted industrialization in its own colonial territories, namely Taiwan, Korea, and Manchuria/Manchukuo (see Cai 2008: 9-33; Jomo 2001: 465; Stubbs 2005: 38-45). Japan's imperialist policy transformed these colonies, coercively linking them to its own development by transferring some of its industrial activities to them. It started with agriculture through local modernization of rice and sugar production for the colonial metropolis. In the 1930s, Japan initiated a new and more intensive phase of transfer, such as iron & steel, chemical, and hydroelectric generation. Japan was among the very few imperialist powers that planted modern heavy industrial sectors in its overseas colonies (Cai 2008: 9-33; Cumings 1984: 12-13; Golub 2016: 45-53; Ogura 2015: 39-45).

⁴ They include, among others, the replacement of Taipei (Taiwan) by Beijing as China's representative at the UN (1971), the termination of dollar-gold convertibility (1971), the first oil shock (1973-1974), the eventual break-down of the fixed-exchange rate system (1973), the Iranian revolution (1978), and the Afghan and Cambodian invasions (1979).

⁵ In 1977, Prime Minister Takeo Fukuda enunciated a set of principles (the Fukuda Doctrine) to underline, above all, Japan's resolve not to grow into a military power again but to strengthen mutually amiable relations with its neighbours. Fukuda was also instrumental in concluding the 1978 Treaty of Peace and Friendship with China. For further discussion on Japan's precarious diplomatic relations with Southeast Asian economies in the 1970s, see, for example, Haddada (1980), Manglapus (1976) and Yano (1978).

⁶ One researcher observes that in the mid-1970s when the importance of ASEAN members in the foreign policy of the United States – under President Jimmy Carter – "dropped virtually to zero", it may have tacitly assigned Japan a central role in its new Asian strategy. As a result, US responsibility in Southeast Asia – which included the 2nd-tier NIEs – was transferred to Japan (Yano 1978: 61).

as a result, in 1982 China became its largest aid recipient (Brooks & Orr 1985: 331-332). In retrospect, these steps laid the groundwork for the set-up and application of the FG paradigm.

Even in the 1970s and 1980s, the strongly anti-communist social proclivity in South Korea and Taiwan did not tolerate left-wing thoughts (tinted by a socialist orientation). On the other hand, in many parts of East Asia, particularly in Southeast Asia, dependency school perspectives (structuralism) were strong. Old dependency school scholars – with the “stagnationist” view (Gereffi 1989: 508), the “underdevelopment” perspective (Frank 1966), and the “structural theory of imperialism” (Galtung 1971) – claimed that external dependency of “peripheral” (or satellite) economies on “core” (or centre or metropole) economies could only lead to stagnation, underdevelopment and revolution in the former (see Suehiro 2008: 16-19). With the term “dependent development”, on the other hand, the new (moderate) dependency school scholars were somewhat optimistic in their outlook. Some argued that structural dependency on foreign capital and external markets would constrain and distort the independent development path of periphery economies (Bello 1993, 1998), but others stressed that such dependence, as seen in rapidly developing East Asian economies, can still be compatible with capitalist economic development (Gereffi 1989: 508; see also Hatch & Yamamura 1996; Peng 2000).⁷ In this regard, the world-systems theory also admits the growth potential of some economies in the “semi-periphery” – those situated somewhere between the core and the periphery – to experience externally dependent development (Li 2007; see also Arrighi 1996; Fischer 2015).

In the 1980s, the FG paradigm clearly surfaced in the academic research and foreign policy discourse among Japanese observers. Indeed, the performance of Japan – together with that of others in East Asia to a lesser extent – was almost exceptionally impressive, against the background of the aforementioned geopolitical and economic turmoil in the 1970s and 1980s (with the latter decade in particular being the “lost decade of development” for many developing countries with mounting external debts). The FG paradigm definitively became part of Japan’s foreign policy to promote the integration of East Asian economies. By the end of the decade, Japan at the zenith of its postwar prosperity had become a vocal advocate of its development practice with the FG paradigm as a core part of its foreign policy (Arase 1994, 1995; Beeson 2007; Hatch 2010; Hatch & Yamamura 1996;

⁷ Observing that peripheral economies in East Asia have been externally dependent on foreign aid and trade, and those in Latin America on major foreign firms and banks, Gereffi (1989) argued that these contrasting modes of external dependency also affected the capability of the local state to convert these external dependencies (or linkages) to a national advantage. By now, Gereffi’s observation seems outdated, as East Asia has become the greatest destination of FDI, having surpassed Latin America. For a recent analysis on the contemporary situation of China, see Fischer (2010; 2015). The fall of the dependency perspective may have much to do with the rise of the 1st-tier NIEs (see Sanchez 2003: 39). In this regard, there was a short-lived revival of the critical dependency perspective after the Asian financial crisis (1997-1998).

Ohno & Ohno 1998; Terry 1996).⁸ However, as will be discussed in the following chapters, the FG paradigm that Japanese policy-makers referred to in the 1980s was considerably different from Akamatsu's model in the 1930s (see also Schröppel & Nakajima 2003).

During the 1990s, what is known as the “East Asian development model” was confronted with critical evaluations (see, for instance, World Bank 1993). The 1997 Asian Financial Crisis brought forth the most critical blow to the image of the region's development model. Meanwhile, China's impressive rise after a brief setback following the Tiananmen incidence (1989) had begun to challenge the Japan-centric development pattern of the region. The reference to the Japan-centric model of the FG paradigm – as well as the developmental state – has since then rapidly declined, for the second time.

In the interim, China's development path began to take the centre stage of East Asian dynamism. Even though China still occupied the low end of the East Asian industrial ladder in the 1990s, its own scale and dynamism have made the Chinese economy a new linchpin for the redeemed working of the FG paradigm now as the China-centric model (Lin 2011). The relevance of China's emergence to the FG paradigm can be seen in many different ways. As touched upon earlier, some researchers, for instance Ang (2016), find the FG paradigm valuable for analyzing *domestic* industrial relocation/diffusion within this large economy, whereas others emphasize the importance of offshoring some of the labour-intensive segments of the manufacturing sectors from China to East Asia and elsewhere (e.g. Africa or Central Asia). In short, the intellectual utility and policy implications of the FG paradigm have been substantially altered with the rise of China.

1.1.3 Perceptions towards the Flying Geese Paradigm

In the 1970s and 1980s, critical observers with some structuralist tinge argued that the FG paradigm was an intellectual framework to disguise Japan's neo-mercantilism or neo-imperialism (see Steven 1990). Before long, however, such negative views soon subsided, certainly considerably by the time of publication of the *Miracle Report* by the World Bank (1993). Yet, similarly, the reputation of the FG paradigm as a Japan-centric model steadily dwindled in the 1990s, as the country suffered from persistent lackluster performance. Since then, what has happened to the model? As noted earlier, China has clearly replaced Japan as the central force of regional dynamism, and that many observers of the Chinese economy have begun to see merits in recasting the FG paradigm in light of China's emergence.

The FG paradigm resembles Modernization theory (see e.g., Dunford 2009; Hanich 2015), as they both belong to a broad category of diffusionist theories (see further discussion in Chapter 2). It

⁸ For several years since the mid-1980s, practically every annual *White Paper* issued by Japan's Ministry of International Trade and Industry (MITI) referred to the FG paradigm, taking note of trends towards the widening and deepening of regional manufacturing activities (Terry 2002: 113).

appears as if the former (the FG paradigm) was a spin-off – with a narrower perspective in terms of geographical scale and societal/sectoral coverage – from the latter (Modernization theory). As for geographical scale, Modernization theory is largely global, though Euro-centric, in nature, whereas the FG paradigm is usually national and regional. And regarding societal/sectoral coverage of development, Modernization theory deals with “upward” reconfigurations encompassing all aspects (socioeconomic and political) of development, whereas the FG paradigm focuses on economic aspects (almost exclusively manufacturing activities and marketing) of development. As argued in this dissertation, both advocate the following ideas:

- i) Modernization/industrialization path is globally uniform, following a long “unidirectional” continuum of structural transformation at varying speeds from “traditional” to “modern”, but available to different societies at different periods;
- ii) Initial structural change in the past occurred in early industrializers/industrializers that enjoyed the possession of inherent advantages of human or physical resources endowments;
- iii) Principal development impulses emanating from early modernizers/industrializers, can activate the emulation process in late modernizers/industrializers; and
- iv) Interactions of early and late modernizers/industrializers are generally positive in terms of overall modernization/industrialization of the global, regional and national communities.

Different observers have referred to the FG paradigm with different intends and purposes in mind. As noted earlier, the original model of Akamatsu, a model of Japan’s catch-up process with the West, has been transformed. Some of its elements have been greatly elaborated (theorized) and further emphasized, but others have been de-emphasized, if not dismissed altogether, as inconsequential. Nevertheless, the FG paradigm has retained, whether wisely or not, its original name, because the model has persistently maintained some of its essential elements.

1.1.4 Geoeconomic Caveats: Conceptualizing East Asia

Thus far the dissertation has referred to East Asia without addressing what is exactly meant by the term. Now, the task – a cumbersome one – is to clarify it. Indeed, the task of clarifying the geographical demarcation of East Asia (i.e., the inclusion and exclusion of national economies, thereby specifying its “membership”) is cumbersome. This is because East Asia, no matter how it is defined, consists of heterogeneous actors (in historical, cultural and ethnographic terms) with widely asymmetric capacities and endowments (in demographic and geographical terms). Obviously, our interest – dealing with East Asian collective catch-up industrialization – lies in those economies that have successfully undertaken the late industrialization process and rapidly raised their national income. But the specific

area of East Asia with the noteworthy development has changed over time as well. In any case, the dissertation covers a geographical area whose boundary (membership) has changed over time.

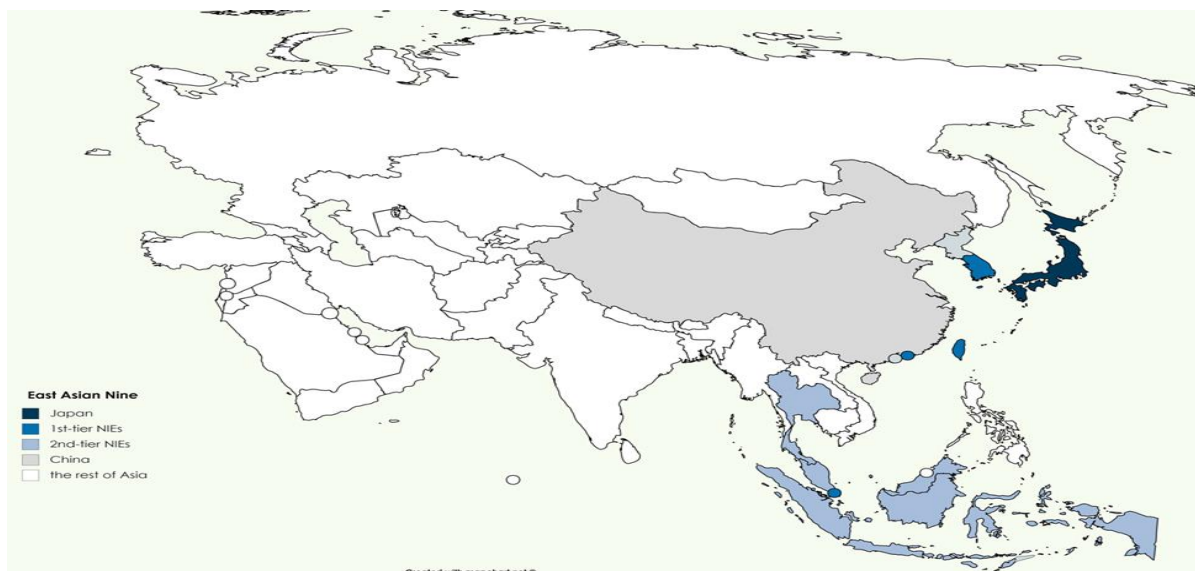
Anthropologists may argue that East Asian high performers are economies of Confucian capitalism (see, e.g., Clark & Roy 1997), which safely excludes Australia and New Zealand – two countries occupied predominantly by Western rather than Asian descendants – from the list of successful East Asian late industrializers. Indeed, the Confucian capitalism hypothesis has long been debated. The older view (as presented by Max Weber) was generally negative, implying that traditional values (including Confucianism) hinder development (Peng 1997). But more recent views have been generally positive, claiming that good East Asian performance has been underpinned by a neo-Confucian economic culture which promotes, among others, acceptance of hierarchy (i.e., the deferential attitudes towards managerial authority and the possible merit-based mobility therein), diligence (i.e., a willingness to work long hours and forgo leisure without being engaged in labour disputes), “groupism” (i.e., a commitment to the firm as a collectivity), and frugality (i.e., high rates of personal and corporate savings) (Henderson & Appelbaum 1995: 16). There is then a third group, “agnostics” – including Peng (1997) – who generally accept some linkages between Confucianism and economic development, but are skeptical about its “universal” nature, arguing that the role of Confucianism in economic development depends on basic conditions, most of all political systems. Confucianism’s respect for authority, for instance, could be an authoritarian state’s device to enforce control and to motivate the general public’s industrious efforts to achieve development. Then a troubling question emerges. Why is it that this long tradition of Confucian culture, which was presumably much stronger in earlier periods than now, failed to engender development in these economies?

The Confucian heritage may assist us in conceptualizing East Asian development as the diffusion process of Japan’s success model since the regionally shared heritage may have facilitated the process. This heritage arguably functions as a factor not only to unify East Asia but also to differentiate it from the rest of the world, particularly the West. It certainly makes it easier to argue that Japan, the front-runner among East Asian late industrializers, can be emulated by the followers who “share” the heritage. But this ethnographic approach by itself cannot explain why Japan alone was successful in industrializing in the late 19th century. A similar argument could be made regarding the effect of the scattered Chinese communities in East Asia that have purportedly linked up many of the region’s national economies (see Chapter 5 of this dissertation for further discussion).

According to the FG paradigm as a Japan-centric diffusionist model, East Asia is typically understood as a region of nine actors: “East Asian Nine”. First of all, Japan, a classic late industrializer occupies the top spot in the regional hierarchy, with the rest of the East Asian economies emulating its past performance. As shown in Figure 1.1, FG paradigm researchers have often clustered these non-Japanese East Asian emulators – or the “late-late industrializers” – into the 1st-tier newly industrialized

economies (NIEs) (South Korea, Taiwan, Singapore and Hong Kong); the 2nd-tier NIEs (Malaysia, Thailand and Indonesia); China and others.⁹

Figure 1.1
East Asian Nine



Clearly, all of the 1st-tier NIEs contain strong Confucian cultural traditions. The reality is that East Asia is culturally eclectic, permeated not only by Confucianism, but also by Daoism, Buddhism and Western influence (Christianity). The Western cultural influence has been historically significant in Singapore and Hong Kong. In some parts of Southeast Asia, the political and economic structure has also contained “Indic” characteristics, described as the “Mandala” system (see Acharya 2014 and Jomo 2003). Oddly, however, the first non-Japanese political leader in East Asia that expressed his willingness to equate the region’s development with the Japanese model was Prime Minister Mahathir of Malaysia, one of the 2nd-tier NIEs, or one with a much lesser amount of Confucian dosage than the 1st-tier NIEs.

⁹ Though this particular selection of East Asian economies as well as their clustering has been widely accepted, it is neither definitive nor permanent. For instance, Das (1996) includes Australia and New Zealand in the 1st-tier NIEs, and China and the Philippines in the 2nd-tier NIEs. Others also add Vietnam, India and others to the Asian FG paradigm. On the other hand, the East Asian FG regiment has never included the Soviet Union in the Cold-War period or the Russian Federation in the post-Cold War period. Under the China-centric model, the Russian Federation has been more welcomed in the context of the One-Belt-One-Road Initiative (for further discussion, see Chapter 6).

1.2 Research Objectives: Questions and methodology

Some researchers have readily dismissed the FG paradigm as an archaic model which simplifies the complex reality of modern manufacturing and trade in East Asia (Bernard & Ravenhill 1995; Katzenstein & Shiraishi 2006; Yun 2004, 2005). As noted earlier, this dissertation presents an intellectual history of “model-building” for late industrialization in light of the modern development history of East Asia. In this regard, the dissertation explores the industrial development of Japan, as the first non-Western late industrializer that successfully carried through its own catch-up drive in the late 19th century, and also the driver of East Asian development in the second half of the 20th century. In fact, many researchers regard the FG paradigm as a telling model to illustrate Japan’s initiative for its own industrialization as well as for the regional development of East Asia.

As noted earlier, while carrying the task of examining the FG paradigm largely as an evolving economic model, the dissertation also considers social dimensions that cannot be identified as economic factors. The model is explored in the analytical parts of the dissertation (Chapters 2 - 6), by presenting its evolving lineage, going through vast amounts of relevant academic and professional research pieces (including archival research of some original works in the prewar period). Furthermore, the dissertation also critically analyzes, in a comparative fashion, the ways in which the two East Asian economies, Japan and China, have deployed the FG paradigm in their development discourse. As far as this author is aware, there has been no attempt in the form of book-length, historical analysis of the FG paradigm, particularly bringing in Akamatsu’s original model as well as the China-centric model as part of the object of analysis.

In the following sub-section, as a preliminary note an attempt is made to locate where the FG paradigm could be situated in the conventional history of economic thought. The aim of the exercise is to avoid the perception that the FG paradigm is an idiosyncratic model that cannot be located in the chronology of mainstream economic history.

1.2.1 Conventional History of Economic Thought

According to the conventional line of Western intellectual history, the origin of economics can be traced back to the European mercantilist period (circa 1400-1750) which emphasized the centrality of the state, or its primacy over other domestic interest groups. Mercantilism – or classical mercantilism, as opposed to neo-mercantilism that appeared later – underlined the importance of nation-building through protection and state power. Viewing international trade basically as a zero-sum game, mercantilists advocated the build-up of wealth by maintaining a trade surplus (thereby accumulating compensatory inflows of bullion). It was understood that “bullion could provide a convenient state reserve in an age prior to central banking and efficient taxation” (Allen 1987: 446).

Mercantilism was gradually replaced by classical liberalism from the mid-18th century. Adam Smith, the pioneering advocate of classical liberalism, challenged some of the principal mercantilist propositions, namely, the value of accumulating bullion as well as the zero-sum nature of trade.¹⁰ Smith and his liberal followers rationalized the principle of free trade based on two main reasons. The “vent for surplus” argument states that overseas markets can provide all trading countries with outlets for surplus resulting from production beyond domestic demand; and that domestic specialization tends to promote the greater use of machinery and leads to the accrual of benefits from “economies of scale” in production. The “vent-for-surplus” argument was popularized by Myint (1959) who presented the case for exporting agricultural surplus where such export would provide subsistence societies with opportunities to employ previously unused factors of production. Thus, exports can contribute to the formation of market-oriented modernization in traditional subsistence agricultural society (Szirmai 2005).

In the late 18th and early 19th centuries, neo-mercantilists attempted to resuscitate mercantilism *without* totally rejecting liberalism (including free trade) as a long-term goal. Both Alexander Hamilton and Friedrich List, two major figures of neo-mercantilism, placed their arguments for interventionist measures as a matter of something like “temporary exception” to free trade. Nevertheless, their interpretation of liberal ideas with “statist assumption” still tended to yield distinctly mercantilist policy prescriptions. Nationalism must have also provided a cognitive base for statism, a fundamental tenet of both classical mercantilism and neo-mercantilism. State building – implying internal unification and external closure – has been central to the mercantilist and neo-mercantilist projects.

Neo-mercantilists do not deny the benefits of trade, but question the consequence of specialization dictated by international market forces, because such specialization, while offering optimal efficiency, may not effectively promote the catch-up process in late industrializers. Neo-mercantilists challenge the static notion of liberal comparative advantage, fearing that specialization at a given time could put late industrializers on a long-term trajectory of low pace in development.¹¹ Their position is that free trade cannot always be the optimal policy, and that temporary protection and other measures can be more conducive to national development and wealth. Thus neo-mercantilists rationalize state intervention – for example, with trade policies encouraging more exports and discouraging most imports – which imposes short-term costs on society (i.e., consumer welfare) for greater long-term

¹⁰ Heckscher (1935) provides a masterpiece on mercantilism, highlighting a fundamental continuity, rather than a shift, of certain ideas between mercantilism and classical liberalism. Whereas both saw a long-term harmony between the goals of maximizing power and plenty, Smith and Heckscher diverged regarding the position of trade policy.

¹¹ Latin American structuralists – including Raul Prebisch, the first Secretary-General of the United Nations Conference on Trade and Development (UNCTAD) – have shared this neo-mercantilist concern.

benefits (i.e., wealth and strength).¹² Thus, the traditional mercantilist concern for the balance of trade is rehabilitated with the neo-mercantilist concern for the specific composition of trade. This concern for “composition” also distinguishes neo-mercantilism from crude protectionism; for a contemporary “classic” work on the history of protectionism, see Chang (2002).

On a preliminary basis, it may be argued that the FG paradigm of the 1930s – as the Japanese derivative of neo-mercantilism – was heavily influenced by the German Historical School. But as Japan’s position changed over time from a late industrializer (vis-à-vis Western imperialist powers) to an early industrializer (vis-à-vis East Asian late-late industrializers), its neo-mercantilist policy stance went through changes as well. Interestingly, the modern versions of the FG paradigm that emerged in the 1960s have incorporated many “modern” microeconomic concepts and terminologies to make the model more acceptable to those who are familiar with neoclassical economics of a marginalist approach (see Schröppel. & Nakajima 2002).

When it was the only late industrializer that had successfully been catching up with Western early industrializers, Japan gained confidence in its own development policy as well as the FG paradigm as the model that justified its policy. In the postwar period, Japan was once the sole advocate of the FG paradigm in East Asia, upholding it from the position of the early industrializer in the region. Now, its monopoly position has been lost, which has affected the FG paradigm. Put simply, the modern version is no longer a Japan-centric model.

1.2.2. Research Questions

The dissertation broadly aims at answering the question of what the FG paradigm is all about in its totality. This research question has come to occupy this author’s thoughts because, as noted earlier, different researchers have referred to the model with different intends and purposes, which, in turn, has confused general perceptions about the model. One of the major causes of disagreement on the model lies in the typical images and norms that “Flying Geese” is supposed to convey. Due to its ambiguous “metaphoric” name, the model presents a fairly large margin of misinterpretation, and this dissertation is an attempt to document how researchers have attempted to convey the images and norms in different figurative (visual) ways. Given that reality has never stood still, it is natural to expect

¹² There are exceptions to this general rule. As for exports, the products encouraged should not cover such items that would help commercial competitors abroad (including capital goods, particularly machinery) as well as those that could strengthen imperialist opponents abroad (including arms and equipment). As for imports, the products that were to be exempt from discouragement would be raw materials and exotic items that would not threaten domestic producers and used for re-export (see Allen 1987: 446).

that the model reflecting it ought to change accordingly over time. Thus, the problem may lie in the fact that researchers have maintained the *same title* – “Flying Geese” – for the model.¹³

The dissertation aims at achieving two broad sets of objectives; one is of an economic orientation and the other of a multidisciplinary orientation. As for the economically oriented objectives, the dissertation carefully delineates the evolution of the “paradigm family”, reflecting the efforts of various researchers to “improve” the model in light of new intellectual developments as well as the changing reality. This does not mean, however, that the newer versions are always “better” – whatever it may mean – than the older ones, as the new versions may have inadvertently ignored or dismissed some important elements of the older ones. At any rate, the thesis maintains a critical perspective in evaluating how the conceptual evolution has successfully (or unsuccessfully) revived its relevance as a useful framework.

The thesis pursues to address the following sub-questions:

- i) What theoretical/conceptual elements have been retained, modified, added to or discarded in the evolutionary course of the FG paradigm to explain the catch-up process of late industrializers? (see Chapters 2 and 4)
- ii) What relevance does the modern FG paradigm present in explaining the changing reality of industrial development that purportedly form the East Asian miracle? (see Chapters 3, 5 and 8)
- iii) To what extent can the Japan-centric FG paradigm still reflect the development trajectory of industrialization of East Asia in light of the changing configuration of relative positions among the constituent national economies? (see Chapters 5 and 6)
- iv) How has China’s recent emergence affected the Japan-centric FG paradigm as well as the geographical area of its application? (see Chapter 6)
- v) How well can the FG paradigm provide a model of “sustained” development not only in each of, but also among, national economies? (see Chapters 6 and 7)

Given that it is a multi-disciplinary (largely political economy-oriented) exercise, the dissertation looks into three important trends in East Asia that seemingly challenge the validity of the FG paradigm.

- i) The FG paradigm, purportedly a Japan-centric model for regional development (Hatch & Yamamura 1996), has been challenged by China’s rapid growth.

¹³ In the 1960s, some Japanese researchers temporarily called their model “the catch-up, product cycle” model in light of the popular rise of Vernon’s (1963) model of the product life cycle.

- ii) The modern FG paradigm – which contains characteristics of “globally contingent regionalization” (Breslin 2010) – was operative as the extra-regional outlets were readily absorbing regional surplus.
- iii) The FG paradigm cannot effectively explain the increasingly prevalent production networks for manufacturing assembly operations in East Asia.

The first trend mentioned above may be reminiscent of the climate of opinion that tended to dismiss Marxism as an intellectual construct at the time of the commencement of the post-Cold War period and the implosion of the Eastern bloc’s leader, the Soviet Union, in the early 1990s. It is wondered whether China’s rise can still retain the East Asian catch-up progress just as in the heyday of Japan’s leadership. As for the second trend, the changing geopolitical and geoeconomic environment surrounding East Asia – most importantly the hegemonic influence by the US – is now affecting the presumed operational background of the FG paradigm. In other words, US administrations have become less and less willing to allow emerging economies – whether Asian or not – to pursue the export-led development strategy. Regarding the third trend, Chapter 3 of the dissertation includes the regional production network model in the FG paradigm family. In a nutshell, the recently developed production networks in the region imply partial rather than total relocation of the manufacturing activities of a particular product. However, a specific figure is an overly simplified scheme; the configuration of networks, i.e., the distribution and institutional linkage patterns are complex. In any case, regional production networks present factors that the earlier FG paradigm did not contain. The production network model challenges the traditional notion of “methodological nationalism”, i.e., the notion of identifying the nature of the final products exported by the countries and the level of their development.

1.2.3 Research Methodology

This dissertation presents a discussion of the intellectual tradition of East Asian development, particularly the collective catch-up process among late industrializers. The research contained in the dissertation is extensive dealing with a long period of Japan’s development history. It covers the period with Meiji leaders’ development efforts down to the postwar multi-sectoral reconstruction and development. It also deals with East Asia, particularly the industrial development of the region’s other economies in the postwar period. In light of the importance of China, the coverage of its postwar development, particularly in the post-Mao period of open and liberal policy regime, has also been extensive. Consequently, it is unlikely that conventional field work (period-specific, location-specific, sector-specific) would bring forth useful results. The epistemological approach in this dissertation consists of reviewing relevant historic literature of development studies (mostly political economy and development economics), a general understanding (and interpretation) of the modern history of the nine East Asian economies under study (basically covering the postwar period, with an emphasis on two dominant regional powers: Japan and China) and the interpretation of their trade data (sector specific). Most of all, it entails extensive archival research of Akamatsu’s research (mostly in Japanese)

on Japan's textile industry in the 1930s. Of course, supplementary research on the overall development history of the Meiji period, with an emphasis on the cotton industry was also undertaken.

1.3 Structure of the Dissertation

The dissertation presents three types of exercises – or “tasks” in short – which relate to various concepts associated with late industrialization, and packed in the FG paradigm. The first task is to trace the historical lineage of the intellectual evolution of the FG paradigm; the second task is to critique the robustness of the FG paradigm; and the third task is to discuss the transition from the Japan-centric framework to the China-centric one. The dissertation consists of five substantive chapters (Chapters 2, 3, 4, 5 and 6), apart from this Introduction (Chapter 1) and the Conclusion (Chapter 7). Chapters 2 and 3 are concerned with the first task of tracing the lineage of the FG paradigm, and Chapters 4 and 5 with the second task of scrutinizing the robustness of the FG paradigm (Akamatsu's original model and those subsequent versions discussed in Chapters 2 and 3). As for the third task, Chapter 6 analyzes the transition in the development discourse of the FG paradigm, from the Japan-centric framework to the China-centric one.

The dissertation also contains an extensive appendix section containing five supplementary chapters (Chapters 8, 9, 10, 11 and 12). These supplementary chapters provide additional information to substantiate various arguments presented in the main text (the first 7 chapters). This dissertation has been formulated in such a way that a reading of the main text alone will be sufficient to understand the main line of the analytical discussion.

To elaborate, Chapter 2 discusses the original model presented by Kaname Akamatsu as a largely *national* development model, together with later refinements and modifications in the early post-WWII (postwar) period. The model started with the conceptualization of the sequence of import (M), production (P) and export (X) of a product (or a product group). The dynamism of the M-P-X sequence leads to two additional broad types (dimensions) of dynamism: domestic and international. The domestic dimension includes: the above-mentioned process of product-specific import substituting production, the progress of what may be called product- and/or sector-specific upgrading. They all depict the rise and fall of the economy's competitiveness for a particular product/product group/sector over time.

Chapter 3 recapitulates the post-Akamatsu process of refining and developing the international (regional) dimension of the FG paradigm. The process has extended Akamatsu's M-P-X sequence, focusing on East Asia as the regional target of its application. The modern FG paradigm advocates have tended to emphasize the role played by foreign direct investment (FDI) as the principal diffusion channel of manufacturing activities. In the 1960s and 1970s, Akamatsu's students (most notably

Kojima) challenged the “underdevelopment argument” of the North-South debate. They used the FG paradigm to explain that Japanese FDI was more beneficial to the host economies than the American counterpart as the former tends to be more consistent with, or complementary to, the theory of comparative advantage than the latter.¹⁴ To a certain extent, this involved the recasting of the FG paradigm in a neoclassical framework.

Chapter 4 critically looks into conceptual – ontological – elements contained in the paradigm as a generic model of national industrial development and regional industrial diffusion/relocation broadly. These problems are often concerned with specific elements of the FG paradigm, such as, among others, the presumption of the “standardized” import substituting process, the ambiguity surrounding the enhancement of national productive capacity, the consideration of demand factors, the validity of the product cycle concept (as a principal component of the modern FG paradigm), and the identification of agents of restructuring (most importantly, the role of the state with industrial and trade policies). As for its robustness as a regional development model, one puzzling conceptual issue is whether the typical neo-mercantilist policy stance (for infant industry protection and export promotion) can be consistent with the collective industrialization of a group of countries.

Chapter 5, a sequel to the previous chapter, looks into the FG paradigm as a development and integration model specifically for East Asia in the post-Cold War period. Modern FG advocates have developed their models in the fluid context of the region, which means that some elements of the model must be reviewed and modified to make them fit better to the changing reality. The dissertation notes that manufacturing activities in East Asia have been increasingly fragmented but at the same time closely linked along with what is known as “value chains”. The prevalent division of labour in the region shows that each national economy is often specialized in producing “incomplete”, parts and components rather than “complete” products. Nevertheless the argument of the dissertation is that the regional production network model could be seen as a modern derivative of the FG paradigm. It is much easier now for major firms in advanced countries with high wages – not just in East Asia but elsewhere as well – to offshore labour-intensive segments of their value-chain assembly processes (such as, most prominently, automobiles and electronic products).

Chapter 6 deals with development discourse in academic and diplomatic circles associated with the FG paradigm. One important phenomenon that has affected the discourse is the emergence of China as the new flag-bearer of the model. This chapter presents an exploratory discussion, in the form of a comparative analysis between the early (somewhat defunct) Japan-centric model and the

¹⁴ Arguing that Japan’s outward FDI projects are mainly in resource- and labour-intensive (often heavily polluting) low-tech industrial sectors, i.e., the sectors of its *comparative disadvantage*, Kojima (1975; 1978; 1985) states that Japan’s regionally active firms not only generate trade (pro-trade) but also enhances industrial restructuring in both Japan and host countries (late industrializers).

contemporary (emerging) China-centric one. China's rise is challenging the regional hierarchy, and arguably contributing to the malfunctioning of the Japan-centric model. Its sheer size and internal diversity have made it more time-consuming for China to undertake external relocation of its manufacturing activities to other economies in East Asia (and beyond). It is argued in the dissertation that China's rise against the increasing production networks in East Asia has challenged some aspects of the Japan-centric model. It is anticipated that China's foreign policy discourse will further deploy the FG paradigm, the scale of which will be much larger than Japan's.

Chapter 7, the analytical conclusion of the dissertation, reflects the discussions presented in the preceding chapters (as well as their supplementary chapters in the appendix section), and examines the overall intellectual importance of the FG paradigm in light of the contemporary global as well as the East Asian situation. The chapter also clarifies the limits of the FG paradigm as a policy guideline in development discourse in changing international and regional contexts. The dissertation attempts to shed light on how China may have found in the model some merits that reflect national interests.

As noted earlier, this dissertation contains five supplementary chapters (Chapters 8, 9, 10, 11 and 12). Chapter 8, the supplement to Chapter 1, presents a preliminary historical note on nine East Asian economies, the "East Asian Nine": Japan, South Korea, Singapore, Hong Kong, Malaysia, Thailand, Indonesia and China. This chapter presents brief historical notes of these economies, individually and collectively, and demonstrates how the weight of their economy has shifted among the group. The choice of these nine economies was "conventional" in the sense that this was done in the 1980s and 1990s when the FG paradigm was popularized among Asian researchers.

Chapter 9, the supplement to Chapter 2, looks into Japan's cotton industry (specifically, yarn, fabric and cotton spinning and weaving machinery) as a case study since the commencement of the country's trade relations in the late 19th century. The reason for this chapter is that Akamatsu's original FG paradigm as presented in the 1930s was based on his detailed historical observation of Japan's textile industry (especially wool and cotton) from the 1870s to the 1930s. The modern FG paradigm concerns itself mostly with the more recent past, say since the 1960s, covering a wider range of industrial activities and including more than a single national economy.

Chapter 10, a supplement to Chapter 3, presents a brief note on a model known as the Investment Development Path (IDP) which depicts the passage of the "international investment position" (i.e., net investment flows of a national economy) and the level of development. The IDP typically shows that along the rise in the income level, the national economy tends to shift its international investment position from a net recipient to a net provider. The IDP is pertinent in the context of regional development where the intra-regional FDI has been a very important source of industrial relocation.

Chapter 11, another supplement to Chapter 3, briefly looks into the Thai automobile industry. This chapter emphasizes the historical influence of Japanese automakers (via their subsidiaries and sub-contracted parts suppliers) on the local industry. Let us note preliminarily that the history of Japanese automakers' activities in Thailand started much earlier than the modern FG paradigm (the integration/snowballing model) explains. The automotive sector was selected as it reflects a much higher stage in the industrial upgrading of a national economy, than the cotton industry of Japan discussed in Chapter 9.

Chapter 12, the supplement to Chapter 5, presents a discussion of empirical papers on the FG paradigm. With the FG paradigm being a multifaceted model, researchers have focused their analytical attention on different aspects of the model, i.e., covering different products/product groups/sectors over different periods of observation. For the domestic industrial upgrading process, for instance, researchers have looked into the shifting shares of product groups (from resource-based, to low-tech, middle-tech and high-tech products) in countries' overall manufactured exports and have compared the shifting trends among countries. In this regard, one important factor is the timing of the commencement of capital goods, i.e., machinery exports associated with outward FDI for offshore production.

CHAPTER 2

Evolution of the Flying Geese Paradigm: Part I: Akamatsu's Original Model and Its Refinements

2.1 Introduction

Chapters 2 and 3 present an analytical survey of the evolution of the FG paradigm. Specifically, Chapter 2 (Part I) discusses the original paradigm presented by Kaname Akamatsu¹⁵ in the 1930s, together with its refinements undertaken by Akamatsu himself and his students in the early post-World War II (WWII) period. The chapter begins with a brief review of the broad modernization drive Japan embarked upon in the second half of the 19th century, when the country ended the Tokugawa (shogunate) period. In the area of industrialization, the development of the textile industry, notably wool and cotton spinning and weaving from the 1870s, provided fertile ground for Akamatsu's research (Ohtsuki 2010). Purportedly, WWII engendered a dreadful impression about the FG paradigm because of its wartime (imperialist) connotation. The model, however, proved to be “resilient”; after a hiatus for more than a decade after the war, it re-emerged in the 1960s.

Chapter 3 (Part II) discusses the “post-Akamatsu” versions, i.e., the “modernized” paradigm in the postwar period as opposed to his original model in the prewar period. The modern FG paradigm includes the notion of late industrialization just as the original model, but its analytical framework is based on regional development and integration rather than a national catch-up industrialization process. We should add that Akamatsu was intellectually active until his death in 1974, and that he himself participated – often in collaboration with junior co-researchers – in the process of formulating some of the “post-Akamatsu” versions of the model.

This chapter first presents the background of the post-feudal, industrial take-off in Japan; second, introduces major conceptual elements that constituted the original FG paradigm as a model for late industrialization; and third, elaborates the refinements of the original model. In order to avoid presenting too much detailed information on Japan's industrial development (in particular its cotton industry), the documentation of the historical development of its cotton industry is relegated to Chapter 8.

¹⁵ We can hardly find any readily available book-length biography on Dr. Kaname Akamatsu, except Ikeo (2008) in Japanese. Korhonen (1994) is one of a few sources that have provided a service to English readers with a section on Akamatsu's personal life. More recently, Ohtsuki (2011) presents a detailed documentation in English on Akamatsu's academic life in the prewar period. Ohtsuki's PhD dissertation (2010) – which was made available to this author – is a fine archival research piece that focuses on Akamatsu's activities in the 1930s, around which period the textile industry in the Nagoya region in central Japan motivated Akamatsu to develop the initial model of the FG paradigm.

2.2 Background of Japan's Post-Feudal (Meiji) Industrial Development

In the 1850s, encroaching Western powers with their military technology forcefully terminated Japan's virtual seclusion (1639-1854). Japan was then obliged to sign what the Japanese called "unequal" treaties.¹⁶ These treaties granted Japan neither the right to prosecute foreign criminals nor the right to impose import tariffs beyond the across-the-board 5% limit. The latter was set in 1866, and lasted until 1899 when Japan's tariff autonomy was partially restored, but its full restoration took another 10 years, until 1911 (Ohno 2018: 36). In light of the gap in military strength, the shogunate leaders perceived that Japan's persistent refusal of the Western approach would only aggravate Western aggression. These treaties caused more than a decade of intensive domestic disputes often with violent clashes between the emperor and the shogunate in Japan. The main reason for the disputes was that shogunate officials signed these treaties without prior imperial consent (Ohno 2013: 136).

The Meiji period (1868-1912),¹⁷ the first post-feudal period under restored imperial leadership, was responsible for Japan's emergence as a "modernized" country. In the early post-Restoration period, up to the 1890s, the Meiji government upheld the grand campaign banner of "Rich Nation, Strong Army" (富国強兵, *fukoku kyouhei*), with a wide range of modernization initiatives, emphasizing, among others, the campaign for industrialization (殖産興業, *shokusan kougyou*) (see, for example, Ohno 2013; Ohno 2018; Yamamura 1977). The psychological factor that motivated the Meiji leaders to undertake such a large-scale transformation of their country was fear: the fear of forceful colonization. They felt that the treaties would minimize, among all limited alternatives, the likelihood of more direct colonialist subjugation that was besetting its neighboring China,¹⁸ along with Africa, Southeast Asia, and much of the rest of the world (Pempel 1999: 161).

¹⁶ Japan's opening process began with the United States' (US) Commodore Perry's visit to Edo Bay in 1853, which led to *bilateral friendship treaties* with the US in 1854 as well as with the United Kingdom (UK), Russia and the Netherlands over the next few years. The US was interested in building trans-Pacific trade, thereby accumulating wealth (Clyde & Beers 1991: 122). In 1858, the US successfully pressed the shogunate to sign a *bilateral commercial treaty*, which was followed in 1859 by similar treaties with the afore-mentioned three Western powers, and now also with France.

¹⁷ Meiji reformers defeated the shogunate forces and carried out the Meiji Restoration (明治維新, *Meiji ishin*) where the emperor was promoted from a long "latent" at the imperial palace in Kyoto to the "manifest" head of state now residing in Tokyo (formerly known as Edo) (Ohno 2018: 38).

¹⁸ In a personal communication (1 June 2015) with this author, Andrew Fischer pointed out that China was dismembered but never colonized by the Western powers in the fashion observed elsewhere. In our view, the *de facto* subjugation of China was severe. The defeat in the first Opium War (1839-42) brought forth "unequal treaties" which obliged it to open many of its ports along the coast to trade. The number of "treaty ports", known also as "treaty settlements", ended up covering the country thoroughly. They were Western colonial enclaves furnished with foreign jurisdiction and extraterritorial control.

As part of the nation-wide modernization drive, following similar policies the Tokugawa shogunate had undertaken in the early 1860s (see Saito 1975), the Meiji government sent abroad official delegations.¹⁹ The public campaign of industrialization included a wide range of actions: hiring Western advisors, hosting industrial fairs, developing educational institutions and research centres, and constructing infrastructure (including public transportation, particularly the railway system and communications). In the early Meiji period, it was the government that hired the great majority of invited Western advisors, mainly from the United Kingdom (UK), France, the United States (US) and Germany (Gooday & Low 1998: 105), and they were predominantly science teachers and engineers. Their numbers, however, declined over a few decades, as many Japanese who had been dispatched abroad to gain the latest ideas, skills and technologies in their specialized subjects were returning and replacing these advisors. Indeed, these Japanese returnees helped reduce the enormous amount of public expense accrued from hiring costly Western engineers and trainers (Ohno 2018: 52; Jones 1968). Yet, the number of *privately* hired foreign advisors in the *private* sector rose rapidly, and soon surpassed the number of those publicly hired (see Saito 1975: 175-177).

The Meiji government financed many firms, or model factories in various sectors, including iron & steel, silk and cotton spinning, shipbuilding and mining (Ohno 2006: 62-64; Ohno 2018: 39-41). This was partly because large merchant houses with large accumulated wealth in the pre-Meiji period were initially reluctant about risking their funds in initiating new enterprises outside their trading and financial activities (Francks 1992: 38). Later, in the 1880s, however, the government sold many of the state-owned plants – except those engaged in military production – to a small number of wealthy merchants (Clyde & Beers 1991: 139; Pempel 1999: 161; Rodrik 2013: 142-144). The officials also adopted various technology transfer schemes, including turn-key contracts, management contracts, and technical advice. The manufacturing arsenal in the machinery, machine-tool, shipbuilding, and iron & steel production all of which the government created in the 1870s spearheaded the country's technological progress (Yamamura 1977). By the early 20th century, Western powers had come to perceive Japan as an emerging Asian geopolitical power, as demonstrated by its victories in the Sino-Japanese war (1894-1895) and the Russo-Japanese war (1904-1905). Japan fought these wars as it

¹⁹ The most celebrated among these missions was the 107-man Iwakuni Mission (1871-1873) that included about half of the cabinet ministers, as well as many young students who would stay on abroad for study. Ohno (2018: 39) explains that the mission had two broad purposes: i) to conduct preliminary negotiations for revising the unequal treaties, and ii) to study advanced technology as well as Western institutions (such as metric weights and measures, the Western calendar, a new monetary system, banking, and joint stock companies, etc.). Whereas the first purpose, the restoration of tariff autonomy, was not achieved right away, the second purpose was soon vigorously put into practice in various forms. Purportedly, one of the most influential Western leaders to Japan's official delegation was Bismarck, who stressed the importance of national unification and nation-building (Murphy 2015: 67, 74).

asserted its political and economic influence in the Korean Peninsula and then in the Northeastern part of China (known as Manchuria).²⁰

The Meiji government eschewed the option of inviting foreign direct investment (FDI), particularly for fully foreign-owned projects (Saito 1975: 185).²¹ This was in sharp contrast with the experience of China and India, two large Asian FDI recipients in the late 19th century. For that matter, the Meiji government was also reluctant to borrow from abroad (Francks 1992: 31; Ohno 2006: 64). Let us note that the Meiji government operated in the age of colonialism when no grants, loans and technical assistance were available to late industrializers in international cooperation (Ohno 2013: 124). Since each of the development contracts that the government signed were usually project-specific with a fixed duration (an average of about five years), foreign experts who had been hired were expected to return home when their contracts expired (Gooday & Low 1998: 105). For the Meiji government, the employment of these foreigners was “a necessary but temporary evil” (Ibid) to be replaced by Japanese as soon as possible (Ohno 2018: 52). The government also took utmost care to prevent important national projects, such as mines, railways and shipyards, from falling into foreign control.

In the early efforts of modern nation-building in Japan, the German intellectual tradition presented a practical blueprint for Japan (McMillan 1995: 5; see also Martin 1990; Thompson 2010; Thompson 2016). Especially influential was Friedrich List. Purportedly his masterpiece, *The National System of Political Economy*, was translated into Japanese – complete with an official introduction from the governor of the newly established Bank of Japan – and circulated widely among the Meiji elites (Murphy 2014: 64). Japanese private entrepreneurs also followed the German practice of placing banks at the centre of business groups (known as 財閥, *zaibatsu*), where banks, instead of bond and stock markets, served as the primary providers of investment capital to firms affiliated with the groups (Ibid: 66). Although considerably loosened up, many of these groups have survived and prospered to the present. At grass-roots level across the country, new and old merchants, skilled engineers, traditional

²⁰ In the 1880s, Japan intervened in Korea’s domestic politics and staged disruptive and provocative actions. This eventually led to warfare with China (Qin Dynamist) which had long assumed Korea as its protectorate. The defeat in this war obliged China to retreat from Korea. Japan was then confronted with another rival, Russia, which came to occupy – with large troops, batteries and military bases – a large part of Manchuria. Forging the bilateral alliance in 1902 with the UK to deter Russia, Japan prepared for a final showdown (Ohno 2018: 44).

²¹ Japan’s FDI regulation was strict, not allowing foreign firms to invest outside the so-called “Treaty Settlements”; however, revisions of international treaties in 1899 granted foreign investors the right to invest outside these areas. Although scattered data offer only clues, inward FDI (mostly from the US) grew until the end of the 1930s. Most of these projects took the form of joint ventures between major Western firms and Japanese counterparts (see Mason 1987).

craftsmen and rich farmers became the driving force of broad-based technical absorption (Ohno 2006: 56).

Japan's trade pattern soon after its opening to Western powers was typical of a developing country. While modern textile products and machinery dominated its imports, primary commodities (such as raw silk, silk cocoon and tea) and traditional handcrafts (such as small-scale artisanal textiles and ceramics) dominated its exports to the West. Fortunately, Japan faced enormous overseas demand, especially from the US, for its raw silk, which would remain an important source of foreign exchange earnings for some time (Kasahara 1995). Over time, however, Japan developed more complex trade patterns with its neighbours, although changes in its trade patterns with the West were much slower. In the 1890s, Japan began to export light manufactured products, such as cotton yarn and fabrics, matches, umbrella, clocks, lamps, glass products, knitwear, and the like, mainly to the rest of Asia and imported materials needed to produce them (Ohno 2006: 62; see also Chapter 8).

In 1914, Japan participated in World War I (WWI) (1914-1915) as the UK's ally, under the term of the 1902 bilateral alliance, against the Central Powers (Germany and its allies). The immediate interests and concerns of the major Western powers obliged them to focus on Europe; as a result, Europe's trade with East and South Asian economies and colonies was considerably disrupted, and many from the latter group turned to Japan for imports (Clyde & Beers 1991: 284). Consequently, Japan was pushed into becoming Asia's emerging industrial power. It received commercial orders from Europe for munitions as well as civilian products. Towards the end of the war, Japan captured German-occupied areas in China and the South Pacific. Over all, the country's external position improved, most of all with the favourable balance of payments. Thus, in the 1910s Japan could clear its outstanding foreign debt and already became a creditor country.

Despite its participation and being on the victorious side in WWI, Japan was not treated favourably at the Paris Peace Conference (1919), which led to the establishment of the League of Nations, a new inter-governmental organization (1920). In Japan's view, the League was equipped with built-in "racist" bias against non-Western societies, including Japan. The Washington Naval Treaty (1922) disadvantaged the country in comparison with the UK and the US. During the 1920s, the world economy experienced a period of considerable prosperity (the Roaring Twenties), but the situation dramatically changed with the onset of the Great Depression in 1929. The European powers in the League severely censured Japan's attempt at territorial expansion, with its 1931 invasion of Manchuria as well as the establishment of its puppet state, Manchukuo (Hook et al. 2001: 28; see also Yamamura 1977). It was in this precarious inter-war period that the FG paradigm was born.

Purportedly, Japan's defeat in WWII was a critical blow to the fledgling FG paradigm. As its wartime connotation of justifying Japan's coercive subjugation continued to tarnish its image, the paradigm

remained practically undetectable to non-Japanese researchers for a few decades after the war (Kasahara 2004; Korhonen 1994a; 1994b). Furthermore, as Pempel (1997: 53) explains, given East Asia being divided in the Cold War confrontation, and Japan being placed under the US security umbrella, the practical appeal of the region to Japan remained subdued for a while. From the mid-1950s, however, Japan began to re-establish its more constructive relations with those economies that were allied with the US, and agreed with ten East Asian economies to transfer about US\$1.5 billion in reparations as well as economic and technical assistance (Ibid: 56).

2.3 Flying Geese Paradigm Proposed by Kaname Akamatsu

The FG paradigm, just like Modernization theory belongs to a broad category of “diffusionist theories”. Diffusionist theories describe the process of shifting from tradition to modernity through geographical spread, whether domestically and internationally, the “impulse of modernization” (ideas, values, goods and technology) (Chant & McIlwaine 2009: 28). A key notion underpinning the FG paradigm is that late industrializers can utilize a modernizing impulse from early industrializers (through trade, investment, aid and others) to activate their catch-up process. According to Ozawa (2009), the changing fortunes of Florentine, Venetian, Genoese and Dutch mercantile capitalism also attested to the applicability of the FG paradigm to the pre-industrial period. Other observers have applied the model to geographical regions beyond East Asia, such as sub-Saharan Africa (Kaplinsky 2008; Lin 2011), Eastern Europe (Kalotay 2004), and Latin America (Palma 2009). Referring to Akamatsu’s model, Blomqvist states: “As an analytical framework, there is now nothing in the model that limits its possible application to Japan and its neighbours only” (Blomqvist 1996: 226). One outcome of the diffusion theories, optimists may perceive, is that economic inequalities, again domestically and internationally, are gradually evened out through the “trickle-down”, “levelling-out” or “spread” effects (for further discussion, see Browett 1980; Chant & McIlwaine 2009; Fischer 2015).

The conventional approach, as an intellectual discourse, to the diffusion of industrial development used to focus on the context of relations among Western countries, most notably the relations between the UK (the early industrializer par excellence) on the one hand, and Continental European countries and the US (late industrializers) on the other. The spread of industrial development originated with the Industrial Revolution in the UK in the late 18th century, which gradually ushered each of the Western “late” industrializers into a modern industrial economy. The emergence of Japan – as the first late industrializer in Asia – widened further the geographical scope of industrialization beyond Europe.

As noted earlier, the initial framework of the FG paradigm as a development model was based on a careful study of Japan’s textile industry from the late 19th century. In the following pages, this chapter traces the earlier part of the evolution of the FG paradigm family. The term family is used to designate various models, theories and concepts (which are included in this chapter) that are closely related to

Akamatsu's original model. For historical and comparative surveys of various versions of the FG paradigm, see, for example, Kasahara (2004), Kojima (2000), and Schröppel & Nakajima (2002).

2.3.1 Kaname Akamatsu: His Initial Framework and Its Evolution

In the 1920s Japanese economist, Kaname Akamatsu (1896-1974),²² began to sketch the modern history of Japan's commercial relations with advanced Western industrializers. Akamatsu delineated Japan's economic development along the line of the German Historical School together with the concepts of Hegelian philosophy (Ozawa 2015: 18; Ozawa 2016: 16-23). Akamatsu also drew on the ideas of Alexander Hamilton (1757-1804) and Henry Carey (1793-1879), both Americans, who also advocated infant-industry protection (Ozawa 2016: 16). As noted earlier, the objective of Akamatsu's research was to formulate a general principle of late industrialization (the catch-up process) by analyzing the development of Japan's textile manufacturing (in particular, the production of woollen and cotton yarn and fabric).

The FG paradigm originated in the 1930s as a model, which Akamatsu metaphorically called "a pattern of a flock of flying geese" (雁行形態, *ganko keitai*) to characterize the general pattern of industrialization in late-industrializers. Many observers have thought that the FG paradigm was part of Japan's explicit pan-Asian project during WWII, purportedly lending intellectual legitimacy for creating a Greater East Asia Co-Prosperity Sphere (大東亜共栄圏, GEACPS) under its imperial tutelage (Aseniero 1996: 6; Kenderdine 2018: 438; Korhonen 1994b: 94; Peng 2000: 181; Schröppel & Nakajima 2002: 223). In 1942 and 1944 Akamatsu was sent to Southeast Asia as the leader of a research group on the local situation, and was retained thereafter for a few years as a Japanese researcher-cum-military officer (Ohtsuki 2017). Akamatsu was purged from public service after WWII – due to his wartime role as a military-collaborator – until December 1948 when he was finally allowed to return to his academic life (Ikeo 2008; Ohtsuki 2010). Let us note that although the model originated in the 1930s, it is unlikely that by the end of the decade the terminology of the FG paradigm had been well accepted into the intellectual psyche and governing institutions in Japan. The FG paradigm then was still an esoteric, late-industrialization model rather than an integrative development model for East Asia.

In any case, Japan at that time stressed its commitment to this pan-Asian project with the self-imposed role as the regional leader, savior and liberator against Western colonialists. After all, as far as non-Japanese were concerned, however, the mode of the country's execution of the project was still in the

²² During his formative years, Akamatsu was interested in Marxism as the 1917 Bolshevik Revolution made it popular among young progressive intellectuals in Japan. Apart from Marxism, Akamatsu studied general economics, and became interested in German philosophy, especially Nietzsche, Schopenhauer and Kant (Korhonen 1994b: 93-94). Akamatsu was also influenced by the new trend of empirical research, which was then getting popularized in the United States, in the process of formulating his own model (see Ohtsuki 2011).

form of externally imposed coercion rather than that of indigenous volunteerism. It boiled down to another form of foreign dominance, not necessarily less oppressive than that of the Western colonists (Acharya 2010: 1003-1004). Indeed, the GEACPS provided the East Asian masses with a convenient political platform for organizing the unity of anti-Western/anti-colonial struggle in the region.²³ As noted above, Akamatsu himself was drafted into the efforts to create a new Asian economic region to serve the Japanese empire, but again whether Akamatsu himself justified Japan's wartime atrocities with his model has been subject to debate (Ohtsuki 2017).

2.3.2 Departure from Akamatsu's Initial Model

Akamatsu published virtually all of his research outputs in Japanese, and this was one crucial reason why the FG paradigm would remain little known to the West until much later.²⁴ By the early 1960s when Akamatsu got his two articles published in English (Akamatsu 1961; 1962), his original model of the 1930s had been considerably developed and modified. The wartime memory of Japanese imperialism – which lingered in many parts of East Asia, especially in Southeast Asia – manifested itself in violent protestations at various occasions of Japanese politicians' official overseas visits in the early 1970s (see Manglapus 1976; Yano 1978).

While many non-Asian developing countries (most notably, in Latin America and Africa) faced a debt crisis during the 1980s, East Asian economies managed to grow, and much of Japan's foreign aid subdued critical views²⁵ towards the country. Instead, the rising interest towards East Asia as an emerging growth pole encouraged Japanese researchers to refer again to the FG paradigm. In the sphere of policy-making, the paradigm's revival in the 1980s was seen as a renewed trial of the Japan-centred flight of Asian geese that had failed during the wartime and early postwar period. The revival of the FG paradigm in the 1980s was also regarded as an Asian response to the proliferation of regional blocs in the midst of the global recession of what was known as the "lost decade of development" for many developing countries that suffered from mounting external debt. In this regard, Japan became a vocal advocate of East Asian integration, with the FG paradigm explicitly serving as a rationale for its foreign policy (see Hatch 2002; Hatch 2010; Hatch & Yamamura 1996; Terry 1996; 2000; 2002).

²³ Perhaps, this may not have applied to Koreans and Taiwanese already living under the Japanese colonial control.

²⁴ A recent biography on Akamatsu reveals that Vernon – who popularized the product cycle theory in the 1960s – was informed of these articles by Akamatsu by one of his Japanese students (Ryuzo Sato) then studying at the graduate school of Johns Hopkins University. However, according to Ikeo (2008), Vernon did not acknowledge Akamatsu's contribution.

²⁵ These include such a view that Japan's postwar diplomatic posture reflected the revival of an Asian version of the Monroe Doctrine where the country regards East Asia as its "exclusive" sphere of influence (Chu 2007: 26).

Many critical observers noted that the renewed reference to the model symbolized the resurrection of the GEACPS (e.g. Blomqvist 1996; Erturk 2001/2; Ginzburg & Simonazzi 2005; Korhonen 1994a; Korhonen 1994b; Thompson 2010). Others, however, counter-argued that East Asian development should be seen as a new trial of East Asian groups, not necessarily Japan alone, seeking paths for regional development in light of various new events, such as the end of the Cold War, the emergence of China as a new powerhouse, and the Asian Financial Crisis (1997-1998) (MacIntyre & Naughton 2005). Some FG researchers – including Akamatsu’s students – have advocated economic integration whose envisaged scale is greater than East Asia. For instance, Kojima and Yamazawa have pressed for Pan-Pacific integration encompassing not only East Asian economies but also other Pacific-rim economies, such as Canada, the US, Australia and New Zealand, together with those in Central and Latin America. For further discussion, see, for example, Das (1996) and Korhonen (1994a).

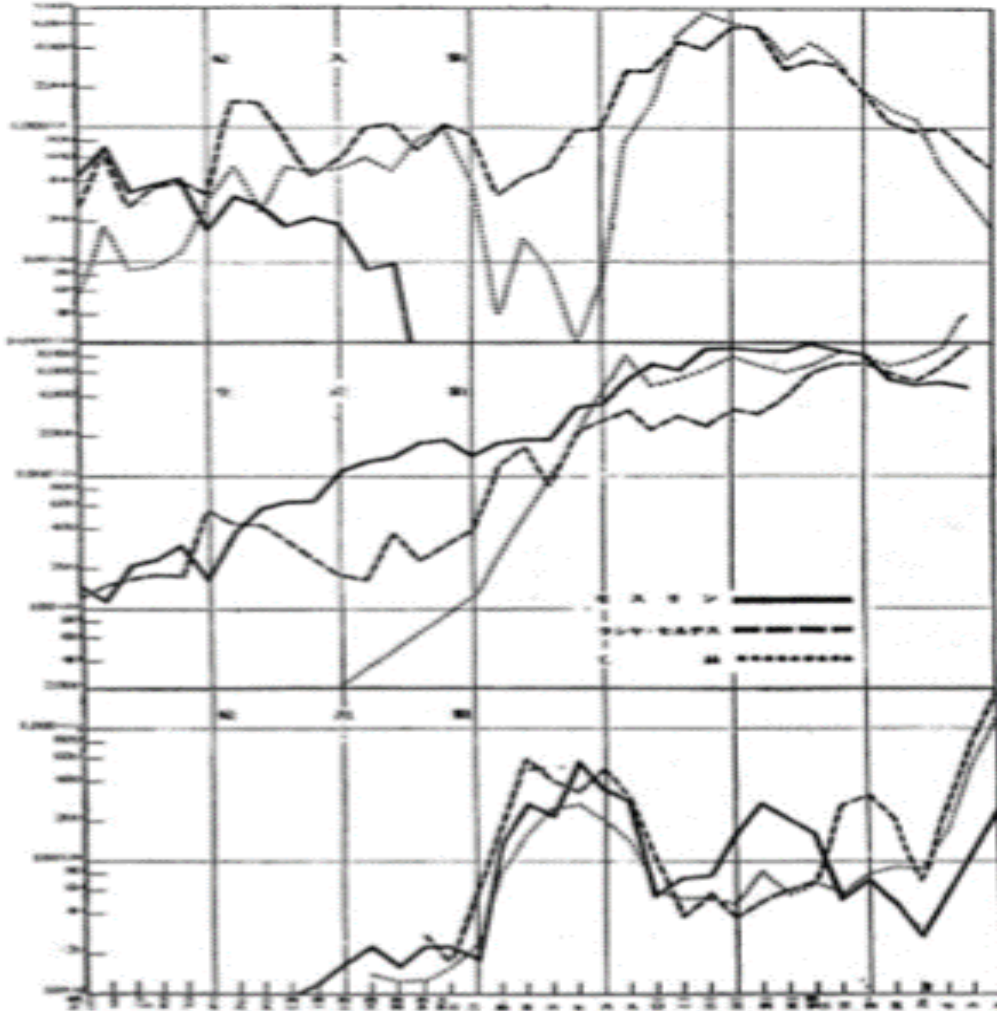
With the burst of the financial bubble of its own economy in the early 1990s, Japanese researchers and bureaucrats stopped actively referring to the FG paradigm as a model to underpin their country’s foreign policy towards East Asia (or Pacific-rim region). Clearly, the Asian financial crisis engendered the shift of focus in Japan’s regional development initiative, with the emphasis no longer being placed on the “real” sector, including manufacturing, but instead on the financial sector in order to safeguard against foreign exchange fluctuations as well as to cope with mounting domestic non-performing loans (Kasahara 1994).

Meanwhile, China began to draw increasing attention as a new powerhouse. In the 2000s, researchers began to consider the implications of this emerging economy’s development in the framework of the FG paradigm, i.e., the diffusion process of manufacturing activities in East Asia and beyond. In light of its huge size and internal diversity, some researchers questioned how the FG paradigm had been occurring within China by looking into the question of sustainability of labour-intensive manufacturing activities. Some researchers have highlighted China’s role in shedding (and offshoring) its labour-intensive activities, for instance to those economies that have not been considered in the model before, such as Africa. China’s most recent Belt & Road Initiative (BRI) could be viewed, to some extent, as an up-scaled implementation of the FG paradigm, unfolding in a much greater regional coverage together with beefed-up institutional arrangements (much of the discussion on China and the China-centric model will be discussed in Chapter 6).

2.3.3 Akamatsu’s Flying Geese Paradigm: Essential Elements

Akamatsu studied Japan’s catch-up process, as a prototype of late industrialization with historical data of its textile (wool and cotton) industry. The term, “flying geese”, which Akamatsu used for the first time in 1935, came from the “graphic” presentation of three time-series curves for a particular product group along the time dimension, where the vertical axis indicates the corresponding recorded value of import (M), production (P) and export (X) (see Figures 2.1, 2.2 and 2.3).

Figure 2.1
Akamatsu's FG Paradigm:
An Early graphic presentation of value of
Import, Production, Export of different woollen products

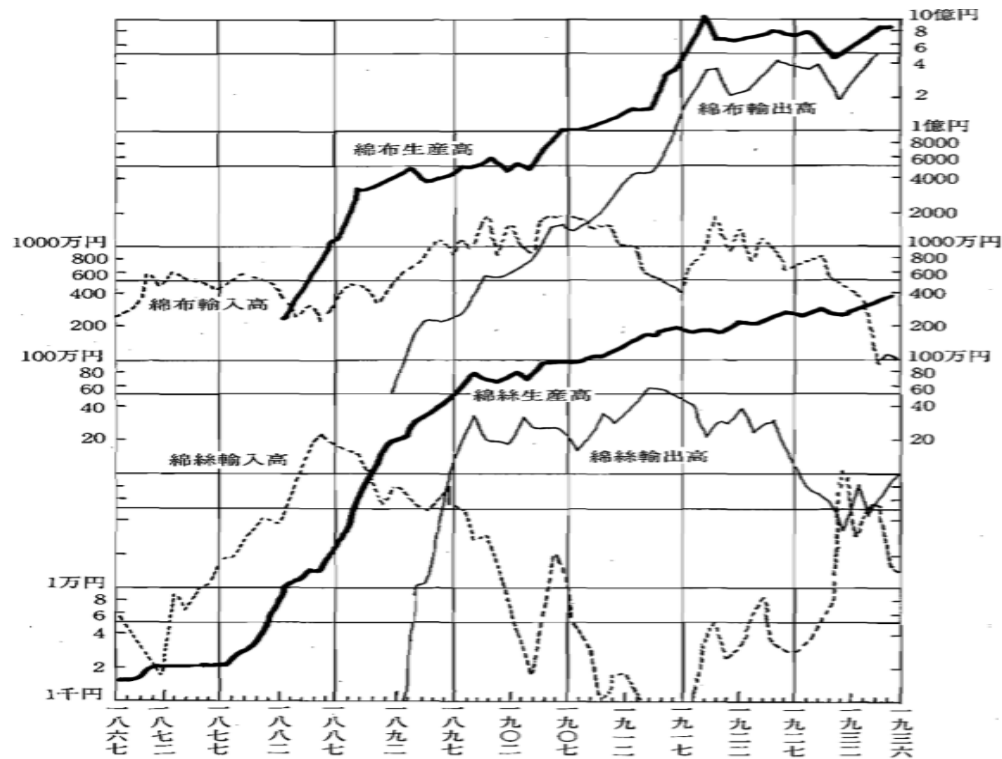


Source: Akamatsu (1935: 209) the original presentation **Import**: the top three lines (the coarse type in a bold line, moderately fine type in a bold broken line, the fine types in a fine broken lines); **Production**: the middle three lines (the same specification as in Import); **Export**: the bottom three lines (the same as in Import)

Figure 2.1 – the reproduction of Akamatsu's very first presentation (Akamatsu 1935: 205) – how three types of woollen products – roughly, the coarse type (shown with bold lines), the moderately fine type (with bold broken lines) and the fine type (with fine broken lines) – performed in import (top), production (middle) and export (bottom) over the period from the 1860s to the 1930s. Note that the vertical axis is (or the piled axes are) presented in logarithmic value. It is understood that for each phase of import, production and export, the coarse type experienced first, then the moderately fine type

second, and finally the fine type third. The M-P-X sequence as such cannot be readily observed right away here; it could be constructed by selecting the relevant line for a specific product type, for example, three bold lines for the coarse type, from each of three graphs.

Figure 2.2
Akamatsu's FG Paradigm:
A primary pattern of Import-Production-Export (M-P-X) Sequence
Of Cotton Thread and Cotton Cloth



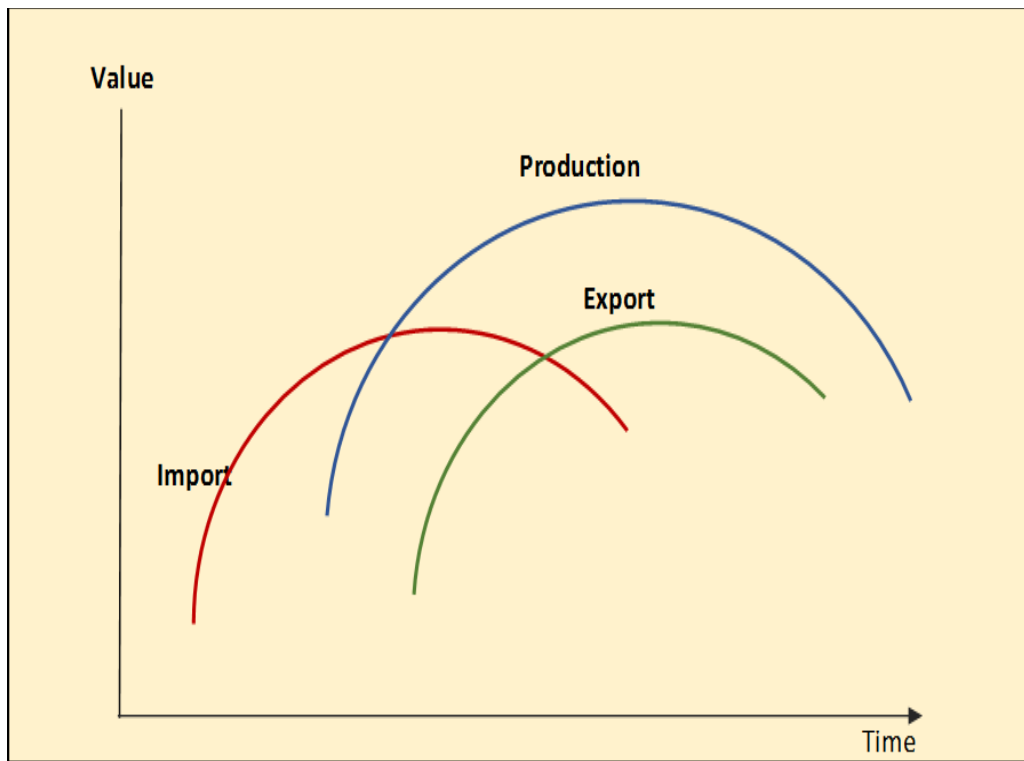
Source: Reproduction of Akamatsu (1937: 200)

Import: the fine broken line (the cotton thread: bottom, the cotton thread: top); **Production:** the bold line (same as the import); **Export:** the fine line (same as in the import)

Figure 2.2 – the reproduction of another of Akamatsu’s early presentations (1937) – also shows the chronological sequence of import (in a *fine broken* line), production (in a *bold solid* line) and export (in a *fine solid* line) for cotton fabric (on the top) and for cotton yarn (on the bottom) over the period from 1867 to 1936. Clearly, the M-P-X sequence generally occurs earlier for cotton yarn than for cotton fabric. Furthermore, the value of transaction is much greater for cotton fabric than cotton yarn. Let us also note that the graphic presentation of these overlapping curves in the M-P-X sequence, Akamatsu observed, resembles the pattern of flying geese; Akamatsu notes: “Wild geese are said to come to Japan from Siberia and go back to north [*sick*] before spring, flying in invert [*sick*] V shape, each of which overlaps to some extent” (Akamatsu 1961: 205-206).

The historical data of import, production and export, as shown in Figures 2.1 and 2.2, are rather messy (if not inaccurate); nevertheless, the essential elements of these data could be put in a stylized M-P-X sequence, consisting of three curves. Figure 2.3 shows in a neatly stylized fashion that the curve appearing first represents the import of particular products, the second curve represents their domestic production (or import-substitution), and the third curve finally represents their export. They all rise and fall, forming an inverted V or U shape. The M-P-X sequence, which Akamatsu called the “primary pattern”, is intuitively (visually) appealing when we consider a long-term analysis for manufactured products that undergo something like a life cycle. Of course, Akamatsu did not use the term – product (or industry) life cycle – in his early writings in the 1930s; however, as the term was popularized in the 1960s, he and his students were more willing to adopt it (see further discussion in Chapter 3.)

Figure 2.3
Akamatsu’s FG Paradigm:
The “primary pattern” of Import-Production-Export (M-P-X) Sequence -
A stylized illustration



Source: Author’s simplified reproduction of various sources, particularly, Akamatsu (1962).

For a late industrializer, the *geese* in this “single-country-single-product” presentation represent these time-series curves, each of them, as mentioned earlier, depicting the historical contour of its import,

production and export, respectively, for particular consumer products. These curves collectively reflect the rise and fall of productive capacity (or competitiveness) of the late industrializer in question. Competitiveness which starts at the minimum when the products are supplied totally by imports (i.e., no local production of similar products) is likely to rise over time. It is understood that late industrializers can raise competitiveness by taking advantage of their own low-wage labour and cheap raw materials obtainable locally, together with the assimilation of foreign technologies (skills and machines). Akamatsu maintained that the initial import of foreign products is a prerequisite for local production; in their absence, local consumers would remain unaware of them and fail to form a market for such products. For a specific product group, the rise of domestic production is associated with the gradual replacement of imports by locally produced substitutes, and eventually leads to the appearance of exports of surplus production. The import, production and export phases emerge sequentially, i.e., in a “one-after-the-other” fashion.

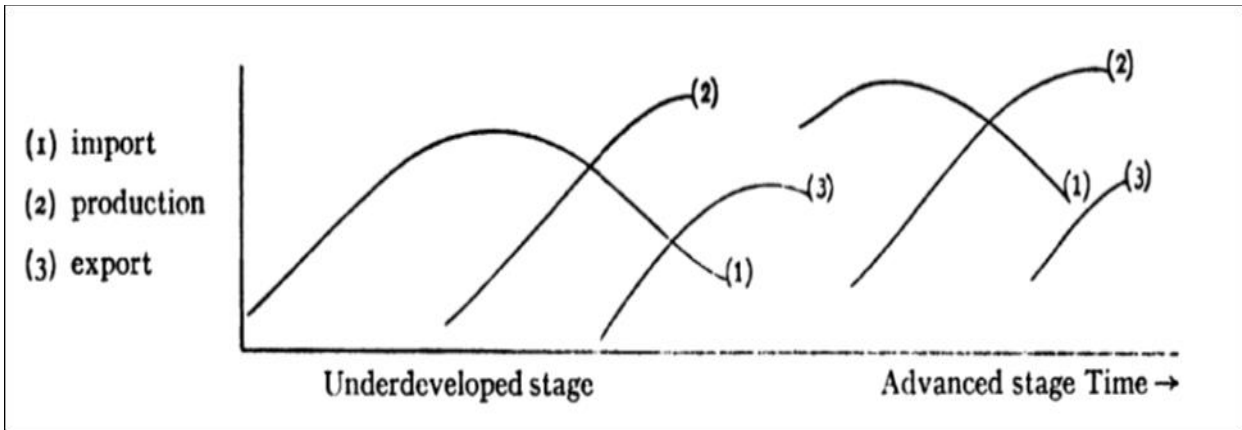
As will be discussed later, the modern FG paradigm accommodates a possibility that the local economy may be engaged in export-oriented production where its manufactured products are geared heavily to external markets rather than to the local market. This is one of the principal justifications of the export-led growth strategy. As the extreme case of export-processing zones (EPZs) may show, the initial phase of import associated with the gradual formation of a local market as the final destination is not necessarily a prerequisite to the commencement of local production. Furthermore, modern FG paradigm advocates identify the “reverse import” phase (M) as an important, additional new wave, which takes place at the very late stages of the production phase and the export phase (see Chapter 3 for further discussion.)

This “primary” pattern of M-P-X sequence in the “single-country-single-product (sector/industry)” framework led Akamatsu to a discussion of intra- and inter-sectoral/industrial shift of the M-P-X sequence, and brought forth the “secondary” model, shown in the “single-country-multiple-product (sector/industry)” framework. This framework depicts the generalized (normal) evolutionary process of shifts in merchandises traded by late industrializers. Akamatsu explains that the M-P-X sequence occurs in progression from “crude and simple goods” (e.g. low-count cotton yarn) to “complex and refined goods” (e.g. high-count cotton yarn). The recurrent M-P-X sequences constitute the catch-up process of late industrialization.

Akamatsu’s original graphic presentation reproduced in Figure 2.4 shows how he visualized the recurrence of a set of M-P-X sequences for different product groups, i.e., intra-sectoral, in the process of development. Figure 2.4 is a stylized presentation of Figure 2.2, depicting that a set of M-P-X sequences for “crude and simple goods” (in the left side) would be transformed into another set for “complex and refined goods” (in the right side). While it is not graphically explicit, Figure 2.4 also implies not only the “intra-sectoral”, but perhaps more importantly the “inter-sectoral” transition of

production, broadly from “consumer goods” (e.g. cotton yarn and fabric) to “capital goods” (e.g. spinning and weaving machinery and equipment) (Akamatsu 1961: 208; Akamatsu 1962: 16-17).

Figure 2.4
Akamatsu’s FG Paradigm:
The secondary pattern of intra-sectoral and inter-sectoral shift of M-P-X Sequence



Source: Akamatsu (1961), the original presentation.

It is understood that at the early stages the import-substituting production of consumer goods often entails the import of capital goods (machines) – the “vertically-related producer goods sector” (Chia 2006: 14) – that are needed for producing the consumer goods in a more efficient fashion than before. Furthermore, as in the case of consumer goods, the domestic demand for these necessary capital goods will eventually contribute to the emergence of their *own* import substituting production. Therefore, broadly, the continued import substituting production of various consumer goods is linked to the emergence of the import substituting production of various capital goods in the long run. Obviously, it is not only the composition of exports but also that of imports that exhibits general upgrading along industrialization.

One troubling aspect of Figure 2.4 is the unit of measurement of the vertical axis. Can it be assumed that the vertical axis reflects the current monetary value (as in Figure 2.2)? If that is the case, then the two sets of M-P-X sequence cannot be shown as in Figure 2.4. This is because as the national economy grows, it seems to be reasonable to expect that the scale of its new M-P-X sequence tends to be magnified (meaning higher in monetary value). Thus, the second set of M-P-X sequence, presumably for more sophisticated products (including capital goods), should be located somewhere in a “north-east” (upper right) location relative to the first set of M-P-X sequence rather than in an “east” (horizontal and right) location as seen in Figure 2.4. As Figure 2.2 shows, the monetary value of the vertical axis for the presentation of the M-P-X sequence should be presented in the logarithmic scale, because of explosively dynamic movements (exponential) in the value.

Purportedly, Akamatsu then presents a stylized four-stage trading pattern of a typical developing country (late industrializer) in its catch-up process vis-à-vis developed countries (early industrializers), based on List's model of growth stages (Ozawa 2016: 17-19). Clustering the existing tradable products into three broad groups: i) primary goods (raw materials), ii) consumer goods, and iii) capital goods, Akamatsu (1961) explains as follows:

The First Stage: When the developing country enters trade relations with advanced countries, domestic demand dictates the import of attractive consumer goods which are not produced efficiently at home. The imports nurture a market (consumer demand) for such products, due to their intrinsic usefulness, or “bits and pieces of foreign culture, which change the values and ways of life of people” (Korhonen 1994b: 96). Thus, imports increase further as long as foreign exchange reserves are readily available, but it may also cause devastating effects on traditional handcraft activities, driving local craftsmen out of work.²⁶ At this stage, the country typically exports primary goods (raw materials) to distant advanced countries with dissimilar economic structure, rather than to neighbouring (developing) countries with similar economic structures. We sense here that Akamatsu's explanation of trade patterns implicitly defies the modern gravity model where geographic proximity among potential traders is a critical factor that affects trade flows.²⁷

The Second Stage: The country begins import-substituting production for consumer goods with the domestic market as a dominant outlet for them. The country's imports gradually shift from consumer goods to capital goods as well as technology that facilitate the local production of consumer goods, mainly for domestic consumption. Meanwhile, the country continues to export mainly primary goods. For establishing such domestic industries, raw materials may be supplied domestically or from abroad.

The Third Stage: The country begins to export consumer goods (typically labour-intensive products to its neighbouring countries), which was often initiated by the imported capital goods. For these consumer goods, imports diminish in absolute terms until a point where the volume of exports exceed that of imports. Exports enable more imports of some primary goods and capital goods for continued expansion of production. Also new consumer goods can be afforded, and they introduce new manufacturing activities into the country. The advancement of the

²⁶ Akamatsu did not seem to consider foreign debt (external borrowing or issuing bonds abroad) as a viable way of financing imports. Indeed, in the Meiji period, the Japanese government generally refrained from borrowing much from abroad for its infrastructure development.

²⁷ In a personal communication (1 June 2015) with this author, Andrew Fischer pointed out that this trade practice at the first stage resembles Prebisch's centre-periphery trade relations where externally dependent countries in periphery tend to trade more with those in the centre than with their neighbours. As touched upon earlier, however, observers postulate different end-results of such trade practice, depending on their basic ideational and theoretical stance. Whereas dependency school stresses its negative aspect of underdevelopment in those countries in the periphery, the FG paradigm, like Modernization theory, stresses its positive aspect of industrialization. See also Fischer (2015).

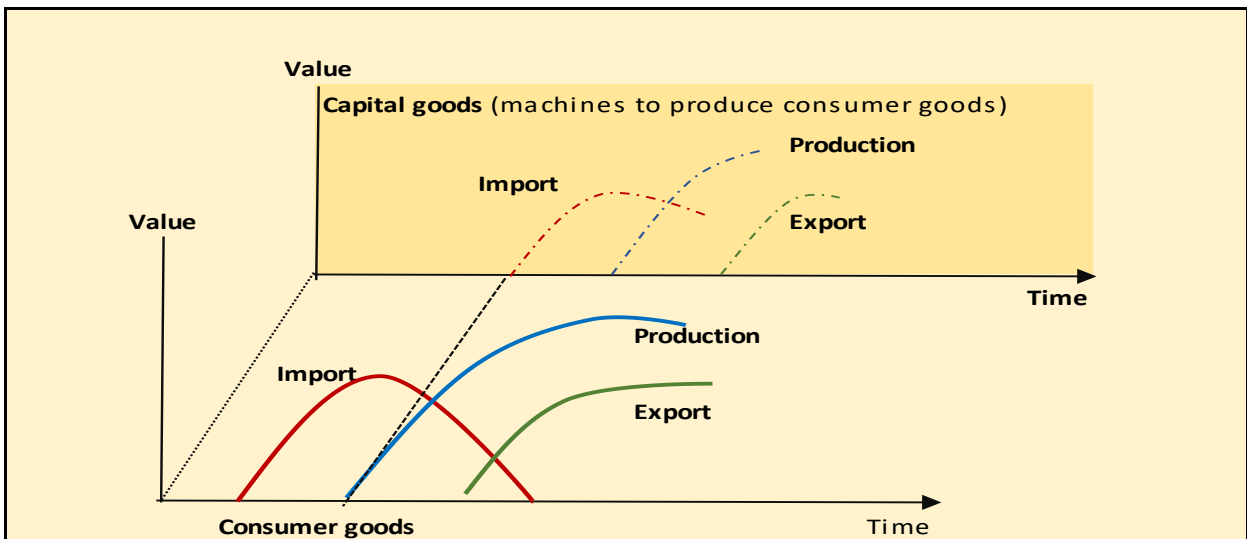
general level of technology with the more sophisticated imported capital goods makes it possible for the country to produce previously imported capital goods.

The Fourth Stage: At this stage, the export of consumer goods begins to decline, and is gradually replaced by that of capital goods. Some capital goods also begin to be exported to advanced countries. Meanwhile, imported capital goods steadily decline, but consumer goods and primary goods may rise.

The time-profile for an imported product is followed first by that for production, and later by that for export. Of course, a national economy at each period of time exhibits a specific profile of different products that are imported, produced, and exported. Thus, another way of explaining the M-P-X sequence is that a product profile (a bundle of products) of imports is likely to reappear (although with some modifications in composition) in production, and eventually (again with some modifications) in exports. The product profile cannot remain identical among the three phases, because the import-substituting production is more time-consuming in some products than others.

Modern FG paradigm advocates are more explicit than Akamatsu in illustrating the above-mentioned inter-sectoral/industry linkages, where the import-substituting production of consumer goods is attributed to the import of capital goods (see Figure 2.5). This particular presentation (Kojima 2000) shows that the commencement of the production phase for consumer goods coincides with the commencement of the import phase of capital goods. In other words, the production of the consumer goods in question cannot start with the traditional mode of production.

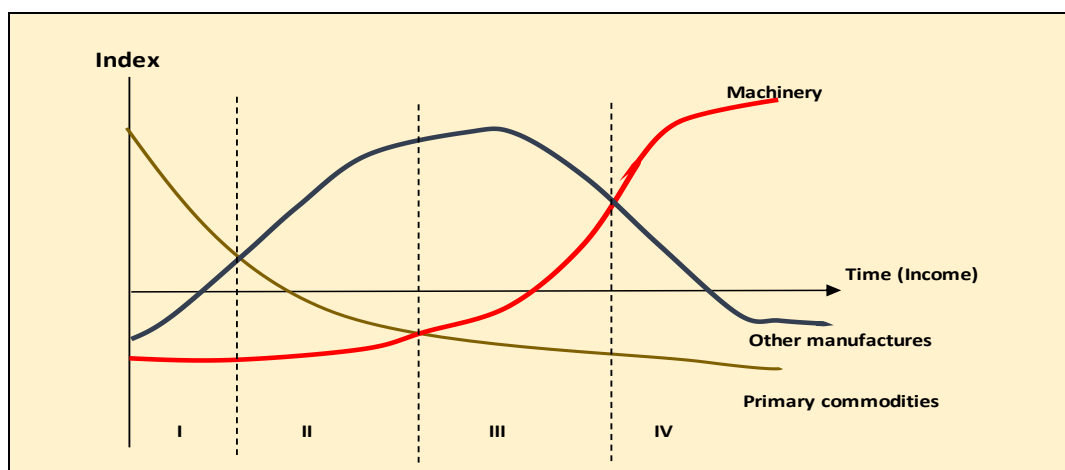
Figure 2.5
Akamatsu's FG paradigm:
Explicit inter-sectoral linkages between capital goods and consumer goods –
Kojima's illustration



Source: Author's modified reproduction of Kojima (2000).

As in the case of the previously discussed M-P-X sequence, Akamatsu's characterization of four stages in a late industrializer's trade patterns along its catch-up process is more stylized than real. While it is difficult to pinpoint when each stage exactly starts and ends, some researchers have tried to construct a framework to operationalize something similar to Akamatsu's four stages of development. The use of what may be called the "trade specialization index" – the ratio of "net export" (X-M) to "total trade" (X+M) for three types – is one way of doing this. For instance, Kwan (1994) indicates that Akamatsu's four stages could be numerically specified by classifying tradeable products into three broad groups: i) primary commodities, ii) non-machinery manufactures, and iii) machinery. The index for each product group, which is one type of competitiveness indices (to be discussed later), may exhibit the shape as indicated in Figure 2.6.

Figure 2.6
Trade Specialization Indices (TSIs) for three commodity groups:
Different stages of development – Kwan's illustration



Source: Kwan (1994) as cited in Blomqvist (1996: 223, Figure 3)

The prototype, long-term contour of the TSI for primary products is one of general decline, rapidly first and slowly later. The TSI for non-machinery manufactures typically indicates a steady rise-and-fall path, and that for machinery shows a relatively late and slow rise. These explanations are intuitively reasonable. According to Kwan (1994), each stage of development shows that the TSIs tend to exhibit the relative magnitude shown in Table 2.1. This four-stage model provides a stylized framework for the generalized (normal) trend of sectoral shifts of production along industrialization, with concomitant changes in trade patterns.

Table 2.1
Trade Specialization Indices and
Stages of Development

Stages	Relative magnitude of TSC				
I	A	>	B	>	C
II	B	>	A	>	C
III	B	>	C	>	A
IV	C	>	B	>	A

Source: Reproduction with some modification of Kwan (1994) as cited in Blomqvist (1996: 223, Table 1).

Notes:

Stages: I) Developing Country Stage; II) New NIE Stage; III) Mature NIE Stage; IV) Industrialized Country Stage.

Commodity groups: A: Primary Commodities (SITC 0-4, and 68), B: Manufactures except Machinery (SITC 5, 6, 8 and 9, except 68), C: Machinery (SITC 7)

The generalized expectation of the TSI contour for each of three product groups (A, B, C) shown in Table 2.1 is well taken; nevertheless, we must note that the presentation still contains serious conceptual problems. Most of all, we question whether it is possible to draw graphically, as specified in Figure 2.6, the single configuration – or the relative positioning – of the three TSI contours. Accordingly, the characterization of these four stages of development as indicated in Table 2.1, which could be judged by the STI values, could also be seriously challenged.

Similarly, the World Bank (1998) looked into the compositional changes, over the 1990-1996 period, among four categories of products in exports of East Asian countries, namely South Korea, Singapore, Thailand, Malaysia, Indonesia and China. This research specifically checked the shares of: i) resource based (RB); ii) low technology (LT); iii) medium technology (MT); and iv) high technology (HT) in these countries' total merchandise exports. And it was shown that the trade share (in terms of percentage point) of RB products went down virtually for all of these economies (by large percentage points, except South Korea whose exports of RB products was already very small); the trade share of LT products did not rise except in Indonesia (as these economies, except Indonesia, had already been in the transition in the production/export of MT and/or HT products); the share of MT products mildly rose in most Asian economies; and the share of HT products rose most notably in all East Asian economies.

The changes in share were classified into the following sets of ranges: a rise of 0-10, 10-20, or 30-40 percentage points (pp), and a fall of 0-10, 10-20, 20-30, 30-40 pp. The findings are as follows in terms of pp: South Korea: RC (no change), LT (minus 30-40), MT (10-20), HT (10-20); Singapore: RC

(minus 30-40), LT (minus 0-10), MT (no change), HT (30-40); Thailand: RB (minus 20-30), LT (no change), MT (0-10), HT (20-30); Malaysia: RB (minus 30-40), LT (no change), MT (no change), HT (30-40); Indonesia: RB (minus 30-40), LT (20-30), MT (no change), HT (10-20); China: RB (minus 10-20), LT (no change), MT (0-10), HT (10-20).

Table 2.2 shows updated compositional changes, utilizing the World Bank's methodology over the 1995-2017 period, for Japan, the 1st-tier NIEs, the 2nd-tier NIEs and China. The manufactured exports consist of four broad categories: i) resource-intensive & labour-intensive products; ii) low-skill & technology products; iii) medium-skill & technology-intensive product, and iv) high-skill & technology-intensive products. UNCTAD maintains trade data based on these product classifications.

Table 2.2
Shares of Products in Different Categories of Total Manufactured Exports (%)
& Changes over time (1995-2017) (percentage points)

	Japan	1st-tier NIEs				2nd-tier NIEs			China
		S. Korea	Taiwan	Singapore	Hong Kong	Malaysia	Thailand	Indonesia	
<u>Resource-intensive & Labour-Intensive Products</u>									
1995	3,8	20,2	21,5	4,3	33,9	13,3	30	65,7	43,9
2000	3,5	15,1	14,5	3	29,4	10,2	20,3	51	35,8
2005	3,2	7,1	9,4	2,8	21,5	9,1	15,2	44,5	26
2010	3,4	4,6	6,7	1,7	14,4	10,1	11	39,6	23,4
2015	3,3	4,5	6,5	2	10,4	10,3	9,4	39,4	23,9
2017	3,3	4	5,9	2	7,7	9,6	9,5	38,2	22,5
1995-2017	-0,5	-16,2	-15,6	-2,3	-26,2	-3,7	-20,5	-27,5	-21,4
<u>Low-skill & technology-intensive Products</u>									
1995	10,3	14,5	13	3,8	6,3	3,5	5,4	6	13
2000	9,1	12,5	11,6	3,2	4,8	2,3	5,2	4,8	11
2005	10,9	14,4	12,6	4,8	3,5	4,2	6,3	6,1	10,5
2010	12,9	19,5	11	5,1	2,3	5,3	6,2	9	11,7
2015	10,8	16,1	10,8	4,7	1,7	5,2	6,9	8,4	11,2
2017	10	16,1	12,8	3,8	1,4	4,6	6,8	10,1	10,5
1995-2017	-0,3	1,6	-0,2	0	-4,9	1,1	1,4	4,1	-2,5
<u>Medium-skill & technology-intensive Products</u>									
1995	46,5	24,9	24,5	16,5	23,1	13,5	22	8,8	19
2000	47,3	22,8	22	15,4	24,3	12,5	25,3	12,4	22,9
2005	50,1	30	22,9	20,4	21,5	16,1	32,5	19,2	23,4
2010	51	30,5	20	17,1	21,3	16,9	37	21,5	23,4
2015	54,5	35,8	20,2	18,5	18,4	20,1	41,8	24	25,9
2017	55,7	31,2	22,1	19,4	17,6	19	41,8	25	27,5
1995-2017	9,2	6,3	-2,4	2,9	-5,5	5,5	19,8	16,2	8,5
<u>High-skill & technology-intensive Products</u>									
1995	39,4	40,3	41	75,4	36,7	69,6	42,6	19,6	24,1
2000	40,1	49,6	51,9	78,5	41,4	75	49,1	31,8	30,3
2005	35,9	48,5	55,2	72	53,6	70,6	46	30,1	42
2010	32,8	45,5	62,4	76,2	62	67,7	45,8	30	42,5
2015	31,3	43,6	62,4	74,8	70	64,4	41,9	28,2	39
2017	31	48,8	59,2	74,9	73,3	66,8	41,9	26,7	39,6
1995-2017	-8,4	8,5	18,2	-0,5	36,6	-2,8	-0,7	7,1	15,5

Source: Author's calculation based on UNCTAD Trade data and product classification.

Note: The share of each product group for total manufactured exports is expressed as a percentage. The change in the compositional share of each product group over the 1995-2017 period is expressed in terms of difference, simply in percentage point, between the share in 1995 and that in 2017.

Table 2.2 presents several notable points on each of these product categories over the period.

- i) ***Resource-intensive & labour-intensive product.*** There is a dramatic decline of the share of this category over time. By and large, the share is lowest in Japan and highest in China, with the clear exceptions of Singapore (with a very small share) throughout the period and Indonesia (with a very high share). Hong Kong is historically active as an entrepot, its trade data reflects economic activities of its neighbouring economies, particularly China.
- ii) ***Low-skill & technology-intensive products.*** The products in this category are relatively small in share, less than 10% or at most 15%. Three sizeable economies, Japan, South Korea and Taiwan, show that the products of this category are always slightly above 10%. Singapore and Hong Kong export very little share of products in this category.
- iii) ***Medium-skill & technology-intensive products.*** The products in this category occupy a large share, say, more than 50% of Japan's manufactured exports. They occupy about 20-30% in the 1st and 2nd-tier NIEs' manufactured exports, with the exception of Thailand which sees exports belonging to this category climbing to more than 40%, or the increase of nearly 20 percentage points over the period. China also witnesses the exports belonging to this category rising from less than 20% in 1995 to 27.5% in 2017.
- iv) ***High-skill & technology-intensive products.*** The products in this category occupy a wide range, with the lowest of 24% in China's manufactured exports in 1995 to more than 75% of Singapore's manufactured exports almost throughout the period. The share of these products went up in most of the country cases, except Japan where the share declined by 8.4 percentage points (from 39.4% in 1995 to 31.0% in 2017). Hong Kong registered the most rapid rise of 36.6 percentage points (from 36.7% to 73.3%) over the period, followed by Taiwan's case of 18.2 percentage points (from 41.0% to 59.2%) and China of 15.5 percentage points (from 24.1% to 39.6%).

According to Akamatsu, product improvement is associated with changes of export destinations, from a low-income area to a high-income area (Akamatsu 1962: 17). Through this process, he argues, the international alignment among countries at different stages of development come to emerge. This is the last element of Akamatsu's model. Akamatsu postulates that although industrial development (and thus the passage along the four stages) occurs at different paces in late industrializers (or developing countries, in modern terminology), such development will sooner or later arrive in all of them.

Accordingly, Akamatsu's FG paradigm includes:

- i) Late industrializers have an M-P-X sequence for each individual consumer good;
- ii) Late industrializers experience shifts of the M-P-X sequence between product groups (from simple to refined goods);
- iii) Late industrializers also experience broader shifts of the M-P-X sequence between sectoral groups (from consumer goods to capital goods); and
- iv) Cross-border interactions show the formation of international alignment, from advanced to backward countries based on their stages of development where the M-P-X sequence is repeated for each product group.

The first three elements of Akamatsu's model were intensely explained in the 1930s, the fourth element – i.e., the international alignment along an industrial hierarchy in which the international diffusion/relocation of manufacturing activities takes place – was introduced in the early 1940s (Schröppel & Nakajima 2002: 206).²⁸ As noted earlier, modern critics have often blamed the FG paradigm as the intellectual justification for Japanese atrocities in the late 1930s and the early 1940s, but Ohtsuki (2017) shows that the regional development aspect of Akamatsu's FG paradigm, the fourth element in the list, had not reached the stage of development to render the support towards Japanese expansionism.

As will be further discussed later, Akamatsu was more willing than modern FG paradigm advocates to admit that the international development gap (or regional development hierarchy) would be fluid. In Akamatsu's early model, Japan was a late industrializer in the state-driven, catching-up process (defying the existing “global” development hierarchy). On the other hand, the modern FG paradigm sees Japan as the development leader in East Asia, confronting neighbours' catching-up challenge, and thus defensive of the maintenance of the regional hierarchy. As shall be discussed later (particularly in Chapter 6), Japanese policymakers and observers are no longer the principal advocate of the FG paradigm in the context of East Asia. It is, instead, various stakeholders in China that have taken up the model to justify their country's overseas reach, not just within East Asia but far beyond the region.

According to Akamatsu (1961), trade relations between the early and late industrializers create dialectical dynamism activated by forces of *homogenization* (or *uniformization*) and *heterogenization* (or *differentiation*). Here, homogenization (“convergence” in contemporary jargon) is the force for the late industrializers to catch up with the early industrializers, and heterogenization (“divergence”) is the force for the early industrializers to remain ahead of the late industrializers through further

²⁸ As noted earlier, Akamatsu devoted himself to developing the FG paradigm throughout his academic career. As a result, his publications in English in the 1960s, namely Akamatsu (1961; 1962), contained some conceptual elements presented in modern versions.

industrialization.²⁹ This dialectical dynamism entails two operational spheres: one is in the domestic sphere within the late industrializers and the other is in the international sphere, or the relationships between the early and late industrializers.

Domestic dialectics occurs within the process of global homogenization. As discussed earlier, the M-P-X sequence of late industrializers reflects the triadic phases, where, in dialectical terminology, import, import-substituting production and export may be seen to represent a thesis, an antithesis, and a synthesis, respectively. Initially, the rise of imports of consumer products in the late industrializers tends to negatively affect the local competing sector (if it cannot retain its captured local market), because the domestic consumption may tend to concentrate on imported products.³⁰ In due course, however, local ambitious entrepreneurs are likely to attempt at producing local substitutes for highly lucrative imports. Perhaps, some local producers may promote this import-substituting production as part of national policy by lobbying with central decision-makers. And later domestic production leads to exporting activities. This dialectical dynamics is exactly the catch-up process of late industrializers.

International dialectics is the process of interactions between the force of the late industrializers' homogenization (convergence) efforts and that of the early industrializers' heterogenization (divergence) efforts. Against the background of the superior position of the early industrializers (thesis), homogenization by late industrializers (antithesis) is thought to lead to greater heterogenization by early industrializers (synthesis). As mentioned earlier, the tension due to the continuous interplay of these forces promotes the advancement (industrial upgrading) of all. The catch-up process of the late industrializers varies over time; these economies may remain dormant for some time but they may also make leaping advances thereafter. In that event, some economies may move faster than others, and advance toward the leading position, whereas others (including early industrializers) may lose their position at times (Akamatsu 1962: 18). Nevertheless, with regard to the long-term prospect of the late industrializers, Akamatsu's perspective – which is an offshoot of Hegelian dialectics – is both “deterministic” and “optimistic” (Korhonen 1994a; Korhonen 1994b; Ozawa 2004).

Another important element of Akamatsu's early analysis was the consideration of long-wave business

²⁹ Modern FG paradigm researchers emphasize the role of globally active firms as “homogenizers”, spreading manufacturing knowledge, institutions and market access from early to late industrializers (see Chapter 3).

³⁰ Akamatsu (1957) admits cases where independent domestic production of certain consumer products, which are of traditional rather than modern kinds, may exist prior to the commencement of their import phase. A case in point is Meiji Japan's cotton industry as opposed to woolen industry (for further discussion, see Chapter 8).

cycles (something similar to the Kondratieff wave) – resulting from technical innovation, i.e., inventions and their industrial application³¹ – as a critical factor to explain “the heterogenization process of the early industrializers” (Akamatsu 1961: 200). He pointed out that the long-wave business cycles of the early industrializers as an important factor that affects the dialectical process: on the one hand, the rising phase of the long-term business cycle results in a heterogenization of international production; on the other hand, homogenization of international production due to the international diffusion of products and technologies as well as industrial upgrading of the late industrializers tends to lead to protectionism and the falling phase of the long-wave business cycle. Akamatsu’s discussion on the effect of the long-wave business cycle on global dialectics was far from complete, and this particular element has been forgotten largely by contemporary researchers dealing with the FG paradigm.³²

2.4 Refinement (Modification) of Akamatsu’s FG Paradigm: “Primary” M-P-X Sequence Model

Akamatsu outlined his original paradigm in the 1930s with broad strokes of a brush and did not construct a neat, water-tight theoretical model. Therefore, further work was cut out for himself and his students (e.g. Kojima, Ozawa and Yamazawa) to refine and reform his model. Akamatsu’s efforts to polish his original model continued until the early 1970s, practically throughout his entire academic life, but his intellectual activities during the post-WWII period went much beyond the FG paradigm.³³ In any case, it is not clear whether these “refinements” have advanced rather than distorted the FG paradigms, particularly Akamatsu’s original model. Perhaps, they have advanced it in some parts, but distorted it in other parts (see Schröppel & Nakajima 2002).

It is true that over time many of the essential elements of Akamatsu’s FG paradigm have been elaborated, and some of them have subsequently been embedded in modern versions of the model.³⁴ This dissertation argues that the single most important event that greatly stimulated the evolutionary process of the FG paradigm was Vernon’s (1966) publication on the product cycle (PC) theory (discussed in Chapter 3). It must be noted at the outset that Akamatsu’s original model reflects the

³¹ Akamatsu argued, among others, that the increased gold production through the discovery of new mines also brings forth the rising phase of a long-wave business cycle (Akamatsu 1961: 200-201).

³² Some researchers have been attempting to revive the discussion of the linkages of the FG paradigm to long-wave business cycles (see Schröppel & Nakajima 2002; and more recently, Tausch et al. 2017).

³³ See Ohtsuki (2011) in English, an off-shoot of his Ph.D. dissertation in Japanese (Ohtsuki 2010) based on painstaking and admirable archival research on Akamatsu’s life in the 1930s and early 1940s.

³⁴ As stated earlier, however, the consideration of the long-term business cycle as an important factor that affects the global dialectics of industrialization (or industrial diffusion/relocation) has been largely discarded.

viewpoint of a *late* industrializer (more specifically that of Japan, in its relations with Western early industrializers) in the pre-WWII period; whilst the PC theory reflects the perspective of the modern manufacturing firm (and that of an early industrializer) in the post-WWII period. Most of these refinements and modifications of the FG paradigm have been undertaken from the viewpoint that Japan is now an *early* industrializer in the East Asian context. Some observers lamented that in the 1980s and 1990s when the influence of the FG paradigm reached its peak in Japan's foreign policy discourse, it was not Akamatsu's original model but its modern interpretation that dominated the debate:

“Not only did it fit the perception of Japan's interests (as viewed by liberal internationalists) better than Akamatsu's original ideas, it also corresponded to the new economic reality in Japan, which had overcome most of the initial problems of economic development, leading to a perception of economic issues from an advanced country's viewpoint” (Schröppel & Nakajima 2002: 223).

The following pages of this section discuss those refinements and modifications of the FG paradigm that are related to the national framework of the catch-up process (as manifested in the M-P-X sequence and its cross-sectoral recurrences). Specifically, three specific issues are considered: i) reverse import, ii) consumption (domestic demand), and iii) competitiveness. Reverse import is a new addition to the original M-P-X sequence. The consideration of consumption, i.e., domestic demand, gives some more theoretical depth to the model. Competitiveness is a conceptual core for the consideration of the regional framework.

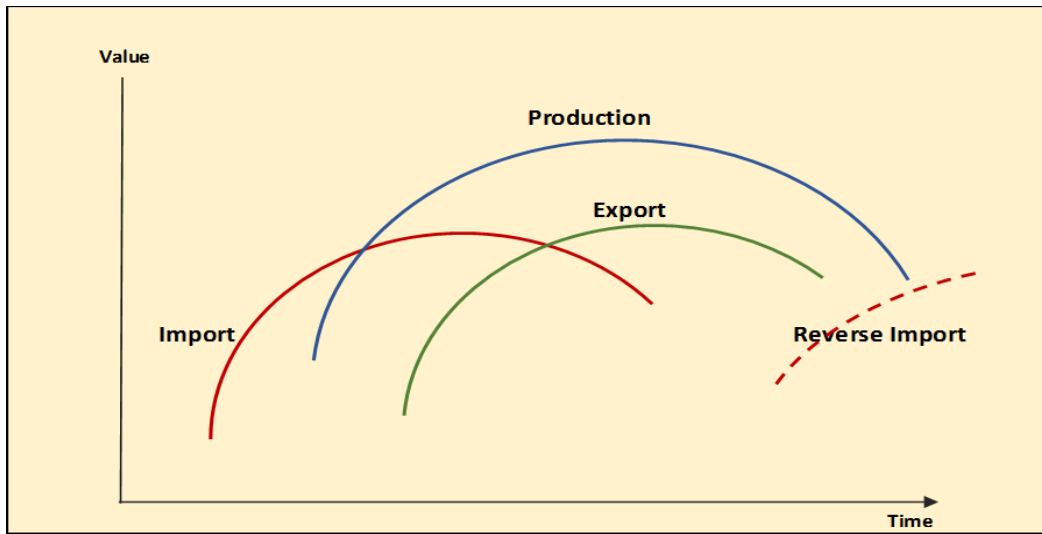
2.4.1 Reverse Import (M')

As stated earlier, Akamatsu considered industrialization from a late industrializer's viewpoint, i.e., the viewpoint of an “actor”, for which industrialization manifests itself in the M-P-X sequences for manufactured products. The same process can also be seen from an early industrializer's side, i.e., the viewpoint of a “target” of catch-up. Hence, the catch-up process of the late industrializer may manifest in the P-X- M' sequence of the early industrializer, where M' stands for “reverse import”. When previously produced (and thus exported) products begin to be imported, reverse import is said to be in operation. Shinohara (1996), Akamatsu's academic colleague, uses the term “boomerang effect” to describe reverse import. Therefore, a longer-term perspective of the catch-up process of late industrializers for a specific product group or a specific sector/industry should start with import, and proceed to production, export, and eventually re-import, forming an M-P-X- M' sequence, with M' being added towards the end of, or after, the export phase in Akamatsu's original model.

The reverse import phase indicates the arrival of the situation where the domestic market of a “late” industrializer is increasingly served by imports coming from overseas production in “late-late” industrializers (see Figure 2.7). However, it is not clear as to what the overseas production really means; whether it is due to the genuine indigenous catch-up process (based on the spontaneous rise of local

firms) in the late-late industrializers or the offshore production of manufacturing firms taking advantage of the low cost of overseas production (particularly due to low-wage workers). In the latter's case, the catch-up process of the late-late industrializers may turn out to be shallow. For a more detailed discussion on the product cycle theory see Chapter 3.

Figure 2.7
Modern FG Paradigm:
The M-P-X-M' Sequence



Source: Author's own elaboration

The specific configuration of the long-term M-P-X-M' sequence for individual national economies – i.e., their respective location on the graph (time) and magnitude (size of value) – depends on the potential capacity, composed of a host of factors, which facilitates their industrialization process. These factors include, most of all, the factor endowments, the quantity and quality of the workforce, and the concrete development policies (including various codes and regulations) undertaken by their government. In the modern FG paradigm, reverse import becomes an important element that underlines the integrative relations between a national economy that is shedding particular manufacturing sectors (via offshore production) on the one hand, and its followers that are accepting these sectors and exporting some outputs back to the former on the other.

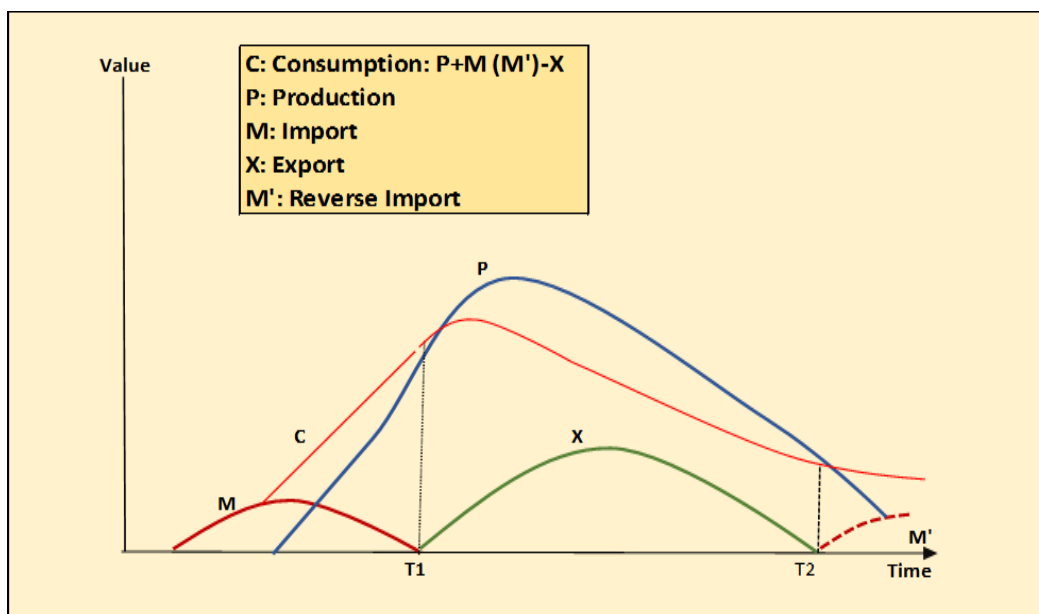
2.4.2 Consumption (Domestic Demand)

While Akamatsu points out that consumption (domestic demand) is an important force to induce import and production (and export), his model (with the M-P-X sequence) does not readily show effects of changes in domestic consumption. When consumption is more than production, import must take place to fill the shortage of production ($C=P+M$). When production is more than consumption, export, as the “vent-for-surplus” argument goes, tends to take place, thereby eliminating the excess of production ($C=P-X$). On the other hand, when the import and export phases overlap

due to extensive product differentiation, then consumption can be derived by subtracting net export ($X-M$) from local production (P), thus $C=P+M-X$.

Yamazawa's stylized model (1990) consists of the import, production, export, reverse import phases and consumption curves (see Figure 2.8). In this model, the import and export curves as well as the export and reverse import curves are presented in such a way that they are located adjacent on a graph, with neither an overlap nor a gap between them. Thus, exactly at T_1 when the import phase ends, the export phase starts, and again exactly at T_2 when the export phase ends, the reverse import phase starts. Obviously, the overall configuration consisting of the M , P , X , M' curves in Figure 2.8 is arbitrarily constructed. At T_1 and T_2 , both import and export are zero, and thus consumption is equal to production ($C=P$). In this model the amount of net export (export-import) is equal to $-M$ before T_1 ; X between T_1 and T_2 , or $-M'$ after T_2 .

Figure 2.8
Yamazawa's Refinement of Akamatsu's Primary M-P-X Sequence



Source: Author's partial reproduction of Yamazawa (1990: 29, Figure 2.1)

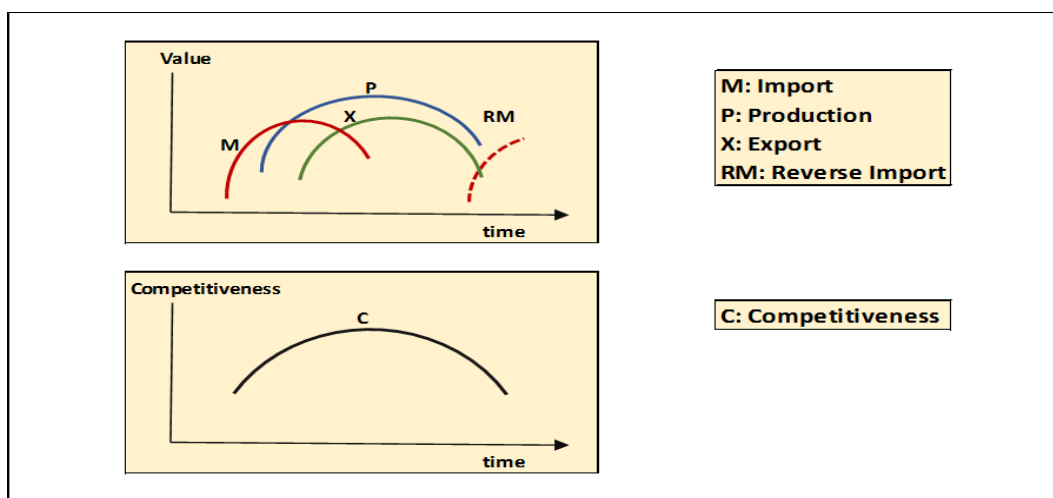
One important message of Yamazawa's model is that the trade pattern is affected not only by production but also by consumption. It should be noted that in the context of the FG paradigm, the explicit consideration of domestic consumption (demand) contains an important policy implication (see the discussion below on "excess production as a proxy for competitiveness"). As noted earlier, however, the specific configuration of the M-P-X-M' sequence in Yamazawa's model cannot escape the accusation of being arbitrary. In this regard, as Felipe (2010) argues, the government's

macroeconomic policy which can affect the level of domestic aggregate demand (and thus consumption) has a great deal of bearing, at least in the short run, on surplus production.³⁵

2.4.3 Competitiveness

A country's M-P-X-M' sequence for a particular product group symbolically represents the rise and fall of its competitiveness in producing it (see in Figure 2.9). Assuming that import substitution occurs during the rising phase of competitiveness, we can reasonably expect that competitiveness reaches its peak around the time when production and export reach their peaks, and that competitiveness declines when export declines and/or reverse import increases. We cannot push this intuitively appealing argument too far, however. This is because import could be affected by macroeconomic and trade policies regardless of the competitiveness of the domestic manufacturing sectors. Or simply consumer tastes may change. Hence, it is not solely competitiveness that can affect the value of imports.

Figure 2.9
Derivation of Competitiveness
(From the M-P-X-M' Sequence)



Source: Author's construction

While it may appear odd, it should also be noted that the declining phase of export is not always attributable to the arrival of a decline in competitiveness of the production in question; it could be attributable to the decline of overseas demand resulting from the changes in global consumer tastes. This possibility, the lack of consideration of market demand, is one of the major critiques of the FG paradigm. It is interesting to note that the “initial imports” of a country originate in advanced

³⁵ For that matter, foreign aid could also affect the level of aggregate demand (domestic and foreign). Many East Asian economies, especially Japan, South Korea and Taiwan in the early postwar period greatly benefited from US official aid and Cold-War related procurements that stimulated demand for their manufactured products.

countries, and thus it occurs prior to, or during the import substitution period, whereas the later imports (or reverse imports) originate mostly from those that are in the process of catching-up abroad (in late industrializers).

Competitiveness under discussion here contains a problem of methodological nationalism. Strictly speaking, it is firms – whether private or public – rather than national economies as such that are the subject of competitiveness measurement.³⁶ At any rate, competitiveness is a relative concept. A country (or a firm for that matter) may become more competitive (cost-effective) in producing certain products than before, but it may be judged otherwise in the international context. This is due to the age of globalization in which a country's competitiveness must be judged in comparison with its overseas competitors. Therefore, a country may become more competitive domestically (in terms of production efficiency) over time, but it may remain uncompetitive when foreign competitors become even more competitive by a greater degree. When competitors decline in competitiveness due to, for instance, the cost hikes of imported resources, parts and components and machinery, the country's competitiveness may rise even if it may not have improved its own productivity.³⁷

2.4.4 Alternative Measures to Calculate Competitiveness³⁸

In light of the need to operationalize the concept of competitiveness, researchers have come up with various methods utilizing relevant national data, especially those related to trade. The following pages discuss “excess production”, “the trade specialization index” and “revealed comparative advantage” as alternative methods of measuring the competitiveness of national economies.

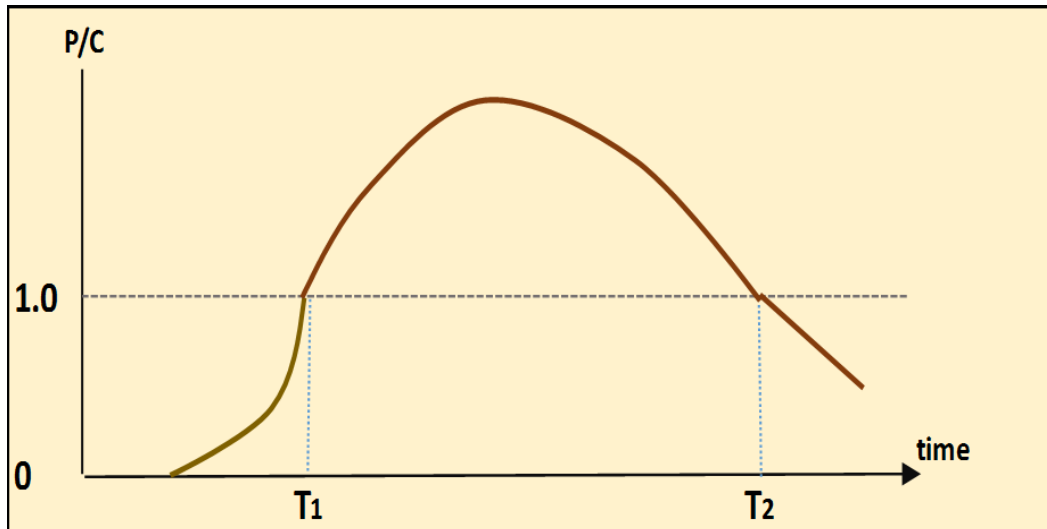
Excess production as a proxy for competitiveness: Yamazawa (1990) derives from his M-P-X-M' sequence a proxy index for competitiveness by looking into the ratio of production to consumption (P/C) (see Figure 2.10 as derived from Figure 2.8).

³⁶ In his personal communication (9 February 2017) with this author, Max Spoor highlighted this point, and the author is grateful for this. Similarly, Krugman (1996) also questions the validity of applying the market concept of competitiveness to national economies.

³⁷ In his personal communication (1 June 2015) with this author, Andrew Fischer underlined the problematic nature of the concept of productivity, by pointing out that the concept cannot be readily translated into cost competitiveness when the costs of inputs are not stable. He further stressed that in developing countries the cost of capital-intensive inputs and the wages of skilled workers handling these inputs heavily affect the country's competitiveness.

³⁸ A critical literature survey of Felipe's (1999) work on empirical analyses on total factor productivity (TFP) of East Asian economies not only underlines the methodological difficulties of measuring productivity (competitiveness), but also confirms his skepticism about the merits of conventional growth accounting (with the estimation of neoclassical production functions) in understanding the industrial development of East Asia. Felipe (2012) and Felipe & McCombie (2003) also pose questions about the existence of “a well-behaved neoclassical aggregate function”, the foundation of estimating the rate of technical progress (competitiveness).

Figure 2.10
Production/Consumption Contour as a Competitiveness Index
Deprived from M-P-X-M' Sequence



Source: Author's partial reproduction of Yamazawa (1990: 29, Figure 2.1)

Note: P/C = Production/Consumption. At T_1 , $P=C$ and $X=M=0$, and at T_2 , $P=C$ and $X=M'=0$ (as specified in Figure 6).

The ratio ranges from zero to positive infinity. Yamazawa refers to the period with the ratio ranging between 0 and 1 (before T_1 in Figures 2.8 and 2.10) as the period of import substitution. During this period the rapid increase in domestic consumption tends to encourage local production to expand, but the latter is still insufficient to meet consumption, and the shortage must be met by imports. Since Yamazawa's model excludes the case of overlap between the import and export phases, consumption is equal to either production plus import (or production plus reverse import), i.e., $C=P+M$ (or $C=P+M'$), or production minus export ($C=P-X$). When the ratio is above 1 (i.e., between T_1 and T_2 in Figures 2.8 and 2.10), production is greater than consumption, and the surplus is exported. In due course, however, as overseas production becomes competitive, and the reverse import phase starts, meaning that the ratio falls below 1 (i.e., after T_2 in Figures 2.8 and 2.10). The reliability of this ratio (an index of excess production) as a proxy for competitiveness is debatable. This is because surplus production might not be due to the rise of competitiveness in production, but, as discussed earlier, due to the fall of domestic demand (consumption).

Indeed, the consideration of domestic consumption has an important policy implication for export-oriented industrialization, which may be termed the "export-investment nexus" (see UNCTAD 1996: particularly 108-112). The export-investment nexus is very pertinent at the early stages of industrialization where the late industrializer in question has not developed significant capital goods (machinery and equipment) for producing consumer products. The government's export promotion

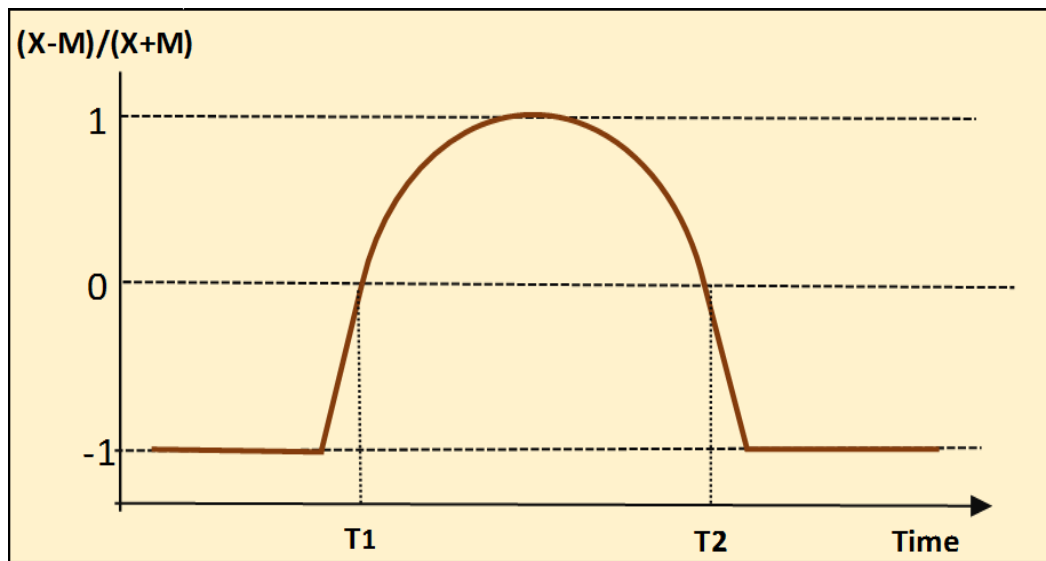
in such a situation – coupled with the complementary policy of restraining the domestic consumption of consumer products (whether locally produced or imported) – would enable producers to raise profits without requiring a corresponding growth in domestic consumption. Exports, after all, could ease the balance-of-payments constraint and allow for the expansion of the domestic production capacity, often by means of financing imported capital goods and accessing advanced technology as part of the catch-up strategy. The need to overcome the financial (foreign exchange) constraint to cover imported capital goods is probably the most significant reason for the strategy of export promotion. Other capital inflows that could be used – as supplementary foreign exchange earnings – for industrialization include foreign aid, commercial loans, private remittances, and the like.

As discussed earlier, the basic understanding of industrial upgrading – i.e., the generalized shift of productive activities expected to be observed in trade data – is that typical late industrializers first develop the primary sector, then “other” manufacturing, and last machinery. Therefore, they gradually shift from primary products (SITC 0-4 and 68), “other” manufactures (SITC 5, 6, 8 and 9, excluding 68), and machinery (SITC 7) (Blomqvist 1996: 223). The following two measuring methods do away with measuring domestic consumption, and focus exclusively on trade data.

“Trade Specialization Index” (TSI) as a proxy for competitiveness: Assuming that a country’s competitiveness should reflect in its balance-of-trade data, its net export data (X-M) for a specific product group could be an alternative indicator for its competitiveness in producing it.³⁹ It is understood that a country’s competitiveness is higher when it has a positive balance in net export (X>M) than when it has a negative one (X<M). Following this logic, some researchers (e.g. Hiratsuka 2003) use the trade specialization index: $(X-M)/(X+M)$, the ratio of net export (X-M) to total trade (X+M). Here, researchers do away with the consideration of production and consumption (domestic demand). The $(X-M)/(X+M)$ index ranges from -1 to 1 (see Figure 2.11).

³⁹ An even simpler index could be the ratio of exports to imports (X/M), which, however, has been seldom used for analytical purposes.

Figure 2.11
Contour of Trade Specialization Index (TSI):
A stylized example



Source: Author's own elaboration

Note: It is implicitly assumed that the export and import curves overlap between T_1 and T_2 (and at T_1 and T_2 , $X=M$). Otherwise, i.e., when they are conterminous, as in the case of Yamazawa's model, the index will be either -1 or 1.

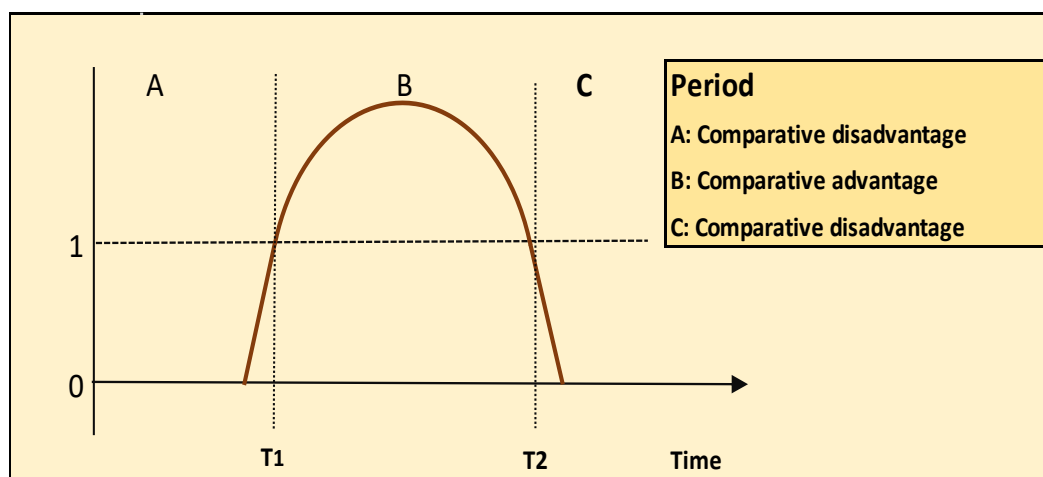
In this example, the index remains flat at -1, even when the country has begun to produce products for domestic consumption. When the export phase begins the index begins to rise, and reaches 0 when rising export and falling import meet (at T_1). The index continues to rise to its apex, that is, to 1 where $M=0$, and thereafter it declines. However, if the import and export curves cross, this maximum value of 1 remains untenable. On the other hand, once the total import substituting production for a particular product group is reached (and thus $M=0$), the index cannot indicate any further rise in competitiveness even if the export of the product group grows further. This is one of the obvious limits of the explanatory power of the index.⁴⁰ Let us note that in Yamazawa's model where the import and export curves do not cross, the index will look quite different from Figure 11. In such a situation, the index will remain flat either at -1 (before T_1 and after T_2) or 1 (between T_1 and T_2).

“Revealed Comparative Advantage” (RCA) as a proxy for competitiveness: One particular version of RCA that has been used most frequently is the comparison of the share of a particular

⁴⁰ The TSI is subject to other criticisms. At a highly aggregated level of product classification that includes intermediate and finished products, the index is likely to underestimate the real domestic value-added in exports. This is because some of the intermediate products (parts and components) are used in the production of finished products for the local markets. Thus, the index may indicate the “minimum” level of the domestic content of the total exports (Rueda 2015: 4; see also Fischer 2015).

product (i) in total export by a particular country (j) and the corresponding share in the export of the world (w). The RCA index for a country (j) for producing (and exporting) product (i) is expressed as: $(X_{ij}/\sum X_j)/(X_{iw}/\sum X_w)$, where X_{ij} and $\sum X_j$ are the country (j)'s export of the product, and its total export, respectively; and X_{iw} and $\sum X_w$ are the world (w) export of the product and the total world export, also respectively (see Figure 2. 12).

Figure 2.12
Contour of Revealed Comparative Advantage (RCA) Index:
A stylized example



Source: Author's own elaboration

The RCA index ranges from 0 (when the country does not export the product in question) to infinity (possibly, when the country is the sole exporter of the product in the world). If the ratio is greater than 1, then the country in question is said to reveal its competitiveness compared with the world. In this calculation, the only factor that must be taken into consideration is export, i.e., the country's export against the global export. While it is innocuous, the quantitative specification of the world performance as the denominator (i.e., the judgement for comparative advantage) could be problematic. What is the conventional rationale to compare the country's performance with the world aggregate? The case may be justified when we deal with an extremely large exporter of a particular product whose singular performance dominates the world performance. One possible remedy then is to exclude the country's performance from the world counterpart, thereby avoiding "double counting". The point is that the country's performance should be compared with that of the "rest" of the world. As a matter of fact, if we are concerned with the competitiveness of a particular country relative to its typical competitors from East Asia, then it could be a better idea to use the performance of the region's economies (with or without the country in question) rather than that of the world as the performance yardstick (or the index's denominator).

Another cumbersome issue with the conventional RCA index is the lack of symmetry. As stated earlier, when the index' value is above 1 (up to infinity), it purportedly reveals comparative advantage, and when somewhere between 0 and 1, comparative disadvantage. This means that the ranges of the index's value for the binary judgement are asymmetric. One way to transform this asymmetric index to a symmetric one is to use a simple calculation of $(RCA - 1)/(RCA + 1)$, which is called "revealed symmetric comparative advantage" (RSCA). One convenient characteristic is that its value varies from -1 to 1, where its range of the RSCA index between 0 and 1 reveals comparative disadvantage (corresponding to the range above 1 of the RCA index) and the range of -1 and 0, comparative advantage (corresponding to the range between 0 and 1 of the RCA index) (see Widodo, 2008 for an analysis with RSCA).

A more critical issue with the RCA index is its *exclusive* reliance on export data, typically published SITC-based export statistics. Because of this, the index can be misleading (overstating), ignoring the situation that the export value of a national economy can contain a large amount of import value of parts and components (as well as machinery). For instance, the calculation based on published SITC-based trade data shows that China increasingly exports significant amounts of high-tech products (Table 2.2 at the outset of this chapter; see also Shafaeddin 2013: particularly Chapter 9). But one still doubt whether China is capable of locally mobilizing the required knowledge and technology for their production. Though the country's local situation is fluid, it is argued that China's firms are still specialized predominantly in low-tech segments of the overall manufacturing of high-tech products through labour-intensive assembling and packaging activities with imported high-tech intermediate products. (See further discussion on the production network model in Chapter 3, and the China-centric model of the FG paradigm in Chapter 6.)

2.4.5 Analytical Conclusion on Calculating Competitiveness

The discussion above reveals how complicated the concept of "competitiveness" could be when we "operationalize" it with a numerical (and thus comparable) index, by using various data (on production, consumption and trade for product groups). The best method would be the use of the detailed input-output table data for manufacturing sectors for all of the economies under consideration for an extended period of time. Unfortunately, such data, particularly in a comparable format for an extended period (say, several decades) in which we can note changes in competitiveness, are not readily available. For the RCA index, the use of value-added, rather than that of export data, can be suggested as a more reliable alternative.⁴¹ But again, the accurate data of value-added for all

⁴¹ In the personal communication (1 June 2015) to the present author, Andrew Fischer stated that one major practical problem is the availability of reliable data.

relevant manufacturing sectors in a comparable fashion for an extended period are very difficult to obtain.

One possible methodological solution is what we may call the index of “revealed comparative **disadvantage**” of which the calculation involves the comparison of the share of a particular product in a country’s **imports** (rather than exports) and the corresponding share in the world’s **imports** (rather than exports).⁴² The idea is that when a country gains comparative advantage in a particular manufacturing sector, the share of its import in the country’s total should decrease. Similarly, researchers may look into the gap between the total export and intermediate import of a specific product group. The idea is that the greater the gap (say, the share of the gap in the export) becomes, the more capable the country is of producing the product group (Rueda 2015: 4-5). At the very fundamental level, one critical question regarding the competitiveness indices, no matter which one among those discussed above may be taken up, is how accurately they reveal the product- or sector-specific competitiveness in production (in the supply side) of the country in the world. This is because the actual performance of trade (export as well as import) is hindered and distorted by various barriers (in demand side) (see further discussion later).

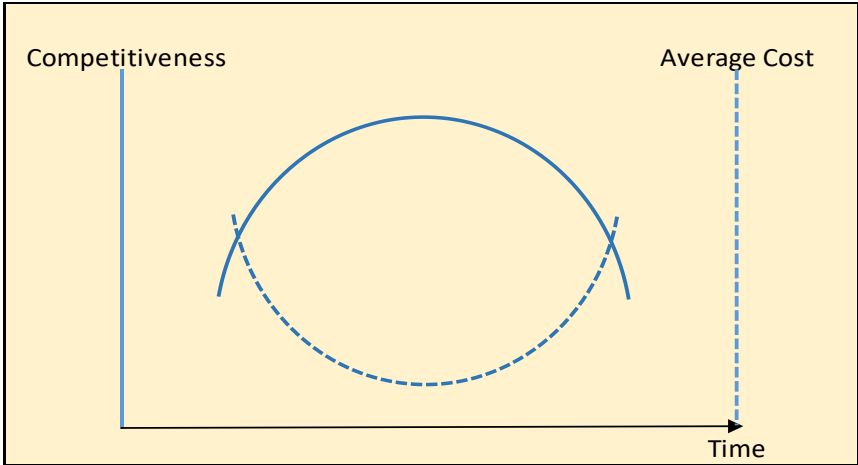
Let us note again that while the RCA index is not concerned with the net trade positions, i.e., the balance of trade, on the product- or sector-specific trade positions, of a national economy, the trade specialization index does. This means that the trade specialization index is a more informative (if not, a more accurate) indicator than the RCA index particularly when the national economy is an importer as well as an exporter for a product group or sector. However, the trade specialization index provides far less information than the RCA index when the national economy is a “pure exporter”. This is because, as shown above, the trade specialization index remains 1 (the ceiling) regardless of the level of exports as long as the imports are zero. Obviously, this is misleading. Since the higher aggregated levels of product classification tend to increase the trend that the national economy becomes both an

⁴² Nayyar (2013) discusses the recent changing trends in the product composition of developing countries’ **imports** from 1980 to 2010, using the five-category product classification of Lall (2001): i) primary products, ii) resource-based manufactures, iii) low-technology manufactures, iv) medium-technology manufactures, and v) high-technology manufactures. The developing countries are divided into three groups: i) Asia, ii) Africa, and iii) Latin America and the Caribbean. He finds that for developing countries as a whole, the share of primary products in **imports** decreased from 22% to 18%, the share of resource-based products remained more or less unchanged around 18%, the share of low- and medium-technology products together declined from 45% to 36%, while the share of high-technology products rose from 10% to 24%. For Asian developing countries (including those in East Asia), the changes are more dramatic: the share of primary products and resource-based products fell from 29% to 20%, and 20% to 18%, respectively; the share of low- and medium-technology products together declined 39% to 32%, while the share of high-technology rose from 10% to 28%. The changes in the product composition for Africa and Latin America are much less dramatic. It is safely assumed that the changes in product composition for East Asian economies’ imports have been even more than those for Asia. Note that Nayyar (2013) also discusses the changing trends in the product composition of **exports** as well.

importer and an exporter, the trade specialization index is more useful for the relatively *higher* levels of product aggregation whereas the RCA index for the relatively *lower* levels. One implication of the discussion above is that regardless of which particular competitiveness indices is used, the different levels of product aggregation may exhibit some inconsistencies. More specifically, at a high level of product aggregation a national economy may show a rising (or a falling) trend of competitiveness, whereas at lower levels of aggregation (for sub-groups), it may exhibit different trends among them (rising in some but falling in others).

While its “appearance” may deviate from the aforementioned inverted V or U shape, competitiveness contour may be associated symbolically with monetary costs of production, analogous to something like the “average cost” of a product (see Figure 2.13 which depicts a plausible relationship between the competitiveness contour and the average cost of production of a particular product or sector within a national economy). The graphic presentation in Figure 2.13 is intuitively appealing; however, it contains cumbersome problems. First of all, given that the framework is a longitudinal analysis (encompassing a fairly long period), the monetary value (unit cost) of a product/sector along the vertical axis is likely to reflect, among others, changes of a “qualitative” nature, including its fundamental characteristics. We have seen, for instance, the gradual shift of production from (less expensive) gasoline-based automobiles to (more expensive) hybrid automobiles. Just because the unit price of the product goes up, this does not imply a fall of production capacity since it may reflect the quality of the product due to technological innovation related to the product itself or regulatory rules related to its production process. This problem in a single-country-single-product/sector could be easily compounded further, when we consider multiple-country-multiple-product/sector case (see further discussion on industrial upgrading below.)

Figure 2. 13
Competitiveness Contours and Average Cost:
Single-Country-Single-Product/Sector Framework



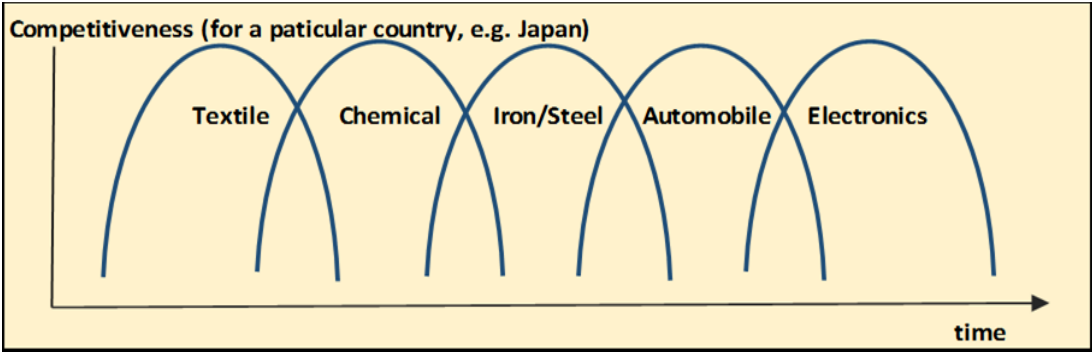
Source: Author’s elaboration

We often hear the expression of the manufacturing capacity of a national economy. However, what is known as “index problems” makes it difficult to raise the aggregation level by grouping the competitiveness indices – however they may be obtained – for various product groups into the total sector competitiveness for the country’s manufacturing sector as such. Furthermore, foreign exchange rates which alter over time can seriously affect the relative price among substitutable products as well as imported parts and components in international markets. Thus, in addition to technological advancement, the cost of manufacturing and marketing a tradeable product can be affected by major changes in the foreign exchange rate. In any rate, it would be unrealistic to envisage a similar shape of average cost curve – although occurring at different periods – for each product group among national economies with diverse internal supply conditions (for example, size and factor endowments).

2.4.6 Industrial Upgrading

The derivation of competitiveness contours from the M-P-X sequence for different product groups/sectors leads us to a model of industrial upgrading (as shown in Figure 2.14, a single-country-multiple-sector framework). Industrial upgrading is said to occur in a manner compatible with a national economy’s competitiveness (or productive capacity), which shows that the country shifts production (and thus export) from “lower” to “higher” levels of manufacturing activities. The lower levels of manufacturing typically include lower value-added, more labour/resource-intensive and less capital/skills-intensive activities; the higher-levels of manufacturing typically include those activities of opposite characteristics.

**Figure 2.14
Industrial UpgradingNational Catch-up**



Source: Author’s reproduction of Yamazawa (1990)

As stated earlier, the competitiveness contour for each product, product group or sector is an expression embodying the corresponding M-P-X sequence. Conceptually, therefore, the rise-and-fall sequence among different competitiveness contours of a national economy for different products, product groups, or sectors indicates that their import curves should also collectively exhibit an inter-product, inter-sectoral order. For that matter, industrial upgrading could be reconstructed alternatively

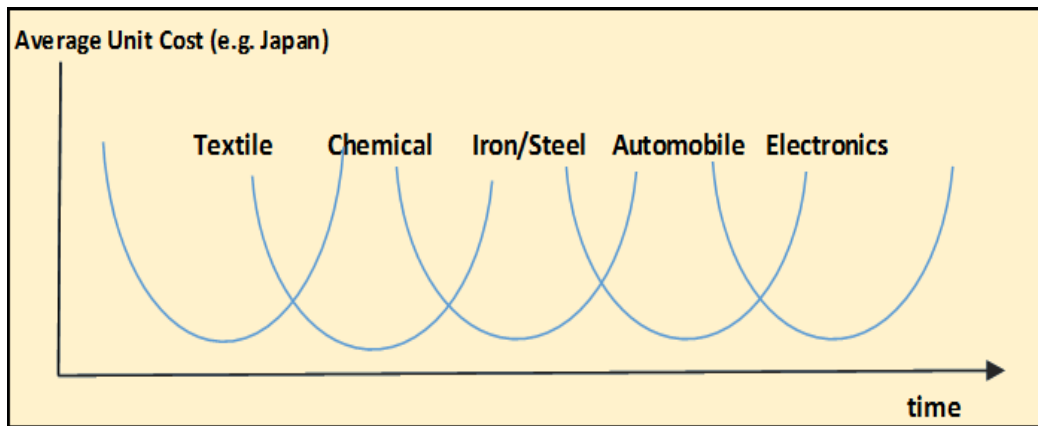
by tracing the historical shifts of production curves as well as those of export curves. In other words, industrial upgrading of Figure 2.14 could be reconstructed for different products, product groups or sectors by tracing the shifts of their import curves, as well as those of production curves or those of export curves, from less to more sophisticated ones. However, we cannot expect even in the name of industrial development that all tradeable products exhibit an extremely similar rise-and-fall contour, in their import, production and export phases?

Another odd aspect of Figure 2.14 is the implicit assumption that the country in question here is relatively “small” in geographical terms. The figure shows that at any point in time the competitiveness of the national economy can be seen only in one of the identified sectors, or atmost in two (for example, textile alone, or textile and chemical, but not textile and iron & steel). This may be reasonable when dealing with an extremely small economy, such as Singapore. But others in East Asia, say, China, for example, exhibit diverse local conditions so that that it may be reasonable for them to engage in a wider range of manufacturing activities.

As shall be further discussed later, we have witnessed the increasing prevalence in many developing economies of the modern development strategy with special economic zones (SEZs). The strategy is to jump-start an export-oriented development by creating an exclusive local manufacturing environment for such products that are marketed mainly for overseas markets. Those firms that are invited to these special enclaves are often given various incentives (i.e., preferential arrangements of reduced corporate tax, special approval of overseas profit remittances, accelerated capital depreciation allowance, etc.) for their export-oriented local operation. We must note here that such a development strategy does not follow the M-P-X sequence, as it truncates it into the P-X sequence (see further discussion in Chapter 3).

The previously discussed relationship of the competitiveness contour with the average unit cost curve for a specific product or a product group could be transposed into a multi-sectoral format. With the caveats already mentioned above, the industrial upgrading process can be graphically shown as the cascading shifts of competitiveness in the corresponding shifts of cost curves for different manufacturing sectors at the national level (see Figure 2.15). Needless to say, Figure 2. 15 contains all of the problems that torment Figure 2.14, and some more.

Figure 2.15
Average Unit Cost
Single-Country-Multiple-Product/Sector Framework



Source: Author's elaboration

Let us note two major problems. First, it is unrealistic to expect that the shapes of the average unit cost curve (corresponding to their competitiveness contours) for different sectors of a national economy should be virtually identical in shape. Obviously, the unit cost of production should range very widely, given the different background of each national economy. Perhaps, one way of dealing with the index problem under discussion here is to calculate the rate of profit for each of the manufacturing sectors rather than a cost curve. In that situation, the rate of profit may trace the similar shape as competitiveness contour, i.e., the inverted V or U shape. But the rate of profit could be greatly influenced not only by the cost of production but also other factors, such as the market structure which can affect the mark-up price (the rate of profit) of products. Needless to say, the rate of profit entails the consideration of market demand in addition to that of production (supply).

The second problem is the problem of timing of shift of production among different products, or product groups. It is difficult to expect that the fall and rise of a cost curve (reflecting the corresponding rise and fall of competitiveness) for a specific product should be synchronized by another in such a way that the former's "sunset" sector could be the latter's "sunrise" sector. There could be gaps as well as overlaps between average cost curves (and thus between competitiveness contours) for different sectors. As shall be discussed further in the next chapter, the problem would be even more complicated when we are dealing with cross-border production activities where the fall of competitiveness of one economy for one particular product group/sector must be met with the rise of competitiveness of another economy for the exact product group/sector.

Let us note on a preliminary basis that these graphic presentations invite some questions. It is hard to expect that each of the product/sector-specific competitiveness (and cost-curves) of a national economy could be presented as in Figure 2.14 (and Figure 2.15)? What could be a unit of measurement

of productive capacity – some sort of representative unit price of production or a rate of profits – that is acceptable among different sectors? How can we again expect that the contours of product/sector-specific competitiveness (and cost curves) are similar in shape and duration? It can be argued that it is more realistic to expect that each national economy exhibits different competitiveness contours (cost curves)? As noted earlier, this inter-temporal comparison of different competitiveness contours cannot escape parametric issues, such as changes in the exchange rate of the national currency, the costs of factors of production, and the choice of technologies for production, all of which can affect the cost of production and overseas marketing (export). This problem will re-emerge in a more complicated way in the discussion on the comparison of sector-specific competitiveness for a specific sector among different national economies (see Chapter 4).

2.5 Policy Implications

Akamatsu's basic M-P-X sequence framework constitutes the core mechanism of late industrialization when a country opens up its economy to trade with – and thereby capitalizes on the opportunities to catch up with – early industrializers. Such trade sets in motion what Ozawa (2009: 28) refers to as a “derived process of industrial development”, which is “a strategically controllable activity at policy level”. Akamatsu's M-P-X sequence involved the delicate issue of infant-industry protection, because the late industrializer must find an optimal level of protection. Excessive protection may prolong the inefficient traditional production for some consumer products (if such production ever existed at all), but eliminates the external stimulus that could create domestic demand for superior consumer products and instigates their import-substituting production. However, inadequate protection may also prematurely trim the possibility of import-substituting production and export. As for the time-frame and sectoral choice of protection, arguably Akamatsu's criterion went beyond the production phase and included the export phase in such a way that a new manufacturing activity must be developed to be internationally competitive.

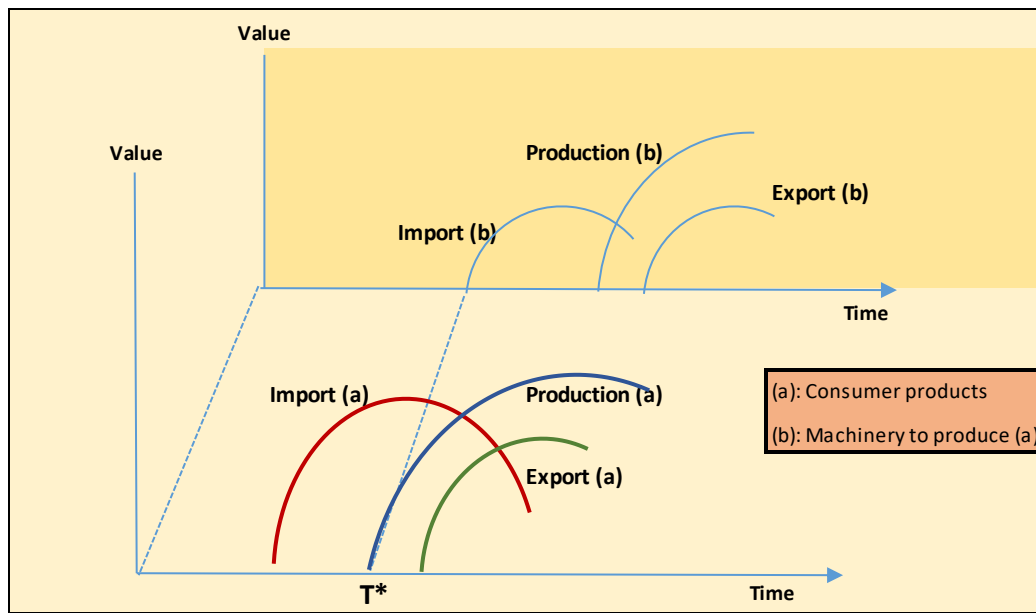
In the early WWII period, the dominant idea of “Big Push” emphasized the importance of a massive bundle of synchronized investments in a wide range of interrelated industrial activities. It is an all-out cross-sectoral, or balanced growth, approach. Akamatsu's policy suggestion was sectorally strategic, and it is akin to an “unbalanced growth” approach, with a step-by-step strategy of developing specific domestic manufacturing sectors over time by way of opening the economy for imports but eventually replacing them with local production. Thus, both the FG paradigm and Hirschman's well-known “unbalanced growth” emphasize the importance of sectoral linkages (Akamatsu 1961: 209).

Let us recall that Hirschman (1958) focused on the phenomenon of import-induced production, just as Akamatsu had done much earlier; however, Hirschman examined basically the initial import-substituting production phase, without considering much the subsequent export phase, whereas

Akamatsu's model pays attention to the entire M-P-X sequence. As a result, Hirschman did not elaborate how domestic production can develop an exporting activity. Hirschman did stress the strategic role for exports, basically as the main source of foreign exchange earnings, which is required to finance imports of raw materials, machinery and equipment needed to support manufacturing activities. But this does not mean that export promotion ought to be carried out in the same manufacturing sector where imports are successfully replaced by domestic production. Any other sector that can export is in a position to provide import finance. Therefore, Hirschman's analysis did not deal with the question as to how the export phase could be promoted as a sequential extension of the production phase (Ozawa 2008: 28-32).

To illustrate Akamatsu's inter-sectoral linkage argument, Kojima (2000) schematically highlights the relationship between the production of consumer goods and the import of capital goods (machinery) (see Figure 2.16). It is shown that late industrializers may begin the local production of consumer products at T^* (on Figure 2.16) when it begins the import of machinery to produce the consumer goods. This does not necessarily mean, however, that the import of consumer products also begins to decline as a result of the rise of local production.

Figure 2.16
Inter-Sectoral Linkage



Source: Author's partial reproduction of Kojima (2000).

Approaching the issue of import protection from a different angle, Krugman (1984) dealt with Akamatsu's M-P-X sequence by introducing the phrase: "import protection as export promotion". For Krugman, import protection under monopolistic competition leads to scale economies, which will eventually enable the protected local producers to gain export competitiveness in price. With a

similar line of argument, UNCTAD (1996) also stressed the importance of simultaneous implementation of export promotion and infant protection.

In the 1960s, Akamatsu also referred to Rostow's concept of "take-off"; however, there is a clear difference between the two. Rostow was concerned with economy-wide industrialization, at which domestic investments reach a level of self-sustainability and all sorts of industrial activity come into existence. Whereas Rostow seemed to be only marginally interested in international trade as a relevant matter for development, Akamatsu regarded trade (perhaps more broadly interactions with advanced countries) as the indispensable foundation to instigate industrial development (Korhonen 1994a: 62).

Nevertheless, let us be reminded that Akamatsu's phenomenon of import substituting production – often with the protectionist support of the state – refers to a particular manufacturing sector, without much consideration of what has happened in the rest of the economy. Furthermore, it is questioned whether state support for the specific sectors should be concentrated mainly during their early import substituting phase or extended into their export phase. As Yamazawa (1990: 32) argued, the state may promote the initiation of production in some specific manufacturing sectors, with various policy measures, for example, the establishment of state-owned plants, the imposition of import tariffs and production/export subsidies, the provision of soft loans, and other measures, but it may perceive that its continuing support over an extended period may prove to be exceedingly costly.

Akamatsu's model seems to be inappropriate for extremely small economies such as Singapore and Hong Kong, or for very resource-abundant economies, such as the 2nd-tier NIEs. In the case of extremely small economies, if production requires a fairly large scale of operation, such as automotive production, such a specific sector cannot be included as a choice along their development path. In the case of very resource-abundant economies, particularly minerals, they cannot easily escape the development path without pursuing what is called "export substitution" (Myint, as cited in Sato 2016: 215), i.e., the gradual shift in exports from less processed primary resources to more processed forms. For example, perhaps, Indonesia cannot escape the industrialization path that includes oil-related sectoral development. As Sato (2016) explains, the intensity of Indonesia's industrialization drive in resource-abundant economies may have much to do with the major movements in international prices of their principal resources (and consequent changes in the country's terms of trade) as well as with domestic institutional settings. Sato (2016) stresses that Indonesia's oil export has generally reduced the intensity of the country's industrialization drive. This is because the periodic large price surges in natural resources, most notably oil, have tended to slow down its industrialization.

The modern FG paradigm, which views Japan as the regional leader (the chief early industrializer) in East Asia, provides a different guideline with a distinctively regional approach. Many researchers, including those who are non-Japanese in East Asia, then argued that Japan's foreign aid policy should

be planned in order to facilitate a region-wide restructuring of manufacturing, where the aid allocation (together with FDI) should be undertaken in such a fashion, most of all, to facilitate Japan's industrial restructuring. Chapter 3 presents a discussion of Japan's external policy particularly towards its neighbours (see also Arase 1994; Arase 1995; Hatch 2010; Hatch & Yamamura 1996; Rix 1989-1990; UNCTAD 1996).⁴³

2.6 Chapter Summary

In the 1930s, Akamatsu formulated his original model of the FG paradigm, based on his study on the catch-up experience of Meiji Japan, a resource-scarce late industrializer, where local attempts were made to internalize (and further develop) Western manufacturing knowledge and machinery. The Meiji Government encouraged local entrepreneurs and profit incentives motivated them to develop these sectors due to rising local demand and the export potentials. Recurrences of import substituting production for different products are the central concept of Akamatsu's model for late industrialization, although the local manufacturing of certain products still entails imported inputs and machinery. In the long run, the local technological development will indigenize these sectors by reducing external dependence (i.e., import) production.⁴⁴

It seems that Akamatsu's original model upheld three objectives. First, it was to explain the process of industrial development and upgrading of the national economy as the repeated M-P-X sequences, which collectively show intra-sectoral and inter-sectoral shifts of competitiveness of production. Second, the trickle-down process of industrial activities, which can raise competitiveness in late industrializers in manufacturing, still entails some state intervention (for protection as well as nurturing). And third, the dialectic interplay between earlier and later industrializers could induce homogenization (convergence) and heterogenization (divergence), which collectively creates some business cycles. Akamatsu's efforts with these objectives were well formulated in the intellectual development of the first two, which were closely related to the national development process.

The FG paradigm hibernated during the immediate aftermath of WWII. In the 1950s and 1960s, Japanese researchers began to add new ideas to update Akamatsu's model so that it would be more applicable to postwar Japan which had transformed itself from a late industrializer to an early industrializer (particularly in the context of East Asia). The new ideas, which have contributed to the evolution of the model, include:

⁴³ However, the story does not end there. In the new premium, i.e., after the lost decade of the Japanese economy of the 1990s, China has taken over Japan's role as the advocate of the FG paradigm as a more globalized development model (see Chapter 6 for further discussion).

⁴⁴ A particular element in this model which may not be internalized/indigenized is the use of imported raw materials. As long as Japan's local production of these products continues, the imports of these resources essential for producing them must continue.

- i) the concept of the reverse import (M'), which has modified the M-P-X sequence into the M-P-X- M' sequence;
- ii) the consideration of the role of consumption, which affects the size of excess production (to be exported);
- iii) the concept of competitiveness, of which the derivation (from the M-P-X sequence) has enhanced the empirical tractability of the model;
- iv) the formulation of alternative methods of calculating product/sector-specific competitiveness of a national economy;
- v) conceptual clarification of inter-sectoral linkages between the export phase (X) of consumer goods and the import phase of capital goods (M), which was helpful in understanding relations among X-P-X sequences for different product groups.

All of these new concepts mentioned above contributed to the development of policy debates in East Asia. They also highlighted that economic nationalism is a key ideology – orchestrated by the state – to legitimize national development projects (see D'Costa 2012; Jomo et al. 1997).⁴⁵ Protective measures were often beneficial for late industrializers in the region, particularly when they were used for the well-targeted, specific native manufacturing sectors that could be foreseen to achieve a scale large enough to attain the “take-off stage” and compete internationally (Akamatsu 1962: 8; Korhonen 1994a: 53). Otherwise, economic nationalism may only impoverish the national economy (Akamatsu 1962: 8).⁴⁶ In addition, the framework of the FG paradigm in the Cold War period – perhaps most applicable to Japan, South Korea and Taiwan, but also to others in East Asia – may require two additional elements: political authoritarianism and security bilateralism (i.e., security protection by the US) (see Achaya 2014).⁴⁷ Akamatsu’s only two articles in English (Akamatsu 1961; 1962) scarcely refer to the nurturing role of the state, in addition to the protective role. As a result, they give a false impression to non-Japanese researchers that the FG paradigm is by and large a market-based model.

⁴⁵ In East Asia, Japan and the 1st-tier NIEs are highly homogeneous in ethnic and cultural background, which has probably rendered nationalism a far more potent force. In the 2nd-tier NIEs, their national economies have been “the unintended by-products of European nationalism”, and ethnic and religious heterogeneity have weakened the nationalist impulse and related national capacities (Jomo et al. 1997: 16).

⁴⁶ Should economic nationalism be equated with “communal unity”, the end of the Cold War – which has reduced the intensity of such unity against the commonly perceived communist threat – may have lessened the imperative of collective action and economic cooperation. Similarly, the new situation may have undermined the rationale for regional states’ intervention to regulate and direct their economies and societies (Stubbs 2005: 185).

⁴⁷ Achaya (2014: 131), however, argues that economic nationalism, political authoritarianism and security bilateralism have been gradually replaced by economic liberalism and interdependence, democratization, and growing multilateralism (coexisting with bilateralism) (Acharya 2014: 131).

In fact, Akamatsu, his writings (in Japanese), did recognize the need for active industrial policy, including “temporary” measures to protect infant industries in order to promote import substitution (see Schröppel & Nakajima 2002: 223; Akamatsu 1958).

Chapter 3

Evolution of the Flying Geese Paradigm: Part II: Modern Versions

3.1 Introduction

Chapter 2 discussed mostly Akamatsu's original model of the flying geese (FG) paradigm with the M-P-X sequence and industrial upgrading as if it had been imbued exclusively with methodological nationalism, i.e., the concern over national development. The model contained policy implications for the national catch-up process, with development policies broadly, and trade and industrial policies specifically. However, Akamatsu did also touch upon dynamic regional linkages in East Asia, although he did it mostly *after* World War II (WWII). Indeed, the postwar model has been regarded as a framework for understanding regional development and integration.⁴⁸ The modern versions of the FG paradigm, which are still based on Akamatsu's original model at the core, constitute an eclectic entity that focuses on regional dynamics where specific manufacturing activities change locations across national borders.

Apart from Japanese FG paradigm researchers, Cumings' (1984) pioneering work, almost single-handedly popularized the product cycle (PC) explanation of East Asian industrialization. He offered an argument that the region's economic development can be understood only in the context of "the fundamental unity and integrity of the regional effort" (Cumings 1984: 3) to which the FG paradigm could be applied. East Asian economies were said to follow one another in a development trajectory in which the latecomers would emulate the experience of the countries ahead of them. Since then, the FG paradigm has been seen often as a variant of the PC theory, and many researchers have been willing to regard the FG paradigm and the PC theory as virtually interchangeable (see, for example, Bernard & Ravenhill 1995). This chapter specifically discusses – as modern derivatives of the FG paradigm, the PC theory, the catching-up product cycle theory, the integration/snowballing model, and the regional production network model. The chapter then considers the lineage of the FG paradigm against the background of broad development thinking.

3.2 Product Cycle (PC)

In a nutshell, the PC theory – based on the view that all products have a limited life span (Dicker 2011: 97) – argues that the production of new products is initially located within advanced economies, and that it will be shifted abroad over time. Here it is assumed that the products become mature along their "life cycle", and their markets (domestic and international) accordingly become crowded and

⁴⁸ It was noted in Chapter 2 that the FG paradigm was not sufficiently developed in the 1930s to the extent to render the intellectual foundation to support Japanese imperial expansionism in East Asia and beyond.

competitive. This life cycle of products together with changing market conditions tends to engender the overseas relocation of their production – offshore production in short – seeking low-cost sites (with cheap labour and other factors of production). The following section introduces a discussion on the technology gap theory as a preliminary framework, and then that of the PC theory popularized by Vernon (1966), which seemingly galvanized the discussion of the FG paradigm.

3.2.1 Preliminary Note: Technology Gap Theory

Contrary to the mainstream neoclassical assumption (free availability of technology), the technology gap theory argues that the gap in technical capacity among real and potential exporters is a principal determinant of trade flows. Starting with the point that technology is not freely available across national boundaries, Meier (1980) drew three important conclusions:

- i) Innovations of new products and new production processes are likely to occur near a market where there is a stronger demand for them rather than in a country with little demand;
- ii) Suppliers, or producing firms, are more likely to supply risk capital for the production of the new products if demand for them exists in their home markets than if they have to go to foreign markets;
- iii) Suppliers located close to a market have a lower cost in transmitting market knowledge into product design changes than those located far from the market (Meier 1980: 38).

These conclusions justify the PC theory – a generalization and extension of the technology gap theory (Salvatore 1974: 65) – as a framework to explain the locational changes of the production of manufactured products and their trade patterns (see also Krugman 1979, and Dollar 1986). Milberg (1994: 418) argues that the existence and then disappearance of technological gaps for specific products and their production – depending on the degree of maturity (and thus standardization) – determine their trade and FDI flows for their production abroad.

3.2.2 Vernon's Product Cycle (PC) Theory

According to Vernon (1966), the life cycle of each manufactured product goes through three stages:

- i) Market introduction stage (with a new product):
- ii) Growth/maturity stage (with a mature product), and then
- iii) Standardization stage (with a standardized product).⁴⁹

⁴⁹ Product life cycle may be divided into more than three stages. For instance, prior to the market introduction stage there is the “incubation stage” of product development, where there are no sales and the firm prepares to introduce the product. Furthermore, after the “standardization stage”, there is the decline stage where the market becomes saturated, and the product becomes technologically obsolete, or consumer tastes change. Unit

In the first stage, the utilized technology is not firmly defined as yet, and product development expenditures dominate the cost structure. Therefore, an economy with relative abundance (and thus comparative advantage in neoclassical terminology) in resources related to research and development (R&D) and skilled labour needed for producing new products – typically those of a high-income or (unskilled) labour-saving kind – is likely to be the exporting country. Firms located in such a country innovate new products, experiment with the design for them in short production runs, and make significant modifications after observing consumers’ response (Vernon 1966: 193-194). At this stage, the need for swift and effective communication on the part of producers with customers, suppliers, and even competitors is critical (Vernon 1966: 195). As products mature, the need for flexibility in input sourcing declines. Furthermore, as product standardization advances, economies of scale from mass production may become available.⁵⁰ Meanwhile, with production technology being also standardized, marketing and production costs become crucial in profit calculations. And at this stage of the product cycle, their production sites are likely to be shifted internationally.

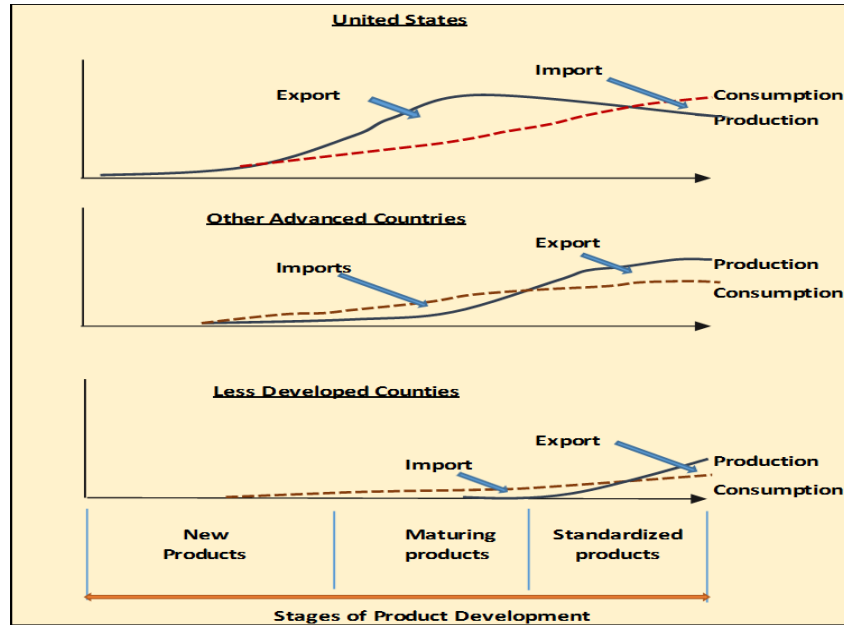
Vernon argues that a new consumer product is likely to be introduced in an advanced economy (with the US in mind), enjoying the advantages of its own large affluent market and a relatively abundant supply of technological and entrepreneurial resources. When overseas markets develop, and the product and its production process are standardized, foreign firms (imitators) – often supported by their local government,⁵¹ first in other developed economies and later in less developed ones – are motivated to produce it for their own home markets, and later even for export to third-party markets as well as the original exporters (the case of reverse import, discussed in Chapter 2). Over time, therefore, developing countries can produce an increasing set of standardized products, which successively become suitable in accordance with their stages of development. In other words, the foreign firms, according to Vernon, are generally engaged in manufacturing products that are at their “maturing” or “standardized” stages rather than at the “infantile” stage. Meanwhile, the originally exporting US firm may attempt to counter the offence from abroad by undertaking outward FDI, i.e., setting up overseas subsidiaries. Vernon presents a pattern of trade of consumer products at different stages of product development (or standardization) (see Figure 3.1).

costs may increase with the declining production volumes and eventually no more profit can be made (see Dickson 2011: 97-99).

⁵⁰ This does not mean that efforts at product differentiation come to an end. Vernon admits that such effort may even intensify, as competitors try to avoid the full brunt of price competition. Yet, he still argues that even though the subcategories may multiply and the efforts at product differentiation increase, a growing acceptance of certain “general standards” appears to be typical (Vernon 1966: 196).

⁵¹ While local firms grow anxious about the situation of indigenous production, local governments that are concerned with generating employment or promoting growth or balancing their trade account may begin to think of ways and means to replace the imports (Vernon 1966: 200).

Figure 3.1
Vernon's Product Cycle Theory:
A graphic presentation of production and trade



Source: Author's reproduction of Vernon (1966: 199, Figure 1)

Vernon (1979) later admits that his PC theory might need some modifications, mainly regarding the location of production for *new* products. As modern firms have extensively established overseas subsidiaries, R&D activities on these products and their production processes has also become more readily and widely available abroad than it was at the time of Vernon's earlier discussion. Thus, the firms may produce new products in their home country as well as abroad at the relatively early stages of their life cycle. More often than not, rapid overseas dispersion of R&D capacity causes precocious and incomplete deindustrialization, or "de-manufacturing" (Ozawa 2003: 704), since the upstream operations such as product/market development are partly (if not fully) retained at home (Ibid). Furthermore, given the narrowing gap in income levels, catering to high-income demands no longer implies catering to the domestic demand of the US alone.

Researchers have developed a rich microeconomics literature – most of all, the "ownership-location-internalization" (OLI) model – on the firm-level motivation of FDI.⁵² In the context of the PC theory

⁵² The OLI model states that the decision of overseas production over export typically requires initial exporting firms to contemplate three categories of advantages that offshore production is likely to offer over export or overseas partnership arrangements. The greater "ownership advantages" these firms possess, the more likely they are engaged in offshore production. The greater "locational advantage" potential host countries offer, in terms of abundant cheap raw materials, low wages, special taxes and tariffs, the more likely they offer alternative locations for value-adding activities. Internalization advantages (advantages in production by the firm's own

(and thus the modern FG paradigm), major pioneering firms that began the production of new products gradually lose some of what is known as “ownership advantages” due to the standardization of their products and production processes. As a result, “locational advantages” (most importantly, low wages in East Asia) become a more dominant factor. The interface between the PC theory and the OLI model may engender a paradoxical case. According to the PC theory, it is the loss of ownership advantages due to the standardization of products and production processes that tends to induce the initial innovating firms to undertake preempt or defensively seek overseas ventures. In any case, the consideration of the recent practice of overseas licensing arrangements, such as “original equipment manufacturing” (OEM) may provide further insights in this regard.⁵³

For each product, there are different input costs, and each input has different characteristics. *What is crucial in the PC theory is that over the life cycle of each product, the relative significance of each input tends to vary.* Because the availability of particular inputs differs among national economies, cost effectiveness in production (thus the location of production) is understood to change over time. Let us recall that according to the conventional neoclassical trade theory of factor proportions (the Heckscher-Ohlin theorem) with the assumption of perfect competition, countries should specialize in the production of those products that intensively use the factors (inputs) of production with which they are better endowed. When this assumption cannot be held, then factor endowment cannot be directly translated into costs of production.

The PC theory postulates that the manufactured products’ “maturation process” along their life cycle exhibits the factors (inputs) needed for its production, and that trading countries also change their production activities (and thus trading patterns as well) over time. However, if we question this aging assumption of the PC theory, the whole scheme of catch-up via accepting offshore production may fail. What if the products do not go through a relatively short life cycle? What if the entrepreneurs are more concerned with “business cycle” rather than product cycles in deciding offshore-production? What if the same (mature) products could be produced at an equal level of cost efficiency (through different production processes) in geographical locations of different factor endowments? Certain products could be manufactured either in a capital-intensive process with labour-replacing robots as well as in a traditional low-wage, labour-intensive process.

self-reliant operation rather than through partnership arrangements) explain that the greater the net benefits of internalizing overseas markets, the more likely firms will prefer to engage in offshore production rather than licensing the right to do so. For further discussion see Dunning (1996).

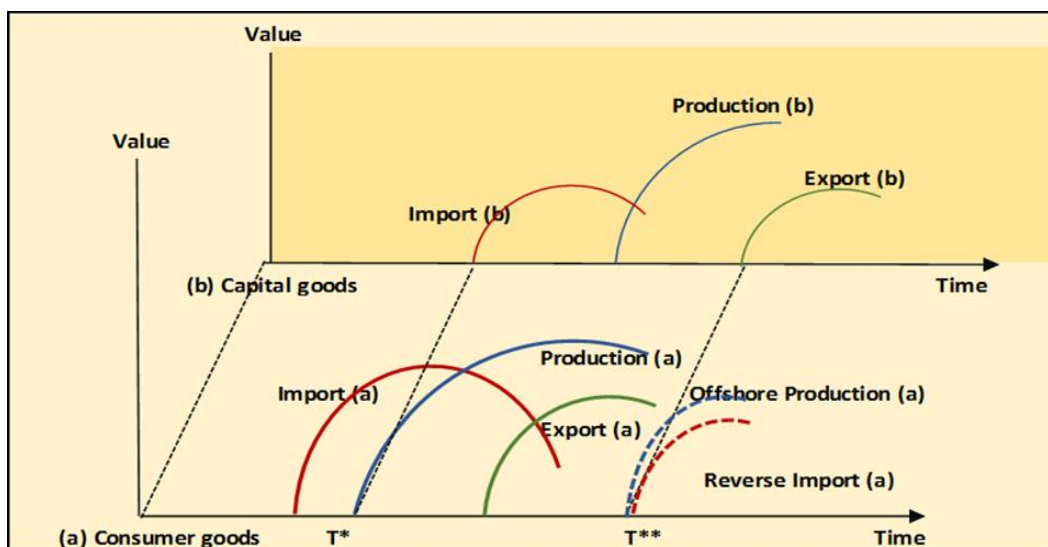
⁵³ The OEM practice has the following features: a local firm makes a product according to the design specified by the foreign buyer; the product is sold under the buyer’s brand-name; the local firm and the foreign buyer are separate entities; and the local firm lacks control of distribution (Gereffi 1998: 101). Furthermore, OEM exports may enhance the ability of the local firm to learn the preference of foreign buyers, including prevailing international standards of the price, quality and delivery of export merchandise (Ibid).

3.2.3 Effects of FDI on the original M-P-X sequence

Modern Japanese researchers merged Akamatsu's discussion on industrial catch-up with Vernon's model of offshore production. These researchers identified outward FDI as the typical and prevalent way of coping with intensifying international competition. As Ozawa (1992: 33) points out, however, they do not address the question as to how the international transfer of standardized production affects economic development and sectoral restructuring of developing countries. The point of contention is that the PC theory would **not** explain the catch-up process of late industrializers, as these economies are seen as passive recipients of foreign technologies (capital goods and production techniques) and market outlets.

In the 1970s, Kojima, the most prominent student of Akamatsu, began to present the FG paradigm in a wider debate on the role of Japanese firms, by incorporating the phenomena of various foreign ventures into the model. In addition to the linkage of the import of capital goods and the production of consumer goods from a relatively short-term perspective, this model also indicates the interplay of three additional types of activities from a longer-term perspective: i) reverse import of consumer goods, ii) offshore production of consumer goods, and iii) the eventual export of capital goods. Kojima presents a graphic presentation that highlights effective inter-sectoral linkages and intriguing relations of offshore production and reverse import (see Figure 3.2).

Figure 3.2
Kojima's "Single-Country-Two-Industries" model
With reverse import and offshore production (FDI)



Source: Author's reproduction of Kojima (2000)

Notes: In this model, the production phase of consumer goods and the import phase of capital goods start at the same time at T^* . Similarly, the offshore production and reverse import phases start at the same time at T^{**} when the export phase of capital goods also starts.

While the model has its merits in terms of conceptualizing reality, it is also an oversimplification. The point is that this graphic presentation is a specific (unique) model for a peculiar case rather than a generic (prototype) case applicable to many cases (if not all). This particular model presents a few sets of coincidence in timing.

- i) The production phase for consumer products and the import phase of capital goods start at the same time at T^* . This is conceptually useful in terms of highlighting the inter-product/sector relations, particularly the consumer goods and machinery to produce them. But this coincidence does not have to happen.
- ii) The offshore production phase for consumer products and the export phase of capital goods start at the same time, at T^{**} . This is also conceptually useful in terms of highlighting the possibility that the offshoring production of consumer products entails the export of machinery for producing these products. But this coincidence does not have to happen.
- iii) The offshore production and the reverse imports of consumer products begin at T^{**} . This point is also debatable, because the sequence between offshore production and reverse import cannot be generalized. When a late industrializer manages to start the production of consumer goods *without* relying on imported capital goods or FDI, reverse import to the early industrializers may come before offshore production.⁵⁴ On the other hand, if some outputs of the offshore production are marketed for overseas markets (export replacement), reverse import is likely to occur much later.

Figure 3.2 shows that offshore production is greater than the reverse import for the consumer product at each moment after T^{**} . This may make sense when the offshore production is for meeting the demand of the local market as well as that of the original exporter's market. But this is just one possibility. Obviously, if reverse import also contains products manufactured in overseas facilities other than offshore production, then the reverse import can be greater than the offshore production.

3.3 Modern FG Paradigm as a Catch-up Product (Industry) Life Cycle Model

As noted earlier, the publication of Vernon's (1966) PC theory stimulated Japanese researchers in their efforts to modernize the FG paradigm. Given the fact that Vernon's PC theory attracted much attention, the FG paradigm came to be seen erroneously as its spin-off. In any case, it was Akamatsu's students that attempted to "modernize" Akamatsu's model by incorporating the notion of product life cycle in it. With the belief that the FG paradigm and the PC theory were *two sides of the same coin*, the principal task for them was to transpose the viewpoint of the PC theory from advanced countries

⁵⁴ In East Asia, Japan and South Korea were well known examples that managed to develop their own early manufacturing sectors without heavily relying on inward FDI.

to developing countries. This did not please every concerned researcher, however. Ozawa, for example, laments that the choice of the nomenclature, “catching-up product cycle”, was erroneous and unfortunate, since it “does an injustice to the FG theory, diluting its uniqueness and importance, even though the FG theory is certainly related to the PC theory” (Ozawa 2009: 35).

It was Saburo Okita, a former Japanese foreign minister, who introduced a modern version of the FG paradigm to a wider audience, when he delivered a speech at the Pacific Economic Cooperation Council conference held in Seoul in 1985 (see Okita 1986; 1991). After this historic speech, the modern FG paradigm rapidly gained popularity in East Asia. The model was thought – at least until the lackluster business performance set in Japan in the 1990s – to be the nucleus of the Asian way of thinking about regional development, where Japan’s foreign policy towards East Asia should aim at facilitating the integration process. In this regard, one Japan specialist explains that when market forces drove Japanese firms towards East Asian neighbours the Japanese government stood ready “to focus, amplify and sometimes orchestrate their efforts” (Terry 1996: 188). (See also Arase 1995; Hutch 2002; Hutch 2010; Hutch & Yamamura 1996; Ikee 2008; Kojima 2000; Kumagai 2008).

Modern FG researchers depict the mechanism of the collective advancement of East Asia as the manifestation of consecutive multi-layered catch-up efforts. With continuously altering product-cycle-based trade, the modern FG paradigm focuses on the regionally contextualized transformation of national economies (thus, macro-economic) rather than on the strategic behaviour of large firms of the PC theory (thus, micro-economic). We must note that the PC theory posits an essentially “ahistorical” flow of individual products in isolation from larger industrial structures, omitting, for example, the backward and forward linkages involving diverse networks of firms within economic sectors, and it overlooks differences in business strategies that can be used to alter the dynamics of product cycles (Gereffi 1998: 103; see also Bernard 1996: 651-655). The modern FG paradigm, on the other hand, presents large firms as “benevolent” conveyers of “industrial” knowledge – mostly industry-specific but firm-specific as well – from one national economy to another. Let us note again one important point: the PC theory was constructed from the perspective of an “innovating” advanced country (or firm), and as a result its explanatory property does not address the question as to how the transfer of standardized production by “imitating” developing countries (firms) promotes their development or catch-up process.

3.3.1 Eclectic Model

In modern FG researchers’ perspective, the key to industrial upgrading at national and regional levels is the simultaneous occurrence of four types of *orderly* sequence of phenomena within a national economy (thus a single-country framework), and among national economies (and thus a multiple-country framework). These researchers (including Akamatsu himself in the postwar period) presented **three** types of sequences. The presentation here consists of **four** types, where distinction is made of

the **intra-industry** sequence (product refinement, modification and diversification) and the **inter-industry** sequence (industrial upgrading).⁵⁵

- i) **Primary sequence** of a particular product (or a product group): Akamatsu's original "single-country-single-product" framework, the M-P-X sequence (see Figure 2.3 in Chapter 2) is expanded into the M-P-X-M' sequence (see Figure 2.7 in Chapter 2). The latter four-phase sequence follows the trade/production of the modern product life cycle: import (M), production (P), export (X), and finally again import (M': reverse import).⁵⁶ The FG paradigm generally considers the cross-border transfer of industrial knowledge and technology (including one embodied in capital goods) from early to late industrializers as the key to the import-substituting process of the latter. However, there are some analytical gaps among different versions of the model.⁵⁷
- ii) **Intra-industry sequence** of product refinement, modification and diversification: This sequence deals with qualitative upgrading **within** a product group or a particular manufacturing sector, showing a shift of competitiveness from "crude and simple goods" to "complex to refined goods". Akamatsu touched upon this in his early study of Japan's textile industry (see Figures 2.1 in Chapter 2 for three different woollen products). Modern researchers though, through somewhat different perspectives, are much more elaborate.
- iii) **Inter-Industry sequence** of sectoral diversification (industrial upgrading): The sequence deals with the qualitative upgrading **among** manufacturing sectors, showing the longer-term shift of competitiveness, say, from consumer goods to capital goods. This was presented in a "single-country-multiple-industry" framework (see Figure 2.2 in Chapter 2 for cotton thread and cotton cloth). As noted earlier, researchers do not distinguish the inter-industry sequence and the previously discussed intra-sector one.
- iv) **Inter-economy sequence** of orderly transfer of industrial activities among national economies along the East Asian regional hierarchy: The PC theory provides an explanation of offshore production of consumer products. But more

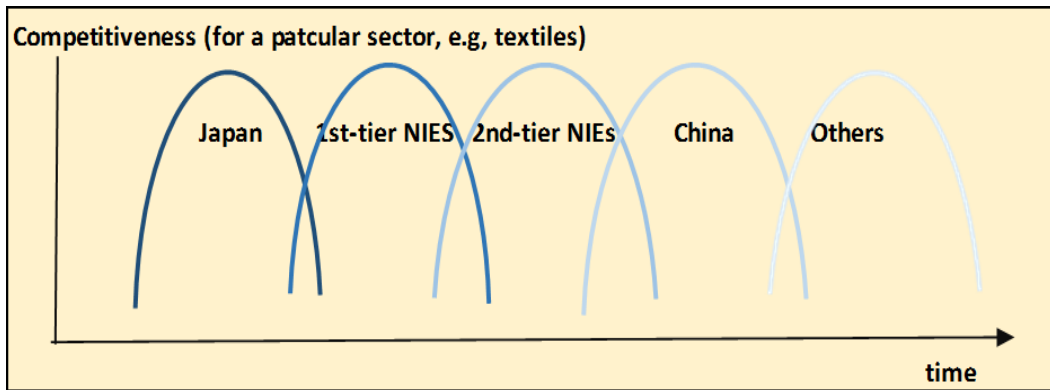
⁵⁵ Indeed, the distinction between the intra-industry sequence and the inter-industry sequence can be arbitrary, depending on how narrowly product groups and sectors are defined. In any case, the country is expected to shift the production (and thus export) activities from lower value-added, more labour-intensive and less capital-intensive products/industries to higher value-added, less labour-intensive, and more capital-intensive products/industries. Furthermore, technical development may mean the rise of the number of the same old products produced rather than of the rise of the quality of the products in question.

⁵⁶ If the offshore production is **explicitly** considered, the M-P-X-P'-M' sequence could be formed, where offshore production (p') take place prior to the commencement of reverse import (M').

⁵⁷ The PC theory, for instance, highlights that changes of a given technical innovation in the early industrializer embodied in a new product or production process are destined to be standardized over time. Such a micro-theoretic analysis was virtually missing in the FG paradigm (particularly in Akamatsu's model).

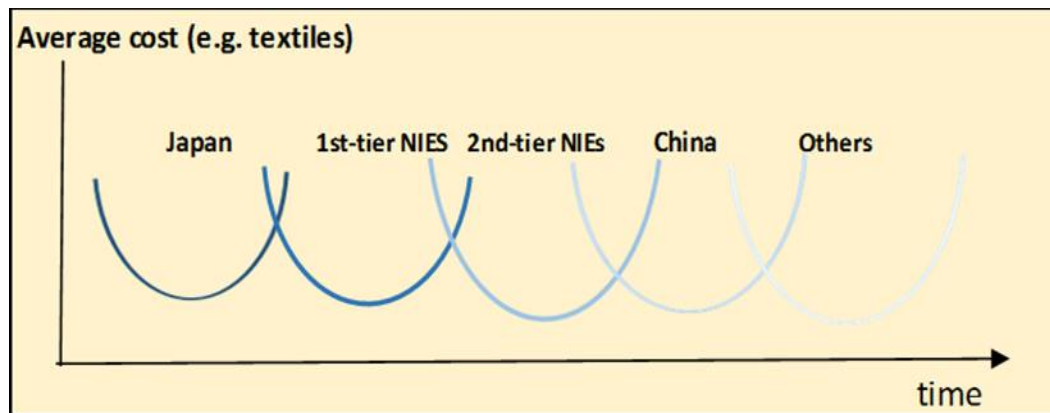
broadly, it is understood that industrial transfers from Japan are destined for those following economies that come to possess the factors (resources) and technological capacities (endowments) most suitable to the transfers (see Lin 2011). This is presented in a “multiple-country-single-product (industry)” framework below (see Figures 3.3 and 3.4) or in a “multiple-country-multiple-product (industry)” framework shown later (see Figure 3.5).

Figure 3.3
Modern Catching-up Product Cycle Paradigm:
Inter-economy sequence in terms of competitiveness



Source: Author’s reproduction of Yamazawa (1990)

Figure 3.4
Modern Catching-up Product Cycle Paradigm:
Inter-economy sequence in terms of average unit cost



Source: Author’s elaboration

Figure 3.3 and 3.4 each presents a stylized inter-economy sequence of competitiveness over time – say, for example, textiles. While being intuitively appealing, these figures invite critical questions. How can we assume that the product/sector-specific competitiveness index and the unit cost of production can be presented so neatly and sequentially among a group of national economies? What could be the

appropriate unit of measurement of productive capacity – some sort of representative unit price of production – that could be applicable among different national economies that are engaged in the particular manufacturing sector or industry at different periods? In addition, we are now implicitly comparing the cost of production with the notion of “absolute advantage”, rather than “comparative advantage”, the mainstay in conventional trade theory.

The difficulty to express competitiveness in terms of cost of production is problematic even when dealing with a closed (autarkic) economy. And the problem could be even more complicated with an open economy. Competitiveness is a “relative” concept, making sense only in comparative terms. Just because a national economy becomes more cost-effective in producing a particular product, this does not necessarily mean that its competitiveness rises internationally, regardless or independently of the situation of other countries. In other words, a national economy’s rise of cost-effectiveness alone would not guarantee a chance of becoming an actual producer (as well as an exporter) of the products in question. Obviously, if a national economy is relatively small, then it may *not* be able to take over *all* of the production of different products previously undertaken by early industrializers. (After all, East Asia consists of economies that are extremely diverse in terms of scale, and this alone complicates the intra-regional relocation of manufacturing activities.)⁵⁸

Modern advocates of the FG paradigm have tended to emphasize the inter-economy sequence among these aforementioned sequences, and they have done so expressly in the East Asian context, where all consumer products purportedly follow a similar diffusion/relocation pattern. For instance, relatively large regional economies, such as South Korea (representing the 1st-tier NIE), Malaysia (representing the 2nd-tier NIEs) and China seem to have followed Japan’s industrial upgrading, depicting shifts of competitiveness among different manufacturing sectors (as shown in Figure 3.3). Due to the influential product cycle concept, the modern version highlights the likely benefits of offshoring of production, with an already standardized production technology and its increased use in newly created manufacturing sectors in catch-up economies. Inward FDI is accompanied by the imports of machinery and equipment for production, components and even business services needed for local production and assembly.

A newly utilized cost advantage in production in catch-up economies cannot remain perennial, because the transplanted production process is likely to raise the factor prices from the previous low levels.

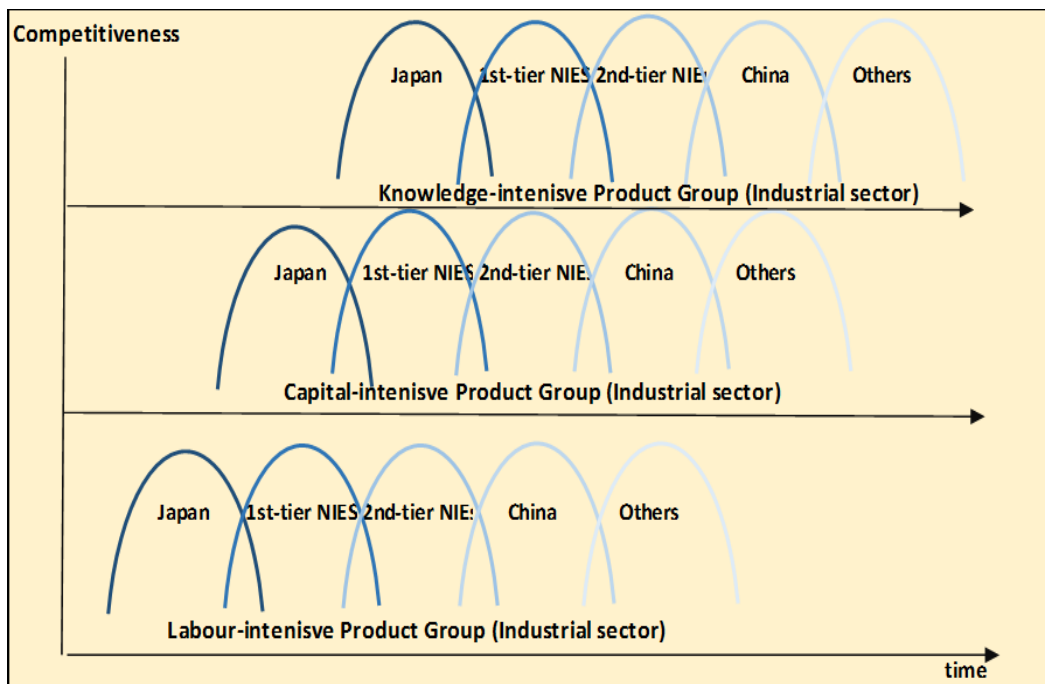
⁵⁸ While it is not directly related to the discussion above, it may be worthwhile to point out that one major merit of the use of revealed comparative advantage (RCA) as a proxy index of competitiveness is that researchers do not have to address many of the cost calculation discussed above. However, it also invites a new set of conceptual problems. For instance, a country’s trade performance, depending on sectors, may be distorted by protectionist measure importing countries.

Thus, according to Kojima (2000) and Ozawa (2009), inevitable changes in factor endowments – for example, the increasing scarcity of cheap labour as implied by the rising wages – will induce sectoral changes in comparative advantage. Consequently, all economies in the industrialization drive are obliged to upgrade their manufacturing activities, searching for better-fit manufacturing activities by shifting from low value-added to higher value-added ones. This is the typical argument for industrial upgrading simultaneously taking place at the national and regional levels. Some production processes, such as in the textile industry, could become capital-intensive with robots replacing scarce labour. This modern version of factor intensity reversal can severely change the implications of mainstream trade theory.

3.3.2 Synthetic Multi-Country-Multi-Product Model

If we cluster products (or different manufacturing sectors) into a high level of aggregation, such as labour-intensive, capital-intensive and knowledge-intensive categories, then we show that for each of the categories (or manufacturing sub-sectors), the production shifts from the regional leader, Japan to immediate followers, i.e. the 1st-tier NIEs, then to others, i.e., the 2nd-tier NIEs and others (see Figure 3.5). In this framework, regional diffusion/relocation of industrial activities is understood as a collective process where followers maintain the “orderly” catch-up process.

Figure 3.5
Modern Catching-up Product Cycle Paradigm



Source: Author's reproduction with some modifications of Yun (2005: 30, Figure 1-8)

In Figure 3.5, the ranking among national economies as well as that among product groups (or manufacturing sectors)⁵⁹ remains unchanged over time. This means no dropping-out, no falling-behind, and no leapfrogging among sectors, to disturb the existing order among national economies. Similarly, product/sectoral order based on “sophistication” enhanced by industrial development remains unchanged. As shall be discussed in later chapters, some observers, even including those who advocate the modern FG paradigm, point out the difficulty of maintaining the ranking over time, especially across different product groups (Ozawa 2008). While a critique of the FG paradigm is provided later, it suffices to note here that Figure 3.5 contains the same problems pointed out earlier when dealing with other Figures.

The FG paradigm may be tested by showing how well a group of competitiveness indices for different product groups/sectors in each national economy in different periods can be drawn neatly as shown in Figure 3.5. Here one major problem is a product/sector grouping. In this regard, empirically oriented researchers have benefited greatly from Lall’s categories (Lall 2000) of manufactured products differentiated by technology intensity. Lall (2000) provides a great service of identifying the specific products that belong to each category in the Standard International Trade Classification (SITC) at the 3-digit level. The classification, in ascending order of technology intensity, consists of the following seven product groups:

- i) Labour-intensive and resource-intensive manufactures (low-tech I);
- ii) Low-skill and technology-intensive manufactures (low-tech II);
- iii) Automobile (mid-tech, I);
- iv) Chemical and basic metal industrial products (mid-tech II);
- v) Engineering products (mid-tech iii);

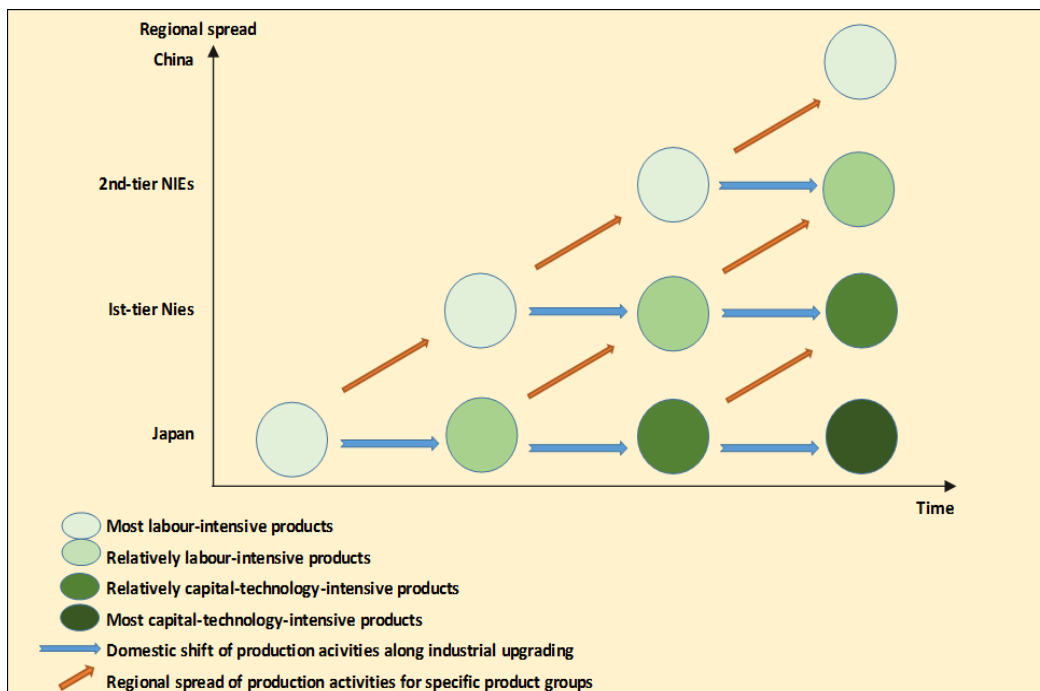
⁵⁹ This three-category presentation is just an example. Ozawa (2008, 2009), with a more analytically detailed industry classification, explains that there are five distinctive stages in the inter-industry sequence, as a “flight map” for follower geese to be guided in their drive to catch up on growth. Stage 1 is the endowments-driven (resource-intensive or labour-intensive light industries) stage, such as textiles, raw industrial materials and agricultural products. Stage 2 is the physical scale-driven (capital-intensive, natural resource processing) stage, with mostly non-differentiated products, such as steel and basic chemicals. Stage 3 is the consumer-oriented stage, such as clothing and higher-level manufacturing, such as automobiles. Stage 4 deals with R&D-based sectors, such as microchips and computers. Stage 5 is internet-based, such as information services. Under this framework, the most developed stage is currently information technology. Each of these stages goes through the M-P-X sequence, although the mechanism of transition from one stage to the next presents considerable challenges. Ozawa also names these five stages after corresponding economists and entrepreneurs: Stage 1 with Heckscher-Ohlin, Stage 2 with Adam Smith, Stage 3 with Henry Ford, Stage 4 with Joseph Schumpeter, and Stage 5 with Marshall McLuhan (Ozawa 2008, 2009).

- vi) Electronics and electrical products (high-tech, I);
- vii) Other high products (high-tech, II).

At this point the technical issue of aggregation among product groupings (or specific manufacturing sub-sectors) should not deter us further. (For further discussion with the compiled empirical tests see Chapter 11.)

Some advocates of the modern FG paradigm have presented a multiple-country-multiple-product framework in a single plan for East Asia (see Figure 3.6). The trickle-down of manufacturing activities occurs from low-end to high-end products among the region's economies, typically from Japan to the 1st-tier NIEs, then to the 2nd-tier NIEs, and China and others. As a result, the gradual shift of production, in an orderly fashion, from more labour-intensive to more capital/technology-intensive production advances in each of these economies, again first in Japan, then in the 1st-tier NIEs, the 2nd-tier NIEs, and China and others. Over time, the regional division of labour tends to grow in size by adding new participants at the bottom of the industrial hierarchy. Meanwhile, the hierarchical order among, or the relative positions of, the countries that have already joined the regional division of labour are shown to be relatively fixed. At least Figure 3.6 does not show a case of reshuffling of the hierarchical order.

Figure 3.6
Modern Catching-up Product Cycle Model:
Multiple-Country-Multiple-Product Framework



Source: Author's reproduction with modifications of Suehiro (2008: Figure 2-4B).

Thus, there are two contrasting arguments regarding how late industrializers typically begin product-specific import substituting production. Vernon's PC theory postulates that it is attributed mostly to technical changes in the manufacturing process (standardization) of the product in question, with factor endowments (capital and labour) in each national economy involved remaining unchanged. Alternatively, the FG paradigm stresses that production can be activated by changes in the factor endowments in late industrializers (including availability of investment capital, knowledge, technology, and market access) with the manufacturing process of the product remaining largely unchanged. We argue that the reality is the mixture of both, because neither the production process nor the factor endowments can be thought to be strictly fixed or rigid (Kasahara 2004).

3.4 Integration/Snowballing Paradigm

By the 1970s, Japan had become a pioneering facilitator for East Asia development by offering some demonstration effects with its own experience. Japanese firms also began to transplant their “disfavoured” activities abroad. Especially pertinent to the discussion is the growth of offshore production of labour-intensive manufacturing sectors in the 1980s, after the 1985 Plaza Accord. A few years later, the 1st-tier NIEs also began to respond to their currency realignment (in 1987) relocating labour-intensive production activities abroad via subcontracting (UNCTAD 1996: 94). By then, modern FG paradigm advocates had clearly situated national industrial upgrading in the context of regional integration, by highlighting the overseas activities of major firms that were “efficiency-seeking” (i.e., attempting to reduce costs of production with, most of all, cheap-labour and other inputs). Let us recall that Dunning's OLI eclectic theory shows that efficiency-seeking is just one of many factors that motivate firms to undertake foreign ventures. Kojima (1978) argues that outward FDI from Japan sent various “productive assets” to the follower economies as a package, promote the benefits of inter-economy linkage. Such a package, which began to grow in the 1970s and accelerated dramatically after the mid-1980s, has facilitated Japan's industrial restructuring, scaling down those specific sectors losing competitiveness.

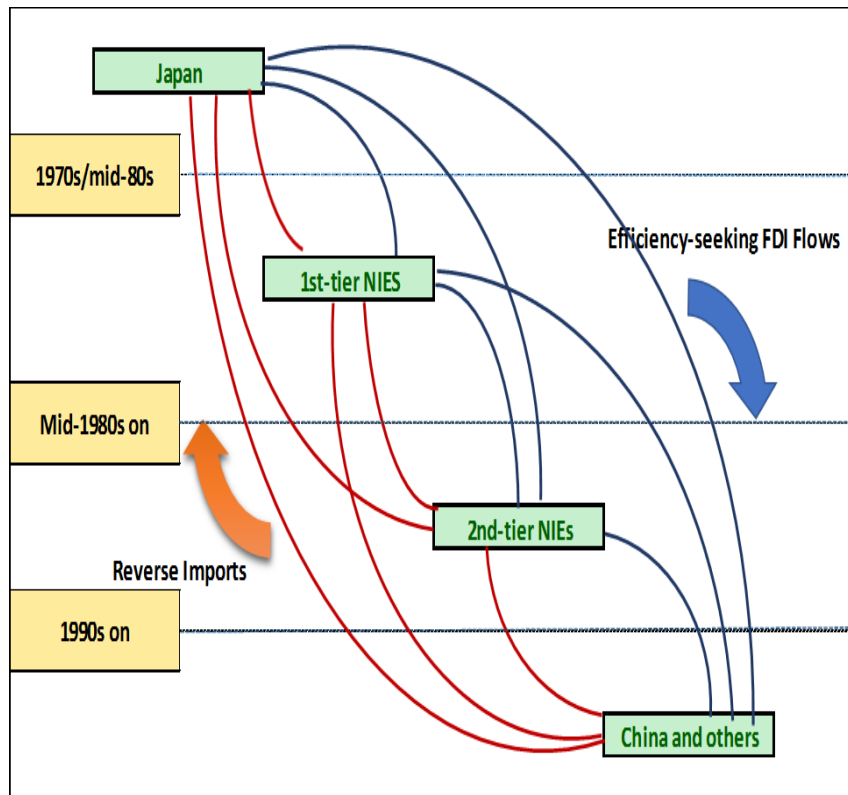
3.4.1 Snowballing Integration in East Asia

The Integration/Snowballing model (Figure 3.7) is a dynamic model. It synthesizes a series of snapshots of “transitory” interactions via efficiency-seeking FDI (downward flows in blue) and trade between national economies, including reverse imports (upward flows in red). The model depicts the interacting national economies and their specific manufacturing as fluid entities and activities, respectively. The term integration is a “de facto” notion⁶⁰ rather than “de jure” notion in East Asia

⁶⁰ Researchers often distinguish between “de facto” integration and “de jure” integration, where the former refers to the increasing linkages among national economies based on commercial interests (trade, investment,

where closer developmental collaboration as reflected in efficiency-seeking FDI flows and reverse imports, are based on rational acts rather than legal agreements. Participating economies are all raising the circle of interactions and upgrading their manufacturing activities in an “orderly” fashion. Significantly, efficiency-seeking FDI has been accompanied by various financial flows, such as official and commercial financial flows.

Figure 3.7
The Integration/Snowballing Model:
The East Asian Flows of Efficiency-seeking FDI



Source: Author's construction.

Figure 3.7 shows that in the 1970s Japan was actively making foreign ventures, often joint ventures in FDI projects in the 1st-tier NIEs. In the mid-1980s, Japan's efficiency-seeking FDI went up, involving the 2nd-tier NIEs. Kojima (2000) believes that such FDI is accompanied by the rise of export of capital products (productive machines, as well as intermediate products such as parts and components for local assembling). In any case, during the mid-1980s, more countries in the region have been expanding/relocating their manufacturing activities abroad. Such FDI enables late industrializers to

loans, etc.), whereas the latter refers to the integration based on the governments' formal actions of treaty negotiations.

attract advanced industrial activities at an increasing pace. This is the phenomenon that may be referred to as “compressed industrialization”.

Over time, intra-regional FDI flows have shown the snowballing trend of integrating growing numbers of national economies as origins and destinations of intra-regional FDI. These phenomena are experienced increasingly by other economies that have followed Japan’s development path. Thus, the recipients (host countries) of intra-regional FDI should not be seen permanently as passive receptacles. On the contrary, the contemporary situation is that East Asian economies are offering preferential arrangements (with “special economic zones”, “export processing zones”, and the like) to entice new inward FDI for their more advanced sectors, and becoming new home countries of outward FDI.⁶¹ Arrighi (1996) calls the emergence of an integrated East Asian economic space “Asianization of the Asian economies”, instead of Hatch and Yamamura’s (1996) “Japanization of the Asian economies”. (For an intriguing discussion on contending psychological frameworks of the Japanese towards Asia, see Avenell 2014.)

Vernon (1966) notes that the phenomenon of reverse import is seen to be *associated* with foreign ventures – whether with or without efficiency-seeking FDI – promoting the relocation of industrial activities. As noted, such relocation would be from early industrializers at higher positions in the regional hierarchy to late industrializers at lower positions. The causal relations between FDI and reverse import, however, could not be clearly established. They differ considerably depending on each specific case. In some cases, the likelihood and/or the reality of reverse import (as a result of overseas import-substituting production) may prompt FDI as a preventive and/or reactive measure.⁶² In other cases, FDI may take the form of partial offshore production of intermediate products to be assembled into final products in the original advanced countries (or elsewhere).⁶³

3.4.2 FDI as a Key Channel of Regional Integration

Modern FG protagonists take efficiency-seeking intra-regional FDI as a crucial factor for the “concatenated” catching-up process in East Asia (Ozawa 2003; 2009; 2016). As mentioned earlier, the

⁶¹ For instance, Japanese automakers, as “geese”, flew to the 2nd-tier NIEs in response to the local protectionist drive to promote import substitution. For an illustrating case, see Chapter 10, the appendix to this chapter, which presents a brief review of the Thai automotive industry.

⁶² The output of such production (whether by foreign firms or local firms) is targeted first at the local market, and later at the original exporter country (i.e., the case of reverse import). In East Asia, the export destinations of local production (of intermediate and final products) also include third-party markets within the region or beyond.

⁶³ One important effect of efficiency-seeking FDI is to raise the density and spread of overseas assembly/production and export platforms. See Section 3.7 for further discussion on the production network model as the latest model of the FG paradigm.

integration/snowballing paradigm can be regarded as a model of “Japanized” or “Asianized” East Asian development. In any case, many observers in the region believe that Japanese manufacturing firms can fulfill the development-facilitating task for East Asia, with their FDI transforming the structure of comparative advantage of different national economies. As noted earlier, the graphic presentation by the FG paradigm of cost comparison of production among different national economies exhibits the comparison of “absolute advantage”, certainly very different from the conventional notion of comparative advantage in the 2-2-2 trade model (consisting of two countries, two products, and two factors of production).

The “downward” movement of FDI flows in the regional hierarchy – in a consistent fashion with the trickle-down effect – does not coincide with the reality, where much of FDI flows are now multi-directional. For instance, the recent surge of China’s outward FDI, especially since the beginning of the new millennium, shows a gradual diversion from the resource-seeking purpose to other purposes.⁶⁴ But research on China’s outward FDI has not advanced much due to data problems. A large portion of the country’s FDI has been recorded to flow to a few tax havens, without revealing its final destinations from there. (For further discussion on China, see Chapter 6.)

The integrative/snowballing model sees that the regional ranking order of industrial development, which determines intra-regional FDI flows, can be maintained.⁶⁵ It is viewed that Japanese manufacturing firms, for example, are likely to invest in relatively higher-income economies earlier and lower-income later. How is this model different from other versions of the modern FG paradigm? First of all, this model emphasizes more than others efficiency-seeking FDI for foreign ventures as well as regional linkages, although the literature points out a host of other motives.⁶⁶ Second, the model highlights reverse import in intra-regional trade, giving the impression that the region is a more or less self-contained (or exclusive) region, even though – as shall be discussed in the US-centric FG

⁶⁴ In manufacturing sectors, China has been actively outsourcing some labour-intensive activities to its neighbouring countries (such as Cambodia, Laos, Vietnam and more recently Myanmar). China has also begun to invest in developed countries (such as the United States) with the goal of upgrading the manufacturing activities through mergers and acquisitions (M&As) of some well-established major firms, seeking “strategic assets”, such as recognized brands, large markets, production technology and managerial skills. Furthermore, macroeconomic pressure of its currency (i.e., foreign exchange appreciation) has also been strengthening the imperative (and capacity) of expanding the sphere of its outward FDI. For a good empirical discussion on China’s outward FDI, see Lu et al. (2011).

⁶⁵ Regional hierarchy, even based on income levels, is a problematic concept, as the income can be raised without much regard to manufacturing activities.

⁶⁶ Firms may wish to ensure the availability of essential raw materials and components when they are hard to obtain domestically. Firms may also be interested in offshore production with the intention of capturing the markets of the host countries and/or those of their neighbours.

paradigm (see below) – it still depends heavily on extra-regional markets (the US and European markets) which provide major outlets for its manufactured products

3.4.3 Characteristic Element of “Openness”

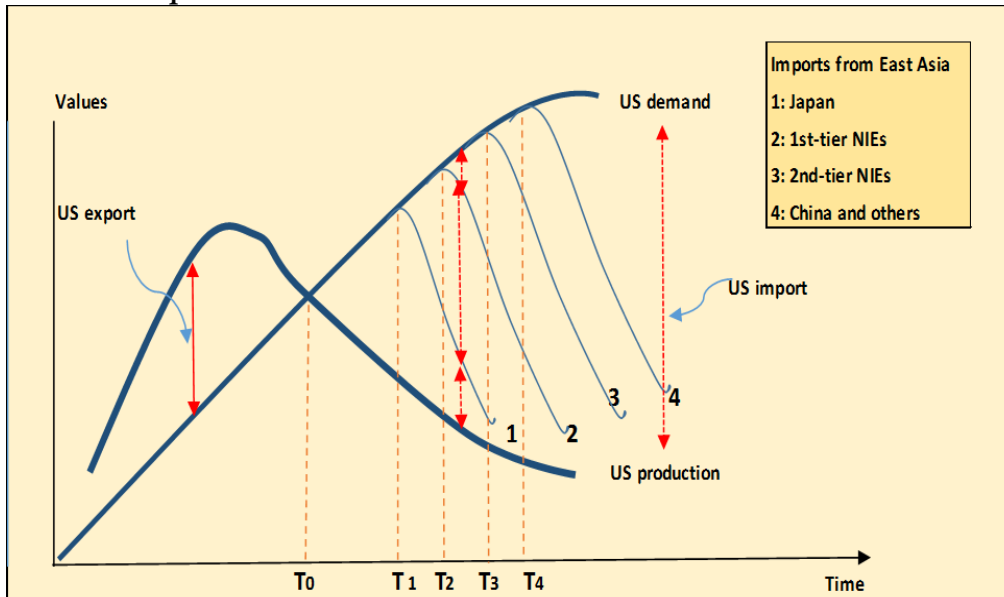
The model under discussion is consistent with the concept of “open regionalism”, for various reasons. First of all, regional “membership” is not rigidly or exclusively fixed; as has been shown, not all East Asian economies are part of integrative development at each moment of time. East Asian development could be seen as an open region in the sense that its market has historically been open to FDI in manufacturing activities from the extra-regional countries, such as the US and Western Europe. The quasi-colonial legacy in some parts of East Asia with extra-regional powers – for instance, Hong Kong – also makes the region’s demarcation very precarious. Furthermore, the region’s manufactured exports have been marketed extensively in the US and Western Europe. As will be touched upon later, in the 1980s and 1990s, several East Asian economies began to develop their labour-intensive products under the sub-contracting arrangement of well-established US firms, as seen in sportswear and athletic shoes.

3.5 United States-Centric Flying Geese Paradigm

East Asia has become increasingly integrated. Much of the postwar experience highlights that the support of US foreign policy (with its military aid and relatively liberal trade policy) towards its Cold War allies in the region was indispensable for regional growth (Cumings 1984). In this regard, therefore, one quick fix to the Integration/Snowballing model would be to add the US, at the very top layer, above Japan, as the primary source of Cold-War related foreign aid and efficiency-seeking FDI, and perhaps more importantly as a major extra-regional market for labour-intensive products from the region (see Bernard & Ravenhill 1995; Barri & Ozawa 1977; Cutler et al. 2003; Numazaki 1998; Ozawa 1997, 2009).

The modern FG paradigm can therefore be perceived as a US-centric model (with the “product cycle” influence) rather than a Japan-centric one. As discussed earlier, a typical consumer product is born and nurtured in, and eventually exported from, high-wage innovating countries, most importantly the US. And as the product (with its production process) matures and becomes standardized, its production site shifts, say to a lead emulator (Japan in the case of East Asia), and consequently the US begins to import the product from Japan. However, as the lead emulator’s production costs rise, other emulators by turn begin to produce and export to the US (see Figure 3.8). This framework provides a telling story of East Asian dynamics by incorporating global geo-political and geo-economic factors of postwar global relations in the explanation (Arrighi 1996; Beeson 2009; Ozawa 2009).

Figure 3.8
US-Centric FG Paradigm
Shifts of Exports from East Asian Economies to meet US Excess Demand



Source: Author's reproduction, with modification, of Ozawa (2009: 90, Figure A.1)

Figure 3.8 shows that when the US faces the “net” import phase for a particular consumer product (or a product group) (after T_0), the gap is filled exclusively by imports from Japan, the first catch-up country in East Asia (until T_1). Before long, however, Japan’s share begins to decline, as the 1st-tier NIEs start to take over the share (after T_1). Over time, the repeated, similar occurrences in share replacement take place due to the rise of imports from the 2nd-tier NIEs (after T_3) and later from China and others (after T_4). Thus, US trade deficits for a particular product are being passed from one East Asian exporter to another. The US initially runs a product-specific trade deficit with Japan but the deficit declines later as the 1st-tier NIEs overtake Japan as major exporters of a particular product. Similar replacements are envisaged to occur sequentially with the 2nd-tier NIEs taking over 1st-tier NIEs, and later China and others taking over the 2nd tier NIEs. The changing origin of the US imports for specific products does not necessarily mean, however, that the absolute amounts of imports from Japan tend to decline sizably. This is because, according to the FG paradigm, the reduction of imports of one product group from Japan may be compensated by the rise of imports of another (more advanced) product group from the country. Furthermore, Japan may provide important intermediate goods to those follower economies that take over US markets.

Indeed, this model makes relevant empirical research somewhat simpler, as the FG paradigm could be tested by observing East Asian economies’ shares in the US market. The research could focus on the question as to whether the US market shares by these economies for each of the products (or the product groups) under study have shifted sequentially in accordance with the ranking of industrial development in the region. For instance, Ozawa presents a test result for SITC number 76, all TV

sets, imported by the US over the 1961-2002 period, and shows that this product group (as well as various other products) depicted shifts of market shares among Asian economies (see Ozawa 2009: 92, Figure A.2).

We must point out many caveats (or qualifications and assumptions) regarding its overall validity of the US-centric model. First, it is assumed that US demand for the products in question is steadily growing, even though this may not necessarily be consistent with the product life cycle. Clearly, the US-centric model tends to underline the demand-side consideration, i.e., the US market, as the central element, whereas the Japan-centric model seems to stress the supply-side consideration, i.e., cost consideration in production and export as the central element. Second, US demand for some consumer products has been met partly by subsidiaries of foreign firms operating within the country.⁶⁷ Third, similarly, the establishment of the North America Free Trade Agreement (NAFTA) in 1994 has attracted much FDI from East Asia to Mexico and Canada, which tended to increase the market shares of the latter two in the US markets. Fourth, the relocation of some specific manufacturing sectors within East Asia has a lot to do with various protectionist measures⁶⁸ of major extra-regional markets (particularly the US). Fifth, the value of manufactured exports may greatly differ from their domestic value-added within the exporters, depending on the size of imported contents in them.⁶⁹

3.6 Regional Production Network Model

Most of the FG paradigm models associate the revolving production and trade patterns with the implicit assumption that each traded product is manufactured, more or less, from start to end in just

⁶⁷ Bilateral disputes of automobile trade between the United States on the one hand and Japan and South Korea on the other in the 1980s and 1990s induced the establishment of large assembling facilities of Japanese and South Korean automakers in North America.

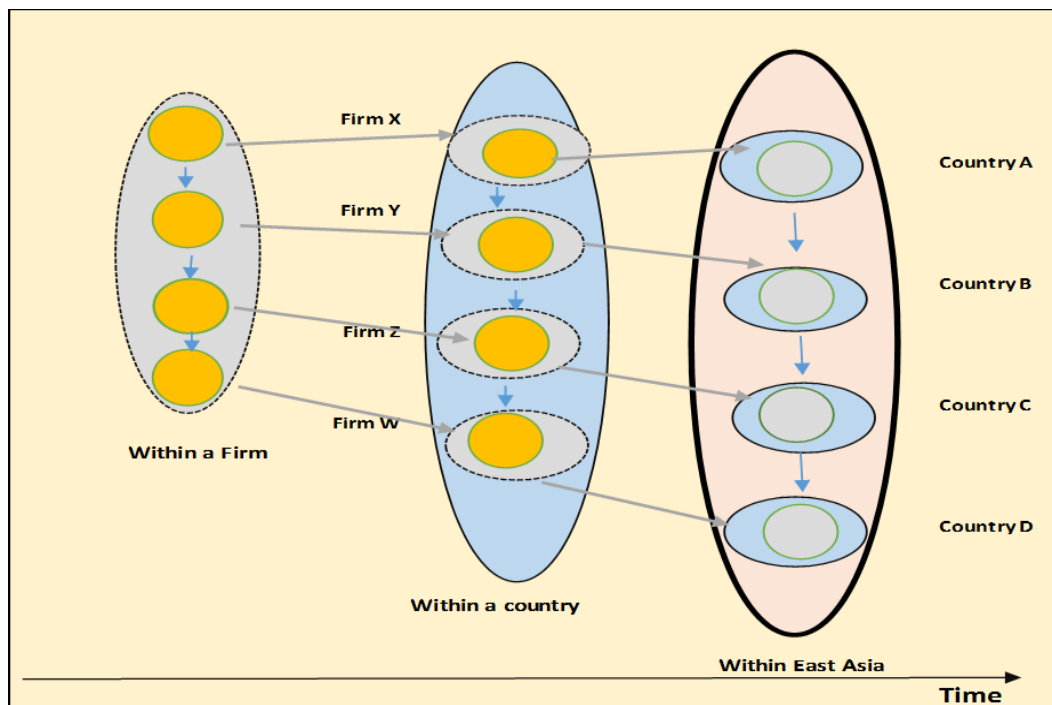
⁶⁸ In the past, some protectionist measures, such as these for the textile and garment trade – including the Voluntary Export Restraints (1955), the Short-Term Arrangement (1961), the Long-Term Arrangement (1962), and the Multi-Fibre Arrangement (MFA) (1974) – also contained preferential policy elements of allocating quantitative ceilings to late industrializers' textile products exported to the US. They contributed to the accelerated relocation of labour-intensive apparel production from Japan to the 1st-tier NIEs in the 1960s and 1970s, and later beyond (Haque & Thaku 2015).

⁶⁹ It could be inaccurate (if not faulty) to equate the product composition of a country's exports with the level of its industrialization. The large value of China's exports to the US – which may be called “processing exports” (UNCTAD 2015a: 33) – reflects the value of intermediate products created by non-Chinese firms abroad or by their affiliates operating within China (Fan et al. 2014: 17; see also Banga 2013). As a matter of fact, China has run trade deficits with East Asian trade partners for intermediate products (parts and components) (UNCTAD 2015a: 34).

one country and exported.⁷⁰ Technological innovations, however, make it possible for modern firms to divide their production process into numerous value-added activities, and help them relocate some of these activities beyond national borders. Thus, the regional production network model highlights the institutional and operational aspects of regionalized production that are facilitated by the intra-regional trade of intermediate products. Consequently, we have witnessed the emergence of numerous production networks of various kinds. Clearly, the development of modern transport has facilitated the geographical expansion of production networks.

Value chains have spread their spatial domain from “within a firm” to “within a national economy” and furthermore to “within a region or global sphere” (see Figure 3.9). Domestic outsourcing in manufacturing for labour-intensive activities has a fairly long history in some parts of East Asia, but cross-border outsourcing for such activities in the region is of more recent origin, slowly emerging from the late 1960s and becoming prominent in the 1980s. In Japan, independent subcontractors used to be engaged in sewing garments or fashion accessories (Ravenhill 2014: 350).

Figure 3.9
Evolution of Production Structures
with expanding institutional networks



Source: Authors’ reproduction with some modifications by Yan (2005: 25, Figure 2-1)

⁷⁰ We should not push this argument very far, because advanced industrialized countries – most notably Japan – have always imported large quantities of basic raw materials for virtually all of their manufacturing sectors.

Production networks can take a variety of operational configurations, and spread their spatial domain from a firm to a national economy and farther to a regional sphere consisting of national economies. Production networks may operate along the traditional combination of the offshore production of labour/resource-intensive intermediate products (parts and components) on the one hand, and the domestic operation of capital/technology-intensive final assembly on the other. They may mean the shift of the labour-intensive final assembling from “domestic outsourcing” (typically through subcontracting) to “overseas outsourcing” while retaining the production of capital/technology-intensive parts and components at home.⁷¹

While this dissertation refrains from elaborating on the evolution of operational configurations, it is worthwhile to point out one interesting aspect of the production network model which attracts researchers’ attention, i.e., the compression of time required in the late industrializers’ catch-up process. The model depicts that the innovating firms are more readily engaged in foreign ventures, i.e., outsourcing parts of the production/assembling process of their products than those in the traditional product cycle framework. At the extreme, major firms outsource all of their manufacturing – rather than some limited segments of it – to subcontractors with which they had only inter-firm/arm’s-length relations.⁷² The firms participating in such networks promote their process specialization, thereby assuming economies of scale in a specific task.

3.6.1 Emergence of Regional Production Networks from the Mid-1980s

In the second half of the 1980s, i.e., after the Plaza Accord with Japan’s currency appreciating rapidly, its firms began to form regional production networks in the machinery sector, in addition to other traditional sectors, such as textiles and garment.⁷³ In the process of participating in regional production networks, East Asian economies, especially the 2nd-tier NIEs and China, were ready to utilize cross-

⁷¹ Japanese firms used to invest abroad for the production of intermediate products that would be shipped back to Japan for final assembly. After the 1985 Plaza Accord, the manufacture of final production also started to be relocated (Minambres Garcia 2016: 119).

⁷² Earliest pioneers were US sport equipment firms that subcontracted small Asian firms to manufacture their brand products. This type of practice soon appeared in many electric/electronics sectors where major Western firms, responsible for the design and manufacturing of components for various home appliances such as personal computers and mobile telephones, began to shed most of their production facilities, thereby specializing themselves more in research and development, together with control of their brand names, core proprietary technologies, and marketing/distribution networks (Ravenhill 2014: 350).

⁷³ Apart from shifting production activities to low-cost locations in East Asia, Japanese firms also responded in two other ways. As discussed earlier, one was the shift of production activities to the US and, to a lesser extent, Europe, in order to cope with protectionist measures on imports from Asia; and the other was the additional investment at home to upgrade productivity and expand the areas to improve competitiveness (UNCTAD 1996: 92-93). Incidentally, this trend contradicts Kojima’s pro-trade thesis of Japanese outward FDI.

country differences in income levels, factor prices and other locational advantages. Many firms in East Asia regionalized their procurement strategies as it became cheaper to import intermediate products and raw materials because of the stronger value of the currencies (Dent 2008: 48).

The Japanese government provided support, most clearly toward small- and medium-sized enterprises (SMEs) that are suppliers of auxiliary items such as parts and components to major firms, by formulating plans for promoting regional integration, primarily as a vehicle for domestic industrial restructuring (Machado 1995: 61). In East Asia, intra-regional trade (both exports and imports) of machinery and intermediate products increased explosively, and transformed corporate activities have considerably affected industrial structures of regional economies. Initially, Japan provided machinery and equipment, often together with advanced intermediate goods for multi-component products, to its neighboring countries, where more labour-intensive, sub-assembly production operations are conducted. Meanwhile, Japanese FDI came to bundle together geographically, thereby forming production clusters in host countries. Since the 1980s the 1st-tier NIEs (and the 2nd-tier NIEs to a lesser extent) have also followed a similar pattern of foreign ventures.⁷⁴ The regional spread of “export-oriented” development in East Asia can be seen as the manifestation of a process through which regional economies are sequentially incorporated into production networks.

As noted earlier, the advocates of the Japan-centric model regard the closer linkages among East Asian economies as “regionalization” of Japan’s domestic production networks (Hutch & Yamamura, 1996). Indeed, East Asian economies once became highly dependent on Japan via, among others, the country’s supplier-firms clustered around main assembly operations in specific locations in East Asia.⁷⁵ Yet, the early firms that contributed to the formation of the production network models included many large firms originating outside the region, most importantly in the US but also in Europe, that have also organized production networks in the region that are linked to their globalized operations (Dent 2008: 52). We therefore cannot overstate the Japanization theme. In any case, it is probably safe to consider the linkages in East Asia as less and less relations among “autonomous” national economies. In some sectors, manufacturing activities are now increasingly operating as if they were taking place within a single production unit with its sub-units (national economies and firms) being connected to one another via intra-regional trade and FDI.

⁷⁴ As a result, China has developed its export; the country’s final (assembled) products as a share of its total exports have grown to be higher in comparison with others in the region (Dent 2008: 45).

⁷⁵ The nature of dependence among East Asian economies on Japan has varied over time. As discussed earlier, ethnic Chinese networks across the region have also been an active element for China’s recent development. Since the early 21st century, South Korea, which has not benefit from the ethnic networks, has become a major source of FDI for China.

3.6.2 Microeconomic Concepts: Fragmentation, Agglomeration

East Asian economies are experiencing the expansion and deepening of inter-related activities of production and distribution (trade and marketing). In this respect, modern versions of the FG paradigm, including the production network model, are ready to explore a micro-economic perspective in the late industrialization process. Here, one important intellectual “contribution” of modern versions – which follows Vernon’s product cycle framework – is the detailed elaboration of behavior, particularly the decisions on diffusion/relocation of major manufacturing firms’ productive activities, which was missing in Akamatsu’s original model. Thus, the search for a fuller understanding of the effects of East Asian production networks on regional trade as well as industrial clustering has stimulated the development of new conceptual elements which constitute the overall logic to explain the trends of regional production networks. Here the thesis discusses two important conceptual elements – fragmentation and agglomeration – which are relevant to a discussion on corporate behaviour.

Fragmentation: Major manufacturing firms split their production process into various segments that can be undertaken in different locations domestically or internationally. They are now more willing to offshore some of these segments incrementally at the earlier stages of the product life cycle. Late industrializers may now find it easier and more beneficial to be engaged in “intra-product” specialization, for example, by inviting the low-skill, labour-intensive segments of assembling and finishing operations in well-established modern supply networks for those products that are generally considered to be technology- and capital-intensive (UNCTAD 1996: 112-123). Such specialization may enable each of these economies involved to focus on a narrow range of activities, thereby raising the possibility of activity-level economies of scale.

We may call this fragmentation (the base of production networks) as the institutional factor creating “the FG paradigm in a hurry”. Whereas traditional international trade theory explains industry-wide location patterns, the fragmentation theory sheds light on vertical, cross-border production networks.

⁷⁶ Regional production networks are often embodied within larger global production networks, which means that regionalization and globalization increasingly interact with each other. Ando & Kimura (2005: 181) explain that fragmentation becomes economical when the cost of “service links” to connect fragmented blocs is sufficiently low, and that while globalization has reduced the cost of service links in general, it depends heavily on the nature of technology in each sector.

⁷⁶ The networks include both intra-firm and inter-firm/arms-length relationships. As far as the typical Japanese firms are concerned, their long-distance, trans-border transactions – such as those between Japan and the 2nd-tier NIEs – typically take the form of intra-firm trade, whereas transactions within host economies are mainly at inter-firm/arm’s length. And Japanese firms’ transactions that cross national borders within the 2nd-tier NIEs are typically a combination of intra-firm and inter-firm/arm’s length (Ravenhill 2014: 351-352).

Agglomeration: Typically associated with production networks is the phenomenon of industrial agglomeration or clustering of manufacturing activities (together with extensive linkages) at specific locations to take advantage of the resulting economies of scale (Arndt 2009). Even as competing firms cluster, they may benefit from attracting more suppliers and customers. The traditional FG paradigm cannot explain the geographical concentration of production activities, as it does not effectively address the economies-of-scale, externalities issues. However, the consideration of the modern trend of industrial agglomeration does not invalidate altogether the FG paradigm. Yet, it highlights the risk of the FG paradigm in assuming “methodological nationalism”, the idea that the complete production process of each manufactured product takes place more or less within a national economy. This is simply because many cases of industrial agglomeration in East Asia have taken place across national borders. Ando & Kimura (2005: 182) point out that agglomeration may have much to do with the role of the state, just as many states have attempted at various agglomeration-oriented policies – for instance, the establishment of special economic zones (SEZs) together with various preferential schemes – which generate locational advantages for FDI.

3.6.3 Implications of Regional Production Networks on the FG Paradigm

Production networks may be seen as the end result of the initiatives of manufacturing firms in dealing with their declining corporate profits due to the rapid advancement of the life cycle of products. As noted above, the difference between the production-network paradigm and the product cycle theory is that the former highlights “partial” discontinuation (thus “fragmented” relocation) of the production process. The regional linkages cannot be seen any longer as relations among independent national economies autonomously engaged in production of complete products. It could be argued therefore that the national economies, or more accurately their firms, participating in production networks are engaged more in intra-industry (rather than inter-industry) and more in intra-firm (rather than inter-firm) trade (Gill et al. 2007: 16).

Nevertheless, the distinction between “intra-sector” and “inter-sector” trade as well as between “intra-industry” and “inter-industry” trade is arbitrary, as it is affected by the level of detail used to specify the product classification. At a highly disaggregated level, intermediate products (parts and components) and their relevant finished products tend to be classified in different product categories, constituting inter-sector, or inter-industry trade. At a more aggregated level, however, these products may be classified in the same category, constituting vertical intra-industry trade. On the other hand, the distinction of “intra-firm” and “inter-firm” trade is clear, but it may not be consequential in our discussion. This is because the regional assembly operation could be organized by either internalized operation through FDI (intra-firm trade) or through traditional inter-firm trade.

Let us look into the long-term M-P-X-M’ sequence in the case of fragmented production. The implication of “intra-industry trade” is that with highly aggregated data the import curves of

intermediate products (parts and components) are entirely located below, rather than crossing, the production curve of the final products that belong to the same product group. The relative position between the import and production curves depends on the amount of local value added as well as the use of local intermediate products. Similarly, the relative position of the export curve depends on, among others, how much the country is involved in the production fragmentation with neighbouring economies. Many large firms link different locations through intra-firm trade in East Asia where intermediate products are produced at one location, and shipped to other locations where further value is added, and eventually assembled into final products.⁷⁷

When large manufacturing firms face the possibility of production fragmentation, they may organize, via FDI and other means, their production process beyond the national border. In the early stages of foreign ventures, these firms' overseas subsidiaries or affiliates tend to rely heavily on intra-firm trade for intermediate products from the firms' home country (in some cases, however, local firms may establish contractual relations with these firms, thereby carrying out inter-firm or arm's-length trade relations). This is particularly notable when parts and components require "specialized" production techniques that are not yet available in the host countries. Similarly, capital goods (machinery) required for assembling the imported intermediate products are also imported. As is postulated by the standard FG paradigm, however, in due course these intermediate products will gradually be replaced by locally produced substitutes. Again similarly, these capital goods will be made available locally, although the import substituting production of capital goods is likely to take a longer period than that of intermediate products.

The proposition above shows that over time, import substituting production in late-industrializing economies is likely to start with the assembly operation of imported intermediate goods (parts and components) for final consumer goods, and this local process gradually expands, and eventually grows beyond the pure assembling segments. Import substituting production tends to expand from intermediate goods (for producing consumer goods) to capital goods. Meanwhile, the original exporting country (an early industrializer) may begin to import some of the consumer products (assembled or produced abroad), which is consistent with the reverse import argument of the modern FG paradigm. In a way, the existence of the reverse import of the early industrializer signifies its long-

⁷⁷ Ando & Kimura (2009) present evidence from transactions of Japanese firms that long-distance transactions, such as those between Japan and ASEAN countries, are predominantly intra-firm in nature. But those within host countries by Japanese subsidiaries in developing East Asia are mostly arm's-length transactions. Middle-distance transactions, such as those among ASEAN countries, are hybrid, a mixture of intra-firm and arm's length. Furthermore, in some specific locations, industrial agglomerations (consisting of foreign and domestic firms) may have begun to operate simultaneously.

lasting relations with late industrializers, i.e., the presence of regionalized linkages among economies at different stages of development.

Participation in production networks affects the development of local economies. The local spillovers from participating in production networks can be limited, if the package of technology and skills required at any particular site is narrow, and if cross-border linkages are strengthened at the cost of domestic ones. Some pessimists argue that a wider choice of potential sites, large firms operating via extensive production networks may get their bargaining power strengthened vis-à-vis host countries (UNCTAD 1996: 114). If the economy remains weak in its capacity to absorb skills and technologies, its low wage strategies may make it difficult to move up into higher value-added activities.⁷⁸

Many researchers point out that the development of regional production networks have denied the validity of the FG paradigm (e.g. Bernard & Ravenhill 1995; Yun 2005). Yet, it must be pointed out that the rise of regional assembly operations has given an inaccurate impression of the real value-added activities of regional economies, most notably those economies located at a lower position in the regional development ladder. For instance, China is a major producer (exporter) of high-tech products, even though its activities are heavily concentrated in the labour-intensive assembly operation of the high-tech product. The modern FG paradigm underlines that East Asian diversity of industrial development – development asymmetry (Dent 2008: 52) – has broadened the scope of regional division of labour, and thus the overall catch-up process. Similarly, the regional production network model stresses the potential of broadening and deepening the division of labour in the region and beyond.

3.7 Chapter Summary

The modern FG paradigm is an eclectic model, consisting of four types of different wave-like graphic presentations. The product-specific primary sequence, the M-P-X-M' sequence, a modified version of Akamatsu's model, contain the M' (reverse import) phase at the end of the sequence. The second and third types are intra-industry and inter-industry sequences which indicate that cost competitiveness of production shifts first among products within an industry, and later between industries. The intra-industry sequence is typically the shift of production from “crude and simple goods” to “complex and refined” products both of which belong to the same product group or manufacturing sector. The

⁷⁸ As shall be discussed later, in the 2nd-tier NIEs and China, export-oriented manufacturing has been conducted overwhelmingly by subsidiaries of foreign firms. Some researchers nonetheless highlight that China is somewhat different from the 2nd-tier NIEs. Wong & Chan (2003) argue that having a huge integrated industrial base, China is more domestically capable of providing auxiliary items to export-oriented manufacturing; therefore, it has the potential to develop extensive production network within the country (Wong and Chan 2003: 510).

inter-industry sequence refers to the shift of competitiveness of production among products that belong to different categories (sectors), such as the category of consumer goods as opposed to that of capital goods. The international sequence shows the “trickle down” of manufacturing activities occurs from early industrializers to late industrializers so that they collectively constitute the region-wide development as seen in East Asia. The overwhelming emphasis on the last sequence, the international sequence, as a principal conceptual concern, is a major characteristic of the modern versions of the FG paradigm.

Akamatsu’s catch-up model has evolved into modern versions for a hierarchically structured group of national economies. Various concepts have contributed to this evolution, among which the most significant is Vernon’s idea of offshore production built on the notion of product life cycle. In the 1960s, many researchers, including Akamatsu and his students, came to accept the view that the modern FG paradigm could be seen as a model containing Vernon’s offshore production, but postulated from the viewpoint of host countries of such foreign ventures, thereby calling their own framework as a catching-up product cycle model (see Kojima 2000). Since then, many researchers, particularly non-Japanese, have considered the FG paradigm and the product cycle argument almost interchangeable (see Cumings 1984; Bernard & Ravenhill 1995).

All of the models of the FG paradigm propose that late industrialization is facilitated through inter-sectoral linkages in trade, such as the import of capital goods (industrial machines) to support the M-P-X sequence of consumer goods. Such import is often done in conjunction with the efficiency-seeking FDI of major firms from early industrializers. As noted above, modern versions of the FG paradigm have greatly elaborated the import substitution process, with the help of the concept of product life cycle. Modern versions emphasize the participation in production networks by accepting efficiency-seeking FDI (with built-in technology transfer arrangement) as part of the practical national strategy of development as opposed to the stand-alone import of technology. Nevertheless, the overall view of the modern FG paradigm is that regardless of domestic condition, such as land size, resource endowments, population size, etc., all national economies can go through a very similar import-substituting process for different product groups/sectors/industries along industrialization.⁷⁹

Modern versions differ from Akamatsu’s original model in one vital aspect. Reflecting the sentiment of Japan’s strong catch-up aspiration as a late industrializer, Akamatsu’s model accepts the possibility of late industrializers – perhaps with Japan in mind – to catch up, and thereby to challenge the

⁷⁹ However, there are many cases of transmuted M-P-X sequence due to truncated import substitution. Many internationally active firms – from within or outside the region – have taken advantage of the special preferential arrangements offered by local authorities for manufacturing activities (often labour-intensive segments of production) in specifically designated areas for purpose of export rather than local consumption.

hierarchical order of industrial development. On the other hand, the modern versions depict international diffusion/relocation of industrial activities tending to occur relatively smoothly as a top-down movement, i.e., from early industrializers (footloose foreign firms) to late industrializers (local subsidiaries and domestic firms). As interacting national economies collectively upgrade their economies, the interaction also expands the sphere of division of labour (snowball effect). But the paradigm cannot effectively explain the underlining factors for FDI flows among late industrializers or those from them to early industrializers.

While some temporary re-shuffling of ranking orders (countries and products) may occur, the FG paradigm generally perceives that such events are exceptions rather than the rule. Therefore, as pointed out above, the collective catch-up of late industrializers can take place in an orderly manner. Yet, the propagation of modern production networks with fragmented processes of production has also stimulated new discussions on the phenomena of clustering industrial activities not as strictly domestic but as regional matters.

Chapter 4

Critique of the Flying Geese Paradigm: Part I: Validity as a Generic Model of Late Industrialization

4.1 Introduction

Researchers have questioned the robustness of the FG paradigm, by pointing out its alleged shortcomings, contradictions and spuriousness.⁸⁰ These criticisms are diverse in intensity and contention. Indeed, the eclectic nature of the paradigm as it stands has invited equally (or more) eclectic, not necessarily coherent, criticisms from a broad range of perspectives. As a result, while containing some merits individually, these discordant critiques have made the FG paradigm appear even more chaotically eclectic. However, it may be argued that some of these critiques are not “fair”. To begin with, Akamatsu’s model was constructed by and large as a macroeconomic model, and many critiques and critics have censured it by complaining that it lacks microeconomic details. This may be equivalent to criticizing a family doctor (a generalist) for lacking detailed diagnostic knowledge on specific organs or their functioning. Another ontological question in analyzing the validity of the FG paradigm is how to deal with the historical context in which individual cases of industrialization have taken place.

Chapters 4 and 5 discuss some of the major criticisms associated with the FG paradigm. Chapter 4 focuses on those that are associated with the FG paradigm as a generic model to explain industrialization of a single national economy as well as a group of them that form a region. In contrast, Chapter 5 deals with those issues that are specific to the geographical context of East Asia.⁸¹ The large majority of FG paradigm advocates have referred to their model, upholding East Asia specifically as their target region in mind. Thus, if the applicability to the region turns out to be questionable, then the applicability to other regions will be even more seriously questioned.

⁸⁰ See, for example, Beeson (2007), Bernard (1996), Bernard & Ravenhall (1994), Burkett & Hart-Landsberg (2000), Edgington & Hayter (2000), Hayter & Edgington (2003), Kasahara (2004), Katzenstein & Shiraiishi (eds) (2006), Ozawa (2000), Rowthorn (1996), Yun (2003), and Yun (2005).

⁸¹ Chapter 5 presents a review of the development experience of East Asia together with that of the region’s integrative efforts, and discusses the validity of the application of the FG paradigm to the region against the geopolitical background (of the Cold War period and thereafter) in which Japan became the active leader in the East Asian catch-up process. Our research covers not only the past period of Japan’s leadership in the region, but also the fluid contemporary situation centred on China.

4.1.1 What is meant by a Generic Model?

In a nutshell, the FG paradigm as a generic model posits two sets of interplaying dynamic changes associated with national and regional development. One is the “upward movement” along the “sophistication” ladder of manufacturing activities – via import (M), production (P), export (X), and reverse import (M’) – in single national economies, from simple products, sectors and industries to sophisticated ones. Hence, the FG paradigm is a model for the catching-up industrialization of late industrializers. The model provides late industrializers with a relatively clear industrialization blueprint together with optional steps (perhaps including industrial policy) by emulating forerunners. Then, what are the merits of the model for early industrializers? While indicating the way for manufacturing firms in early industrializers to survive through offshore production, the paradigm puts the earlier industrializers in an alarming position as they are obliged to upgrade industrial activities with diminishing examples available for emulation. The other is the “downward movement” of these activities along a hierarchical order among neighbouring countries – the “trickle-down effect” in popular jargon – thereby prolonging the life cycle of particular products and manufacturing sectors. In this regard, the FG paradigm, particularly its modern versions, is also a model of regional development, depicting industrial diffusion/relocation among interacting national economies that constitute a region.

4.1.2 Criticisms of the FG Paradigm: Classification of Issues

A categorization of the various criticisms of the FG paradigm is not a simple exercise.⁸² In the first instance, the following pages concern themselves with the thematic (and methodological) framework of the FG paradigm, which presents what is referred to as “level-of-analysis” (or “unit-of-analysis”) problems. These problems are attributable to the lack of consensus among FG paradigm advocates/theorists (and critics) on the nature of their subject, i.e., whether their models deal with macroeconomic development (of a national economy or a group of national economies) or microeconomic development (at the much lower levels of aggregation, such as specific manufacturing sectors or individual firms). This ontological discord has obfuscated the identification of the “geese” that are purportedly flying.

The issues beyond those related to the above-mentioned ontological (and methodological) category may be divided into three broad categories: i) questions associated with national development, i.e., industrial development via a series of import substituting production (or M-P-X-M’ sequences) within a national economy; ii) questions associated with regional industrial transfer/relocation via among national economies; and iii) questions on sustainability of the FG paradigm as a blueprint for regional

⁸² The problems discussed cause cumbersome presentational problems. This is because these problems could be presented in various ways, and they could be grouped also in various ways as well. Thus, any attempt of presenting and grouping them could be tentative in nature.

development and integration.⁸³ Obviously, the issues to be discussed are not mutually exclusive; therefore, the following discussion will contain extensive cross-references.

4.2 Level-of-Analysis Problems

It has been shown that the FG paradigm was constructed initially as a national development model, and that the initial analysis clearly focused on a national economy. Over time, however, FG advocates came to incorporate into their model some microeconomic elements (of less aggregated units), such as specific manufacturing sectors and firms. As noted earlier, this is partly due to the pressure from those critics who pointed out the “inadequacy” of the FG paradigm as a microeconomic model. We can still debate, however, whether lowering the level of analysis makes the model more accurate in explaining the totality of the development process of late industrializers. This reminds us of some neoliberal theorists who have criticized Keynesian macroeconomics for the absence of a telling microeconomic foundation.

Another (and separate) level-of-analysis problem relates to the identity of product groups, or more accurately the aggregation of product groups. This issue is a serious matter once the discussion shifts from the theoretical/conceptual realm to the empirical analysis of data (basically trade data). We now know that the calculation of competitiveness indices can be heavily influenced by the level of product aggregation. The level of product aggregation can determine whether the FG paradigm is confirmed or refuted in specific cases (see, for example, Tung, 2003 for an interesting discussion based on an empirical analysis of the electronics sector in East Asia⁸⁴).

4.2.1 Methodological Nationalism

Akamatsu used the term, “flying geese” for the first time in the 1930s as an expression for the “graphic” presentation of the M-P-X sequence for textile products. He claimed that industrialization – more accurately, late industrialization – is the repetitive process of this sequence for different product groups. His macroeconomic model of trade-development nexus depicts how industrial upgrading of late industrializers is linked to their trade relations with early industrializers. Akamatsu indeed acknowledged that external relations (more accurately imports) would impact some local

⁸³ The issues deal mostly with production-related, or supply-side, matters. In Section 4.5, we also consider issues related to the demand side of market transactions, i.e., the role of market demand for specific products, at the domestic, regional (intra-regional) and international (extra-regional) levels.

⁸⁴ Tung (2003) shows that while historical trade data on electronics products of East Asian economies at a high level of product aggregation shows a general rise and fall of competitiveness as postulated by the FG paradigm, the similar exercises at lower levels of aggregation – with sub-groups of consumer electronics, IT products, telecommunications, parts and components, and semiconductors – such a shifting pattern of competitiveness among sectors becomes much less clear.

industrialization drive; nevertheless, his analytical concern was decisively national in scope. After all, trade (import and export) cannot be conceptualized without the national border, distinguishing between inside and outside.

Akamatsu held such an ontological commitment that late industrialization could be empirically verified by analyzing *their* sector-specific trade data, without detailed firm-level information. His macroeconomic perspective reflects “methodological nationalism”, according to which the development of a certain product group (or a manufacturing sector) is symbolically regarded as a part of “national economic development” (Gore 1996) rather than a manifestation of corporate strategies.⁸⁵ Akamatsu thinks that late industrialization requires a variety of nationalistic components, such as “nationalistic psychological attitude, national control of capital, and national initial protection of industries to achieve enough strength to compete in the international marketplace” (Korhonen, 1994: 63).

The above discussion, however, does not sit well with the inter-country sequence of industrial diffusion/relocation. This sequence – which Akamatsu purportedly developed in the early 1940s (Schröppel & Nakajima 2002: 206) – reflects what we may term “methodological regionalism”, in light of a lack of a better term, as a conceptual counterpart to methodological nationalism.⁸⁶ This new perspective was a prelude to the modern FG paradigm. For Akamatsu, the inter-country sequence was probably almost an after-thought in the evolutionary process of his thoughts on the restructuring of domestic manufacturing. In the 1930s, Japan, a late industrializer, had not reached such a high level of manufacturing development – not as in the situation of the 1960s – that contained obsolescent (“sunset”) manufacturing sectors that would seek offshore production. This supports the view that the FG paradigm had not reached a sufficiently mature stage in the 1940s to prove intellectual backing of Japanese expansionism in WWII (see Ohtsuki 2010, 2011).

As was noted in Chapter 3, Vernon’s product cycle framework with the idea of offshore production via FDI constituted an important basis for the modern version of the FG paradigm, including the shift of analytical focus from the national economy (of late industrializers) to the major innovating firms (of early industrializers). Indeed, FG paradigm advocates benefited from the microeconomic concept of corporate strategies together with that of product cycle, as they helped fill, to a certain extent, the theoretical lacuna of the FG paradigm, in particular its microeconomic foundation. By the

⁸⁵ However, the macroeconomic approach should not be identified with methodological nationalism. For a relevant discussion on contemporary China, see Fischer (2010).

⁸⁶ During WWII, Akamatsu regarded his country as a more advanced one (*shinkonkoku*: a newly advancing country) among late industrializers, but refrained from calling it an early industrializer (Schröppel & Nakajima, 2002: 223). These terms resemble the world systems theory’s three-layer terminology for national economies: core, semi-periphery, and periphery. For Akamatsu’s wartime experience, see Ohtsuki (2017).

1970s Japan no longer regarded itself as a late industrializer, and FG advocates began to focus on Japan's new role as an early industrializer (in the context of East Asia) to recycle its obsolescent (or "mature" in Vernon's term) manufacturing activities abroad. The FG paradigm then came to contain less of a macroeconomic approach and more of a microeconomic one. However, this shift was not definitive.

When the modern FG paradigm was seen as a Japan-centric model for East Asia in the 1980s, the focus on firms (i.e., Japanese firms) somewhat declined again, and researchers talked about the expanding regional hierarchy. However, it was pointed out that methodological nationalism contains the danger of identifying the economic competitiveness of individual national economies with that of domestic firms (thereby, discounting the increasing activities of foreign firms). Furthermore, in some cases foreign firms may function as major drivers for national development (as seen in Singapore). It was in the 1990s that the production network model became increasingly viewed as a model better reflecting the reality of East Asian manufacturing activities, and that modern manufacturing firms regained analytical attention. Thus, a better understanding of East Asian political economy may require a shift of analytical focus from individual national economies to more micro-level activities of manufacturing firms (Yun 2005: 53).

Methodological nationalism in the FG paradigm also contains the implicit assumption of relatively high political autonomy of national economies, armed with, among others, high barriers to cross-border labour immigration. Particularly pertinent in this regard is the movement of unskilled, low-wage labour. Let us recall that the FG paradigm highlights the export-oriented manufacturing activities of national economies with its states typically upholding labour policies that generally "suppress" workers' wages in order to gain and retain price competitiveness of their exports (see Kasahara 2013). But the eventual wage rise will oblige national economies to upgrade their industrial structure towards more sophisticated (meaning labour-saving) sectors. However, if the state has relatively lenient immigration policies, the imperative for industrial upgrading as well as offshore production may not become strong. This is because "guest workers", who are willing to work at low wages, may cause the "lock-in" effect against structural upgrading. A case in point is Malaysia where the inflows of unskilled foreign workers from its neighbouring economies since the mid-1990s has prevented investment in more capital-intensive and higher value-added processes and products (see Henderson & Phillips 2007).

The above sketch of the historical shifts of analytical focus of the FG paradigm shows that researchers have not agreed on what are the acceptable units of analysis. Yet, given that the main proponents of the FG paradigm have generally perceived the positive force of capitalism (or market) toward modernization, they have also eschewed "Marxian class analysis" (for studying capitalist social relations) as often taken by those critical observers (see Burkett & Hart-Landsberg 2000). One major

shortcoming of the FG paradigm is the inadequate attention paid to inter-linkages between the real sector (manufacturing) and the rest of the national economy. Perhaps, the only actor that has received some attention is the state which promotes industrialization through various policy measures to protect and nurture infant industries and stimulates upgrading of the national economic structure and operation.⁸⁷

4.2.2 Identity of “Geese”

The above discussion shows that the evolving/shifting analytical focus in the FG paradigm has given rise to different images about migratory birds. Originally, the geese, the graphic M, P and X curves of a national economy for a particular product/product group/sector, reflected the generalized behavioural patterns of domestic consumers and firms in late industrializing countries. Akamatsu presented his model to depict the catching-up process of Japan, where three geese illustrate historical phenomena – rather than actors, explicitly, as such – of import (but implicitly the country’s consumers), import substituting production and export of surplus product (but implicitly its local firms). The geese – or more accurately, their routes of flight seen in a graph – then became a historical contour of sector-specific productive competitiveness (say, textile, steel, chemical, cars and electronics) that push a national economy to technologically more sophisticated levels. Thus, the geese were different manufacturing sectors, each of which sequentially takes off and flies, tracing its competitiveness contour, until it is replaced eventually by another contour of a more advanced sector.

In the early version of the modern FG paradigm, the “catching-up, product cycle theory”, which was influenced by Vernon’s product cycle, the migrating geese were major manufacturing firms producing “mature” (standardized) products.⁸⁸ Yet, it cannot effectively explain how the late industrializers can upgrade their industrial structure. Offshore production is totally within the purview of profit-motivated firms from early industrializers, whereas late industrializers (and their local firms) are seen to be passive recipients, waiting for the arrival of such activities. Before long, however, the unit of analysis returned to the aggregate level of the national economy, where the geese were then identified

⁸⁷ When a particular industry suffers from the rising cost of production, the ideal solution would be to promote industrial upgrading of production. Otherwise, the country may face “industrial hollowing-out” with the outflows (efficiency-seeking offshoring) of the particular production activities. If the country allows the inflow of cheap factors of production (including the immigration of workers), then it may retain the particular production activities in question within the country but the imperative of industrial upgrading will remain rather weak.

⁸⁸ As pointed out in Chapter 3, international relocation can be motivated either by changes in production processes or “changes in factor endowments” (in a broad sense, including their quality and quantity as well as available technology) in different locations (domestically and internationally). With its analytical focus on trade and production activities (say, via FDI), the modern FG paradigm, as seen in the product cycle argument, stresses the former case whereas Akamatsu’s model stresses the latter case.

with either the shifting contours of sector-specific competitiveness within a national economy or among a group of them. In short, depending on the level of analysis, the geese that are flying mean different things. The geese could be different manufacturing sectors in national economies operating in the catch-up process, of which competitiveness (“comparative advantage”, or more accurately, “absolute advantage”) can alter among them. The geese could also be footloose manufacturing firms with “competitive advantage” that migrate within East Asia and establish their overseas subsidiaries, assuming the role of prime organizers of an evolving regional division of labour. But at the same time, the geese are also national economies among which regional industrial diffusion/relocation can take place. The most modern FG paradigm, the production network model, is an eclectic model which contains all of these cases, although the most dominant view is that the geese are still national economies.

Another pertinent issue is the size of the group of actors, “geese”, involved in the different versions discussed. Akamatsu’s initial model is a two-actor (bilateral) model of a late industrializer (Japan) interacting through trade with Western early industrializers. Vernon’s product cycle model is also a two-actor model where the US (or its major innovator firms) as the innovator interacts with other countries (or their imitator firms).⁸⁹ The situation, however, could be more complicated over time. The catching-up product cycle model states that major manufacturing firms tend to shift from domestic to overseas production for a particular product to sustain the life cycle of their product (and possibly their own corporate existence). In this offshoring process, the firms in question face selection among potential candidates (overseas sites); therefore, the situation could be multilateralized. Furthermore, in due course, these firms as well as host countries’ local firms will face similar internal pressure to go abroad.⁹⁰ Accordingly, the number of firms that are likely to seek new appropriate sites for offshore production tend to rise. This is more explicit in the integrative/snowballing model of the modern FG paradigm, where an increasing number of geese, either national economies or firms, contribute to the spatial expansion of integrative transaction (FDI and reverse import). In the production network model, the number of geese – firms involved across national borders – is further multiplied, with an increasing number of products (raw materials, parts and components, etc.) mutually linked in complex and fragmented production processes.⁹¹

⁸⁹ Vernon (1966) differentiates the imitator countries between developed countries and developing ones, where the offshore production begins first in the former group and later in the latter. But the interactions remain basically bilateral.

⁹⁰ However, this will immediately engender the concern of the hallowing-out of domestic manufacturing. Of course, the FG paradigm stresses the importance of domestic industrial upgrading, i.e., the shift of production activities into new sunrise sectors, concomitantly with the overseas migration of sunset sectors.

⁹¹ Some observers, such as Ozawa (2009), identify the United States as the leader of the industrial hierarchy in the broad Pan-Pacific region (rather than Japan in a narrower East Asia) where the FG paradigm is operative.

4.3 National Development

The FG paradigm is about late industrialization, where its core element lies in the recurring import substituting production (and export) of manufactures, with concomitant sectoral shifts from the traditional labour-intensive to the modern capital- and technology-intensive ones. However, as many critics point out, the microeconomic mechanism of industrial upgrading, i.e., the sectoral shifts of import-substituting production, remains a black box. In the following pages, various conceptual issues will be discussed under the following headings: i) M-P-X sequence, ii) export-led development, iii) technology acquisition, iv) agents (drivers) for restructuring, v) role of the state, vi) role of FDI, and vii) competitiveness in the national context.

4.3.1 M-P-X Sequence

Akamatsu's M-P-X sequence contains the following propositions:

- i) The import curve (starting earlier) and the production curve (starting later) tend to cross each other, meaning that the import phase (starting earlier) and the production phase (starting later) partially overlap.
- ii) The production curve (starting earlier and ending later) and the export curve (starting later but ending earlier) cannot cross each other because the export phase is contained within the production phase.
- iii) The import curve (starts earlier) and the export curve (starts later) may or may not cross each other, meaning that the import phase may or may not overlap with the export phase each other.

The first proposition above states that the production of consumer products initially requires their import. But this is an overstatement since local production could start *without* the preceding import-substitution phase. A case in point is the “export processing zones” where much (if not all) of local production is for overseas markets (for further assembly operation or final consumption). In this case, the simultaneous occurrence of production and export P-cum-X coincidence could be a possibility. A more drastic case, the two-stage M-P phase may be eliminated, and start with the M-X phase resulting from the practice of re-exporting imports with an extremely thin profit margin. The imported consumer goods for local consumption may no longer be regarded as important. Another case that may challenge the first proposition is textile and apparel products. In virtually all societies, from the very beginning there are some sorts of traditional local clothes. Thus, the sequence should be modified into P*-M-P-X, where P* designates the production of *traditional* domestic products that may or may not be replaced by *modern* imported substitutes. Modern imported products and traditional domestic products belong to different categories (at a highly disaggregated level). Then the modern products should exhibit an M-P-X sequence, whereas the traditional products may exhibit a P*-X* sequence (if overseas markets develop the taste for “exotic” foreign products) or only a production curve (P*) (if

overseas markets fail to develop). Accordingly, the level of product aggregation has much to do with the formation of the M-P-X sequence.

The second proposition above follows the “vent-for-surplus” argument: the export phase begins when local production create surplus. The export phase therefore is a sub-period of the production phase. As observed in East Asia, local production can take place mainly for external markets – often in “export processing zones” – rather than for the (local) domestic market. Then the production phase and the export phase are “time-compressed”, and may overlap heavily, if not totally (see Ozawa 2016: 6-8). A more cumbersome case is Hong Kong where the vent-for-surplus argument does not hold for labour-intensive exports, since they are virtually re-exports of what it imports from China and others. In other words, the export (as re-export) phase can take place *after* the production phase ends. Thus, the original M-P-X sequence can be changed to the M-P-X-M'-X' sequence where M' and X' stand for reverse import and re-export, respectively.

The third proposition above indicates that the import phase totally or partly precedes the export phase. Let us note that the similarity between the import and export curves may also indicate similarities of industrial structure between a pair of trade partners.⁹² This means that changes in industrial structure in trading countries tends to affect how much these curves overlap in each country (Blomqvist 1996: 221). Again, the level of product aggregation (or product classification) affects the degree of the phenomenon of import-export overlap. At a higher level of aggregation, a wider range of parts, components and final (assembled) products could be grouped together into the same category, thus the overlapping phenomenon is more prevalent.

At what stage of the import phase, does the production phase begin, rise and fall, or at what stage of the production phase, does the export phase similarly begin, rise and fall? These are so basic but difficult questions because the generic answers would not be useful. Obviously, they depend on the specific country-specific M-P-X sequence where the latter can be configured with a host of market conditions (domestic and international) that are not uniform in history (over time) or space (among different late industrializers). As noted earlier, the system of product classification (the level of aggregation) can affect the relative “graphic” position of the M-P-X sequence. For instance, a large domestic market may allow the continued growth of importing high-end products and the local production of low-end products both of which belong to the same product category. In such situations, the import and production curves may or may not intersect.

⁹² In general, the more similar the trading pattern between them, the more similar they are in industrial structure (in terms of substitutability or complementarity), and the more their bilateral import and export curves overlap.

In any case, the FG paradigm emphasizes the importance of import based on two types of arguments. First, *imported consumer products* (of superior and attractive quality in comparison with traditional local counterparts) can entice local consumers into their consumption (demonstration effect), and instigate the sense of urgency (the Schumpeterian “animal spirit”) among existing and new local producers to create local substitutes for the local market (and beyond). Akamatsu did not elaborate on the transfer mechanism of technology and knowledge through trade of consumer products and machinery to produce them, apart from vaguely referring to “demonstration effects”. Second, *imported capital goods* (parts, components, and perhaps more importantly machinery and equipment) as well as imported raw materials are required for manufacturing activities. Akamatsu’s original model was more directly related to the first type of argument than the second type. He may have perceived that the import-instigated/facilitated development path – in short, “import-led development” – would be of universal application for late industrializers in the long run. Yet, given that local conditions and external relations – including the ability of financing imports as well as the local availability of raw materials and intermediate goods – are diverse among late industrializers, the pace of industrial upgrading is likely to differ widely among them. As a regional catch-up model, modern versions of the FG paradigm do not pay much attention to local differences among late industrializers very much.

The process of late industrialization hinges on the acquisition (and local adaptation) of technology from abroad, and in this regard, imported goods and services (financing, intellectual property rights, licensing) could all be important. Akamatsu – like Gerschenkron (1962) who is known for his concept of “advantages of backwardness” – supported the idea that late industrializers can exploit the technological backlog accumulated by early industrializers.⁹³ Here, we sense a case for what is called “compressed modernization” of the catching-up process where late industrializers can internationalize – at an increasingly rapid speed – new technology and knowledge embodied in imported products themselves and/or imported raw materials, intermediate products and machinery to produce them. In either case, the effective local absorption of the technological backlog – of products and/or production – from abroad requires a host of supportive factors in the local economy. They include, most importantly, the overall societal commitment (based on economic nationalism) towards the introduction of modern science and technology to the local economy.⁹⁴

⁹³ Early industrializers, on the other hand, may face the potential disadvantages (or dangers) of technological leadership, which means that they may have invested so heavily in given technologies and their surrounding infrastructure that they have difficulty in moving to new generations of technology. In modern theorizing, this situation is referred to as a “technological lock in” (Szirmai 2005: 127).

⁹⁴ Other concrete elements include, among others, the social capability of agents (including the state, firms, managers, engineers, teachers and trainers) with adequate ambition, and organizational and managerial skills, a relatively well-educated and disciplined labour force, and sufficient financial resources (Sato 2016: 215). Again, given the diversities among them, not all late industrializers can equally exploit the advantages of backwardness.

The modern FG paradigm, depending on its versions, is less clear about the importance of import-led growth. For that matter, it is not certain whether the catching-up product cycle version of the FG paradigm contains the perspective of import-led development. This is because advocates of the modern FG paradigm generally view national and regional development not from the perspective of major foreign firms but rather from that of local stakeholders in late industrializers. Let us recall again that the modern FG paradigm regards Japan as an early industrializer rather than a late one. In the snow-balling version of the FG paradigm, the nature of import-led development became “diluted” because of the role of FDI. In the more recent production network model, local economies as specialized providers are often equipped with export-processing zones (EPZs). Firms in late industrializers that heavily depend on imported intermediate products make efforts to widen access to good-quality imports at low prices in order to raise local price competitiveness. This may be particularly important in sectors such as automobiles and electronics with a large number of specialized inputs (Lawrence & Weinstein 2001: 383).

4.3.2 Export-led Development

Akamatsu understands the importance of export, based on two sets of reasoning: One is a sector-specific argument and the other is a macroeconomic argument. As for the former, his M-P-X sequence shows that the export phase of manufactured products occurs at the mature stage of their production phase, which resembles Vernon’s product cycle. We are aware that the export outlet is especially important when a small domestic market prevents local firms from exploiting economies of scale (the possibility of mass production). Strictly speaking, this argument supports the position that the causal flow runs from development to export, rather than from export to development. Without the option of exporting surplus products, their local products may remain more expensive than the imports, and their high prices will consequently hamper the expansion of the domestic market. This is a classic vicious circle (Suehiro 2008: 129). The sector-specific argument reminds us of the classic argument of “vent for surplus”.⁹⁵ As Akamatsu notes, industrialization enhances the qualitative nature of products manufactured and exported, in addition to the quantitative growth with surplus production.

Some observers are critical towards the argument of this production-surplus-led development, by pointing to “the fallacy of composition” – the idea that a certain action that works favourably for a relatively few actors may not work for large numbers. In the context of export-led development, if many late industrializers are engaged in the production and export of labour-intensive products, they are likely to face protectionist policies abroad (Cline 1982) and/or the deterioration in their (barter) terms of trade. Even if they can successfully improve their productivity and make up for the terms-

⁹⁵ The importance of the overseas outlets for excess production is not uniquely relevant to manufacturing. Myint (1959) has popularized this classical argument for agricultural exports which would make it possible for subsistent societies to employ some of its underutilized domestic factors of production beyond domestic needs (Szirmai 2005).

of-trade deterioration, again major importers may begin to consider protectionist policies. Strictly speaking, however, this is not an argument against the logic of the FG paradigm. Instead, it is an argument against probable failures of continuous industrial upgrading of all national economies which may create a high concentration of production and export of a narrow range of labour-intensive products. In other words, the issue at hand is the slow-down of dialectics, resulting from the excessive “convergence” (or “homogenization” in Akamatsu’s term) of late industrializers against “divergence” (or “heterogenization” in Akamatsu’s term) of early industrializers.

As for the second argument of macroeconomic financing, Akamatsu acknowledges that at the early stages of development the replacement of manufactured imports by domestic substitutes requires the export of primary products that can generate foreign exchange reserves large enough to cover the imported raw materials, intermediate products and capital goods for local production. Thus, the low-level performance in the export of primary products can constrain the availability of those products that collectively underpin import substituting activities (this is somewhat similar to the Latin American structuralist argument for industrialization). In any case, the export of primary products may enable the state to finance the development of infrastructure and essential social services. The argument appears reasonable, because export earnings normally constitute the main source of foreign reserves. Of course, export is not the sole source of foreign exchange earnings; many economies have relied on other sources, such as official development assistance (ODA), public and private loans, and foreign investment (direct and portfolio). In addition, the export performances of firms were often taken as an easily measurable indicator of success for their administrative authorities to justify their public support toward the extension of such firms and their sectors (Mathews 2006: 322).

Indeed, the importance of export in the macroeconomic framework can be precarious, when we reflect on the argument of the “resource curse”, which shows that many successful late industrializers are those that are not well endowed with natural resources. This is purportedly because the internal drive for industrialization may be stronger in a situation of resource scarcity than of resource abundance (Jomo 2001: 466). For resource-abundant late industrializers, the issue is to utilize the resource wealth in such a way that currency appreciation – due to the successful resource export – will not work against the interests of emerging manufacturing sectors, or that a group of resource-driven foreign firms will work against the industrial development of the rest of the national economies (Mathew 2006: 326). As for East Asia, the 2nd-tier NIEs have been slower in developing their own manufacturing than Japan and the 1st-tier NIEs, because the former group has been less compelled to industrialize than their counterparts due to their rich natural resource endowments (Jomo et al. 1997: 10; see also Sato 2016, for a case study of Indonesia).

The modern FG paradigm emphasizes the contribution of large foreign manufacturing firms to industrial development in late-industrializers, engendering “FDI-led”, or “transnational corporation

(TNC)-assisted development” (UNCTAD 1995b). However, this is not comparable with the above-discussed concepts. Perhaps, FDI-led development could be regarded as a sub-group within import-led and export-led development, as FDI could be a significant factor to promote import-substituting production as Vernon explains. Given that the modern FG paradigm with emphasis on production networks links different locations via trade of intermediate goods, the FDI-led development, as seen in the production network model, can contain some elements of being import-led and export-led with varying degrees of importance, depending on local conditions (see further discussion on the agents for restructuring in subsection 4.3.4.)

4.3.3 Technology Acquisition

Akamatsu made a broad statement that the local production of consumer goods can be prompted by imported capital goods (machinery), while not elaborating *how* the production phase takes over the import phase. His model points to “reverse engineering” of imports, i.e., the process of dismantling of these products, thereby acquiring the knowledge of their inner working of mechanics and figuring out the process of producing them in local conditions. Japanese producers have emphasized the absorption of what Suehiro (2008) calls “product technology” and “production technology” from abroad, where the former signifies the designing and development of technology required to create products to match certain specifications in terms of their performance (such as, volume capacity, energy consumption) and characteristics (such as, structure, strength), while production technology refers to the assembly and processing technology required to make a certain product that conforms to specifications and manufacturing manuals (Suehiro 2008: 231-232).⁹⁶ The very act of importing consumer goods provides late industrializers (perhaps more to their consumers than firms) with the opportunity of acquiring knowledge of products (product technology). But this still remains “potential” rather than real, unless afore-mentioned “social capacity” (Abramovitz 1986) has reached a sufficient level.

This was possible since Japan’s modernization since the late 19th century provided a favourable domestic environment. In any case, the lack of elaboration on the import-production transition is a critical omission, if we expect that the FG paradigm should provide some microeconomic foundation. In light of Japan’s early experience Akamatsu was not enthusiastic about the reliance on foreign capital in the form of FDI (and for that matter, loans as well). For the most part, technology acquisition should be promoted by self-help on the part of late industrializers to enhance their own “social capacity” (Abramovitz 1986) or “institutional vehicles” (Gerschenkron 1962) to learn, adopt, emulate,

⁹⁶ Suehiro (2008) further points out that production technology could be classified into three types based on sectoral differences in the kind of skill formation demanded on labour: i) operating technology, ii) assembly technology and iii) processing technology. For further discussion, see Suehiro (2008: 231-256).

and catch up.⁹⁷ Furthermore, channels of interaction with early industrializers other than inward FDI – such as traditional reverse engineering on imports (to master technology embedded therein), technology import and licensing, and OEM arrangements – may prove to be sufficient for acquiring technology transfer.

Modern FG paradigm advocates generally have a high expectation of major manufacturing firms from early industrializers to act as the principal providers of modern product/production technology as well as overseas market outlets. Nevertheless, many critical observers have argued that the technology transferred by these firms has been extremely limited as they are keen to retain their technological advantage as long as possible. The issue of the extent to which modern productive technology is transferred internationally via foreign ventures of multinational firms boils down to the delicate interplay of factors surrounding the willingness of these firms in light of the market conditions as well as policies/regulation of all economies involved on one hand and the absorptive capacity of host economies (late industrializers) on the other. It would be rather naïve to expect that once late industrializers insert themselves in international production networks, technology would be automatically transferred to local firms.

Clearly, the acquisition of technology contains many development issues for late industrializers. How about early industrializers that are basically providers of the departed technology? For early industrializers technology is less of something that may be received from more advanced economies but something that may be innovated by themselves. Akamatsu regarded periodic major technological innovations – something a bit shorter than a Kondratieff wave (45-60 years) – would accentuate the pace of global dialectics. Major technological innovations are important to the process of heterogenization (or divergence) of the early industrializers vis-à-vis late industrializers. Akamatsu's concern with dialectics, particularly major technological innovations was marginalized (or overshadowed) by the general recognition of the Kondratieff wave popularized by Schumpeter. Most of the modern FG paradigm advocates may not even realize (or care about) the significance of dialectics in Akamatsu's original model, although a few critical researchers have pointed out an Akamatsu wave (see Grinin, et al. 2015: particularly Chapter 5).

4.3.4 Agents (Drivers) for Restructuring

Different versions of the FG paradigm point to different agents (“geese”) for the social restructuring that accompanies the catch-up process of late industrializers. Akamatsu's original model underlines

⁹⁷ According to Abramovitz (1986: 387-388), “social capacity” is the term that reflects a particular societal characteristic that allows late industrializers to achieve a level of productivity as high as early industrializers, and he identifies it with a complex mix of technical competence (gained through education) as well as with political, commercial, industrial, and financial institutions. Other aspects of the economic system that affect social capacity include, openness to competition, to the establishment of new firms, and to the sales and purchase of new goods and services (Abramovitz 1986: 389).

imported modern consumer goods and those consumers affected by them as instigators of local production of their substitutes. While others (including the local government) are also important, the central agents are domestic private firms within late industrializers. The successful catch-up process heavily depends on these firms' own enterprising initiatives in "learning by doing", through a broad process of reverse engineering, sometimes with licensing agreements of joint venture production. In a joint venture production, the participating firms (domestic and foreign) are the agents of import-substituting production. Therefore, if the external stimulus should be altogether cut off, domestic production may remain stagnant. Yet, imports may have a predatory effect on local production, particularly when the local market is very small and cannot leave any niche for domestic producers. Akamatsu gently hints at the desirability of state intervention to soften the excessive intensity of external competition (Akamatsu 1962: 23). This reminds us of the neo-mercantilist sentiment that was prevalent in the prewar period in late industrializers. As noted earlier, modern FG paradigm advocates emphasize the pattern of "TNC-assisted restructuring" (UNCTAD 1995b), where large firms facilitate the "downward" relocation of manufacturing activities via efficiency-seeking FDI.⁹⁸

Apart from each East Asian economy, several other agents (drivers) have contributed to structural changes (in terms of the sectoral shift of manufacturing sectors) in the region. The FG paradigm lacks the details of intricate interplays between these agents. One actor group that has traditionally affected East Asia is the Chinese diaspora communities spread in many parts of the region (most notably in Southeast Asia). These communities have provided informal channels to help link up firms. Business firms in Taiwan, Singapore and Hong Kong have been engaged in overseas manufacturing activities, say, in the 2nd-tier NIEs where the locally dominant Chinese entrepreneurs seemingly value informal networks of ethnic kinships. On the other hand, the small size of the Chinese population in Japan and South Korea may have made it more difficult for Japanese and Korean firms to establish overseas business operations in the 2nd-tier NIEs.⁹⁹ Arguably, China's recent achievement has much to do with close relations with Hong Kong (*de jure* integration in 1997) and Taiwan (*de facto* integration). However,

⁹⁸ They generally downplay the role of various agents in late industrializers, stressing instead that large firms from early industrializers can function as "the innovators, knowledge disseminators, and promoters of structural change" (Ozawa 2015: 19-20). Of course, in many cases, local businesses – through technology licensing and joint ventures arrangements – are heavily involved in restructuring local manufacturing. But local businesses in late industrializers that strive to forge ties with major firms from early industrializers are often those in real estate or financial sectors, rather than manufacturing, and they may be more interested in profit making by securing market access through participating production networks rather than technology acquisition as such (Hatch 2010: 85-86).

⁹⁹ Thailand is somewhat different from others in Southeast Asia. The absence of the exclusive dominance of ethnic Chinese in business perhaps one factor that helped Japanese firms to enter Thailand for joint venture in the earlier period. See further discussion in Chapter 10.

this cannot be pushed too far as non-Chinese are dominant investors in contemporary China (see Chapter 5 for further discussion on informal Chinese linkages).

Finally, while not necessarily regarding it as the direct agent for East Asian development, we cannot dismiss the “hegemonic” role of the US, the postwar regional order where the FG paradigm (re-)emerged was the manifestation of *Pax Americana*. Thus, the success of East Asian development was considerably due to the country (for its overall Cold War foreign policy towards the region as well as its firms’ investing there.) In this regard, some of the actions of US President Trump may threaten the sustenance of the modern FG paradigm, where the US plays the role of major market-provider for East Asian FG participants, particularly China (see Chapter 5 for further discussion on the role of the US).

4.3.5 Role of the State ¹⁰⁰

Gerschenkron (1962) stresses the role of the state particularly for a late industrializer in mobilizing resources to protect, nurture and develop its industrialization process (with specifically targeted manufacturing sectors). Here the catch-up process of late industrializers is basically the emulation of early industrializers, taking advantage of their “advantages of backwardness”.¹⁰¹ Thus, the state facilitates restructuring via emulation, by providing appropriate financial and technical assistance and guidance. In some cases, the provision of some social safety nets for those who find it difficult to adjust in the transforming situation (the case of structural unemployment). Akamatsu recognizes the role of the state in facilitating the M-P-X sequence, although he does not elaborate on concrete measures that the state ought to take (Akamatsu 1962: 23). Instead, he alludes to the role of “economic nationalism” in building locally owned enterprises with the state’s “limited” support for infant industry protection (Akamatsu 1962: 8). The M-P-X sequence is not an automatic process; instead, it often requires resolute infant-industry protection. A critical question here is how to determine “a reasonable level” of protection for designated products/sectors from external competition so that protection will effectively instigate their import substituting production and export. What about a “reasonable length” of protection? The question is: when should such protection be withdrawn? It could be argued that the state should keep its eye on the targeted products/sectors even after import-substituting

¹⁰⁰ The author published a fuller exposition on the relationships between the developmental role of the state and the FG paradigm; see Kasahara (2013).

¹⁰¹ How well late industrializers can exploit their advantages of backwardness, depends on their levels of what Abramovits (1981) refers to as “social capacity”, i.e., their capacity to acquire advanced technology and make use of it. Abramovitz (1981: 387) fears that low levels of social capability have prevented some late industrializers from filling the existing technology gap. Social capacity reflects the technical competence of the general public, which is affected by levels of their education and the relative size of those with training in technical subjects in society (Szirmai 2004: 83).

production is developed enough to meet the domestic demand. The state may remain involved to ensure that the targeted products/sectors can develop into exportable sectors.

In some specific situation, the state may remain involved in such a way that the products/sectors in question become obsolescent so that they could be offshored in an orderly fashion. Such protection must be “fluid” because the products/sectors targeted for protection and exit must also shift over time. Industrial protection via restricting imports often face sharply contrasting reactions from different segments of society. Some segments, whether infantile or senile, such as import-competing local firms typically support it, whereas others including local trading firms and retailers for imports as well as some consumers are likely to oppose it. Thus, the role of the state here also includes finding conciliatory solutions by optimizing societal benefits. Let us recall that Meiji Japan could not undertake extensive mercantilist trade policy due to the absence of tariff autonomy for many decades (see Ohno 2017).

The FG paradigm, as a regional development blueprint, however, requires the states of regional economies to maintain stability in macroeconomic indicators. The attainment of reliable inter-country comparison of cost curves requires, among others, reasonably stable foreign exchange rates among the countries involved. Trade can be greatly facilitated when the exchange rates are stable among trading countries and cordial diplomatic relations are maintained among them. Furthermore, such diplomatic relations may facilitate the smooth relocation of industrial activities across national borders. The dynamic evolution of production networks, however, has required a rethinking of the role of the state. The policy strategy of the state typically aims at connecting the local economy to the global economy “in such a way that local industrial transformation, accumulation, and development can take place” (Oriain 2000: 163). What is pertinent is the state’s contribution of inviting high value-added activities of international production networks to its jurisdiction, and to developing local linkages. Given the general trend that foreign affiliates tend to source the most sophisticated and complex parts and components either internally or more predominantly from preferred (often foreign-owned) suppliers within or outside the host country (UNCTAD 2002: 75). The worst case scenario here could be that the local economy is locked in “a low-wage, low-value-added site, without local linkages” (Yun 2003).

4.3.6 Industrial Policy and Comparative Advantage

The modern FG paradigm generally gives an impression that industrialization can proceed in a relatively conflict-free fashion, with smooth restructuring where domestic investment (as well as labour) can easily shift from “sunset” sectors to “sunrise” (and exporting) sectors. Modern FG paradigm advocates thus downplay the need for the state to act as a facilitator of conflict-minimization (see Chang 1994 for a brilliant discussion on industrial policy). But this does not sit well with the concept of the developmental state that has been well accepted in East Asia. One major area of the

debate on the role of the state is selective industrial policy. Some argue that state interventions should “conform” to a country’s comparative advantage, while others argue that state initiatives should “defy” its present comparative advantage in order to upgrade its industry. The FG paradigm postulates orderly industrial upgrading with all economies linked in a hierarchy, and where leapfrogging may be regarded as disorderly conduct. But this is the view typically held by those countries that are located at relatively higher positions of the development hierarchy. Thus, Akamatsu was more willing to accept a change in a hierarchy when Japan was a new industrializer. On the other hand, Japanese advocates of the new FG paradigm tolerate the idea of late-industrializers’ catch-up process as long as it does not seriously challenge the hierarchical order.

Clearly, the state in the contemporary age of neoliberal globalization has lost some of its discretionary policy space, but it is premature to dismiss its developmental role altogether (see UNCTAD: 2014). Biersteker (1990) provides a typology of four forms of state intervention according to their intended design to: i) “influence” (i.e. to promote and/or constrain) private firms’ behaviour, ii) “moderate” conflicts among social stakeholders (especially between capital and labour), iii) “redistribute” social and private products, and iv) “produce” goods and services. He argues that the influence of neo-liberal prescriptions has most clearly led to a reduction in state interventions in the area of “production”. Neo-liberals have pushed policy prescriptions generally directed against the more extensive forms of state interventions associated with “state capitalism” and Keynesianism (Biersteker 1990: 488).

These contrasting views may be attributable to the position of observers in the international/regional industrial ladder. When discussing Japan’s early catch-up efforts during the Meiji period, Akamatsu admitted that the existing international industrial hierarchy could be alterable (implying Japan’s rapid rise to challenge the existing order). On the other hand, Japan’s FG paradigm advocates in the post-WWII period reflected their country’s national interests as East Asia’s most significant early-industrializer. Thus, as the regional leader, these modern advocates were not readily supportive of the issue of reshuffling of relative positions of East Asian economies that are collectively engaged in industrial development. In a famous debate in the 2000s, Chinese economist Justin Lin (then the World Bank Vice President) argued that selective industrial policy in late industrializers should follow their comparative advantage while South Korean economist Ha-joon Chang (Cambridge University) counter-argued that selective industrial policy should defy the prevailing comparative advantage (Lin & Chan 2009). Lin’s position, which resembles that of Japan’s FG paradigm advocates of the 1980s, seems to reflect China’s interest of recycling the life-cycles of some of its sunset manufacturing sectors by shipping them abroad. Here, Lin is taking the interest of maintaining Chinese leadership in a globalized, China-centric framework. In contrast, Chang’s position reflects an ambitious late industrializer (just as Meiji Japan was), which is interested in challenging early industrializers as well as the most recent emerging superpower, China.

4.3.7 FDI for National Industrial Upgrading

Vernon (1966) thinks that the control of product and production technology tends to decline as the product itself matures, and that product standardization leads to the overseas diffusion of relevant (product and production) technology. Most FG paradigm advocates hold a positive picture about the role of FDI in manufacturing development, stressing that manufacturing activities can be transferred with relevant production technology. According to its integrative/snowballing model, the shift of industries (and products) from the “core” (early industrializers) to the expanding circle of peripheral countries (late industrializers) facilitates their catch-up process.

During the heydays of the international development debate of the 1960s and 1970s, the role of FDI used to be a principal point of contention between modernization theorists and dependency scholars. The former group argued that modern foreign firms would contribute to the growth of developing countries by offering some of the missing ingredients (stimulants) needed for industrialization, whereas the latter group contended that these firms would damage host countries with an array of misconducts. In this regard, the modern FG paradigm advocates resemble modernization theorists. The negative view towards FDI has since considerably declined, perhaps most prominently in East Asia. This does not mean, however, that the modernization theory has become more widely accepted. Indeed, the extent to which FDI stimulates genuine local development has still remained under debate. Most of all, it is not certain whether FDI is the ideal channel for technology transfer. A focus on FDI leads to a somewhat distorted picture of regionalized production networks, since these networks often operate through technology licensing agreements or other forms of arrangement such as sub-contracting that may not involve cross-border financial flows (for further discussion, see Bernard & Ravenhill 1995).

There is wide variation in production technology, that is, in terms of the types of capital goods (equipment and machinery) and skills required to use them. There is also wide variation in domestic conditions as well as efforts among late industrializers (see Lall 1993). Obviously, it would not be possible to expect that required technology (product and production) could be transferred to all late industrializers. Perhaps it is correct to state that as a product matures there will be a parallel escalating threat to the original producers from foreign competitors, but they may form offshore production in such a way that their overseas subsidiaries will retain proprietary technology rather than let it pass on to independent local firms.

Production networks consist of the manufacturing stages of a product spread among different locations, depending on their cost differentials, with intermediate goods (parts and components) being

traded among them for eventual incorporation into finished products.¹⁰² Multi-step assembling operations of modern sectors, such as automotive and electronics, allow firms to partition their production activities into “slices”. The firms (or for that matter, national economies) participating in the operations no longer have to master an entire production technology for the assembly line and to organize it themselves. They can instead focus on mastering just one facet of the production, which is likely to induce large savings in learning costs and to allow local small and medium-sized enterprises (SMEs) as parts suppliers or assemblers, to coexist with large foreign firms (UNCTAD 2002: 74). The production network model indicates that in comparison with the conventional FG paradigm, the transfer of production activities could be more rapid. Thus, characteristically, the production network model can be called “the FG paradigm in a hurry”. Yet the technological acquisition in the new model is much more incremental, because major international firms can more easily retain firm-specific technological advantage. This implies continued dependence on overseas subsidies and subcontractors (foreign and local) engaged in technology and component inputs from abroad without developing linkages with local suppliers. This is not what the original FG paradigm envisaged.

4.3.8 Competitiveness in the National Context

As for quantitative devices of competitiveness index, some shortcomings of the conventional formula of revealed comparative advantage (RCA) are pointed out. One principal shortcoming is that the formula does not take into consideration the import contents of exports. Another competitiveness index, the trade specialization index, may be better than the RCA index as it takes into consideration the import components of exports, but once the country reaches the maximum score of 1 (with no import), then additional exports (or the further rise of its export capacity) will not be reflected in the competitiveness index.

The rise and fall of a country’s competitiveness in a particular manufacturing sector is only judged in relative terms against its own past, and against other sectors (better or worse). Obviously, the time span required for the first element (Akamatsu’s M-P-X sub-sequence) is normally shorter than that for the second element. One fundamental question is that of how can we expect that the fall of one sector coincides with the rise of another? The competitive contours for different sectors were drawn as if they were virtually identical in shape except for the time frame during which the competitiveness contours are observed. But such an assumption is far from being realistic. Both of these aspects of competitiveness contour configuration may be expressed in terms of something like the “average cost” of a product, although it is difficult to pinpoint the unit cost as such when dealing with a product group or a sector that contains a wide range in “unit cost”. Again, how can we expect that the fall and

¹⁰² One reason why large international firms favour such an approach is that it permits them to take advantage of economies of scale in parts and components making, something not possible in many national economies with relatively small domestic markets (Machado 1995: 54-55).

rise of a cost curve (reflecting the corresponding rise and fall of competitiveness) for a specific product, should be synchronized by another in such a way that the former's "sunset" sector could be the latter's "sunrise" sector? The comparison of average cost curves among different national economies (as proxies of their product/sector-specific competitiveness) would be even more problematic (see further discussion in Section 4.4.2).

4.4 Regional Development and Integration

As discussed earlier in relation to the role of the state, it was noted that the FG paradigm, as a regional development model, requires stability in inflation and exchange rates, to enable cost/price comparisons among different geographical sites. Beyond the maintenance of macroeconomic stability, however, the FG paradigm, particularly in Akamatsu's initial model, is not explicit as to what actions the state should undertake to facilitate compositional changes of manufacturing activities of their national economy. It was noted that some modern FG paradigm advocates argue that *de facto* regional integration is one aspect of their paradigm. Obviously, friendly diplomatic relations are a prerequisite for the relocation of industrial activities as well as for international flows (marketing) of goods and services. The paradigm's policy recommendations would include the coordination of trade policy and facilitation, together with the development of transport infrastructure, shared access to natural resources such as energy, water and maritime resources. This does not necessarily mean, however, that free trade should be the national policy regime, since such a regime could possibly bring forth unwanted predatory effects by imports to potentially import-substituting production.

The following pages present a critique of the FG paradigm as a model for regional development and integration, under the following headings: i) life cycle,¹⁰³ ii) competitiveness, and iii) regional hierarchy.

4.4.1 Life cycle

"Catching-up product cycle" was a generic term used for modern versions of the FG paradigm, a synthesis between Akamatsu's framework of late industrialization via trickle down and Vernon's arguments of the cross-border relocation of manufacturing activities for "mature" (i.e., standardized) products.¹⁰⁴ According to Vernon, each manufactured product has a unique product cycle, the

¹⁰³ The concept of life cycle, especially product cycle, could have been placed in the discussion on the FG paradigm as a national development model (Section 4.3). Nonetheless, it was placed here since Vernon's product cycle theory was introduced as part of the regional developmental model rather than that of national development.

¹⁰⁴ The snow-balling model of the FG paradigm predicts a staged sequence of expansion of manufacturing activities – which Bernard & Ravenhill (1995) call a "rational" pattern of industrial diffusion – beginning with mature products, from Japan to the 1st-tier NIEs, followed by the 2nd-tier NIEs, China and others.

maturing life cycle process, which influences the sequential relocation of its production from domestic to offshore sites. This is because product standardization (maturity) is likely to lead to cost-conscious, high-volume, mass production, and it supposedly induces the increased use of cheap, unskilled labour that is more abundantly available in developing countries.

The concept of product cycle, however, has been debated and criticized by many observers. These issues of concern can be summarized in the following three propositions:

- i) Maturation of manufactured products leads to standardization of the products themselves and their production process;
- ii) Maturity/standardization basically means the increasing prevalence of labour-intensive, mass production; and
- iii) At the late stages of product/production maturity, the original firms gradually exit from their domestic market, leaving its demand to be increasingly met by reverse import.

As for the first proposition, we may argue that firms are interested in prolonging the life cycle of their products (“de-maturing”) by attempting to reach a high level of product differentiation as well as effective marketing strategies to entice consumer demand. For instance, they may attempt to show that their products are substantially different from others that belong to the same generic group even when they are not (for instance, pharmaceuticals) (Taylor 1986: 757). In fact, more recent discussions have developed a rich literature on marketing performance along the product life cycle. Here, the succession of corporate strategies can affect the market performance of products at different stages of their life cycle (see a critical discussion in Dhakka & Yuspeh 1976).

The second proposition has been increasingly questioned in some sectors. Indeed, mature products can be efficiently manufactured and marketed in *capital-intensive, small-batch* production – rather than *labour-intensive, mass production* – with the greater use of labour-displacing robots, reducing the labour input to a bare (but highly skilled) minimum (UNCTAD 2016a). Taylor (1986), a business specialist, stresses that labour-intensive, mass production is just one among different ways to achieve profit maximizing (if not cost minimizing) in manufacturing and marketing products.¹⁰⁵ Even when they become mature and standardized, not all products are faced with international relocation, in the light of their specific set of quality and quantity of inputs required for their production and transport costs. This case – altering factor proportions in producing products – can therefore disadvantage labour-

¹⁰⁵ Talyor (1986: 758) points out that computer numerical control of machines and computer-aided manufacturing, for example, can promote flexible production, drastically reducing the costs of batch production, and facilitating low cost customized production.

abundant/capital-scarce late industrializers. Broham (1996:122) explains that this has happened in one of the most mobile manufacturing sectors, that is, textiles and garment.

The third proposition, i.e., reverse import at the last stage of product cycle, is also subject to debate. Purportedly, the original firms gradually exit from their domestic markets, leaving demand to be increasingly met by reverse imports. But large manufacturing firms often act regionally with less of an intention to *relocate* and more of an intention to *expand* their production and marketing activities.¹⁰⁶ In such a situation, reverse import (except for some intermediate products) may not occur. Even if reverse import should take place, it is still not certain whether or not it is the original firms (or their subsidiaries operating abroad) or foreign competitors that are engaged in reverse import. The reality is probably a mixture of both. In other words, the product cycle argument does not deal well with the consideration of “ownership” resulting from the joint ownership of local and foreign firms that has taken place in many parts of the world.¹⁰⁷

After all, not all firms that invent new products remain the facilitators of their standardization. Firms in late industrializers have occasionally obtained the licensing for newly invented products, and standardized them as commercially viable products. This means that some products experience the growth stage in countries other than (or in addition to) innovating countries. By revising his earlier exposition, Vernon (1977) states that in some cases overseas production – by imitating firms or offshore production by innovating firms – may start while products are still in the growth phase at home. In other words, products with the extensive offshore production/assembly process are not always mature products.

Is it reasonable to assume that the life cycle of the products may not differ much from the life cycle of their manufacturers? (For a good literature review of the “corporate life cycle”, see Miller & Friesen 1984.) This question leads to level-of-analysis questions. This dissertation argues that firms need not pin their future altogether on specific products, unless they are dealing with narrowly specialized single-product firms. The reality is that many modern firms are less specialized, and they produced differentiated products. Furthermore, modern firms may manufacture products that are at different

¹⁰⁶ We historically witnessed three principal waves of Japanese outward FDI. The first wave was triggered by the initial appreciation of the Japanese yen after the 1971 breakdown of the Bretton Woods system, and it was heavily concentrated in natural resources in developing countries. Much of the second wave, from the late 1970s, was in manufacturing in North America and in both manufacturing and additional natural-resource development in Asia, but it was lagging in Europe. The third wave, the most dramatic wave in magnitude, appeared in the mid-1980s, FDI increased around five-and-a-half times in North America and Europe but about one-and-two-thirds times in Asia (Machado, 1995: 45-46).

¹⁰⁷ This limitation is thrown into relief by Dunning’s (1981) inclusion of ownership as one of the three foundation stones of his eclectic theory of FDI.

stages in their life cycles. And firms themselves may influence the life cycle for legitimate commercial reasons. The product cycle discussion does not recognize that new products and production processes could be created and brought into firms as a result of “exogenous” life cycles.

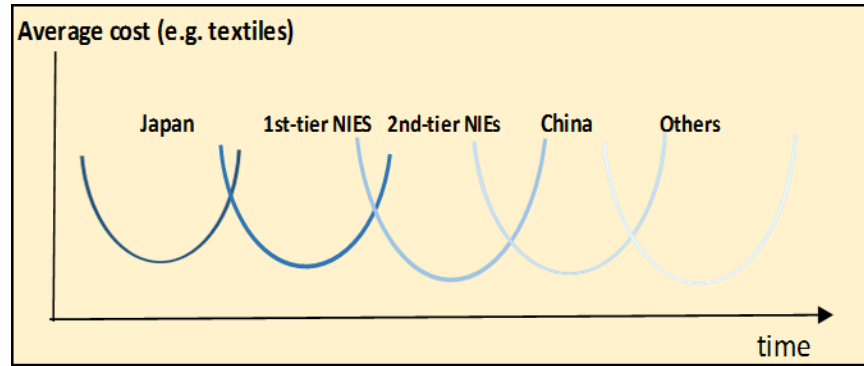
Is it possible to state that manufactured products, their producers (at different stages of the product cycle), and specific sectors to which the products belong go through patterns of their own life cycles, something like product life cycle, company life cycle, or sector life cycle? And these life cycles could be further affected by business/market cycles of some sorts – long waves as well as short waves. As was discussed, Akamatsu initially broached the idea of a “business cycle”, but this was totally ignored by modern FG paradigm advocates; however, some researchers have recently put forward a new type of business cycle, an Akamatsu wave, possibly as a replacement of the Kondratieff wave (see Grinin, et al. 2015: Chapter 5).

4.4.2 Competitiveness in a Regional Context

The FG paradigm as a regional development model depicts the gradual shifts of competitiveness contours for different product groups (sectors) in each of the national economies in a particular region. This is closely associated with industrial relocation among countries. As was pointed out earlier, one major problem with such an exercise is that it is difficult to swallow the idea that changes in a country’s competitiveness – if such a competitiveness contour is drawn at all – of different products/sectors can be lined up. In any case, different sector-specific competitiveness contours rise and fall, in a sequential fashion so that a fall of competitiveness of one sector is compensated by a rise of competitiveness of another (more advanced) sector. To this, the international dimension is now added. The fall of a country’s sector-specific competitiveness must be matched by the rise of another country’s competitiveness, so that the former’s “sunset” sector becomes the latter’s “sunrise” sector. Indeed, in the case where a regional group consists of countries that are diverse in size and endowment, the neatly lined-up competitive contours are unlikely to be realistic.

Figure 4.1 below graphically recasts the industrial upgrading process – i.e., the cascading shifts of competitiveness for a specific sector among a group of national economies – in terms of the corresponding shifts of cost curves. What is interesting here is that the concept of “absolute advantage” (the comparison of the costs of production of a specific product between different countries) rather than the concept of “comparative advantage” (the theoretical mainstay of mainstream trade theory) takes over the as the theoretical base rather than the concept of “comparative advantage”, the theoretical mainstay of mainstream trade theory, the international comparison of the cost ratios of production between different countries. In other words, the concept of comparative advantage does not make sense in the single-product situation.

Figure 4.1
Average Unit Cost
Multiple-Country-Single-product (Sector/Industry) Framework



Source: Author's elaboration

As was argued, the conversion of competitiveness into a cost curve is problematic at the national level and even more so at the regional level. Some of the problems identified at the national level re-appear at the regional level, such as the accuracy of monetary value (average costs) as an indicator of competitiveness due to product improvement and instability of foreign exchange rates. Furthermore, the presumed visual similarity of competitiveness contours (and cost curves) among different sectors in a single-country framework will be exceedingly complex in the multiple-country framework. Competitiveness (understood here as cost efficiency) is a “relative” concept. Just because a national economy becomes more cost-effective in producing a particular product, this does not necessarily mean that its competitiveness rises internationally. It depends also on how dramatically cost-effectiveness in production improves in other economies. Thus, a national economy’s rise of cost-effectiveness would not automatically provide the chance of becoming the producers of the products in question in the context of the division of labour.

Furthermore, it is also necessary to take into account economies of scale in production. Obviously, if a national economy is relatively small, then it may not be able to take over all of the production previously undertaken by early (relatively large) industrializers. It is therefore difficult to imagine that a small economy will develop a manufacturing sector that is sensitive to the scale. East Asia consists of economies of which the scale has been extremely diverse, which can complicate the theorization of intra-regional diffusion of manufacturing activities.¹⁰⁸ In any case, smaller economies (e.g. Hong Kong

¹⁰⁸ While it is not directly related to the discussion above, it may be worthwhile pointing out that one major merit of the use of revealed comparative advantage (RCA) as a proxy index of competitiveness is that researchers do not have to address many of the cost calculations discussed above. But this is simply to avoid theoretical/conceptual issues. It invites a new set of conceptual problems. For instance, a country’s trade performance, depending on sectors, may be distorted by protectionist measure importing countries.

and Singapore) are more willing to engage in foreign ventures, especially with adjacent neighbors in order to augment the possibility of scale-economies. But such scale-seeking cross-border integration does not mix well with methodological nationalism which views late industrialization as a national project.

Perhaps, more questionable is the validity of constructing the time-order of competitiveness contours (or average cost curves) among a group of national economies. The drawing of the competitiveness contour for a specific product, or a product group is done in the order of Japan first, followed sequentially by the 1st-tier NERs, the 2nd-tier NIEs and China. This sequence was conceptualized in the 1980s in light of per capita GDP comparisons among these economies. At that time, hardly anybody questioned the logic as to why industrial diffusion/relocation must occur in the top-down order of per capita income. However, per capita GDP does not necessarily coincide with the capacity of manufacturing productivity. Furthermore, it is not difficult to argue that manufacturing firms' FDI may sometimes prefer oversea locations where cost-saving factors are largest (in the case of efficiency-seeking) and sometimes those overseas locations where per capita income is highest (as in the case of market-seeking).

4.4.3 Regional Hierarchy

When the regional development model was popularized in the 1980s, Japan was by far dominant in the region; the 1st-tier NIEs' nominal per capita income in 1985 ranged from less than a quarter ($<1/4$)(South Korea) to two-thirds ($2/3$)(Singapore) of Japan's; and 2nd-tier NIEs per capita income ranged from less than one-fifteenth ($<1/15$) (Indonesia) to about one-fifth ($1/5$)(Malaysia) (based on IMF data). In 1985, China's nominal per capita GDP amounted to less than one-forty-fifth ($<1/45$).¹⁰⁹ As we know, the gap between Japan and its neighbours has since been steadily reduced, and this per-capita ranking has been considerably reconfigured. The FG paradigm once appealed to Japanese observers as a development model with Japan occupying the top of the regional hierarchy with the highest standard of living. But the image of sustained regional hierarchy (together with the accompanying centrifugal industrial transfusion) invites several conceptual problems. Again, one may question the relevance of per capita GDP as a proxy of industrial development. The rise of per capita income does not occur only as a result of manufacturing activities. As discussed in the next chapter on the East Asian situation, Singapore and Hong Kong, which now occupy the highest positions in terms of per capita income in the region, are no longer manufacturing-based economies.

The regional hierarchy provides a market rationale (or ladder) for efficiency-seeking FDI in search of overseas locations of cheap resources (raw materials and low-wage labour). Why does the FG

¹⁰⁹ These are estimated by using various "nominal" per capita GDP figures publically available. But there is a wide variation of their figures for each of these countries. The purchasing power calculation of per capita GDP still shows a narrower but wide gap between Japan and its neighbours.

paradigm argue that the migratory destination of manufacturing activities will be one with the “highest” labour costs among its neighbours? Our view is that the cascade-type diffusion of manufacturing activities is considerably fictitious. If offshore production could be motivated strictly for cost reduction, then FDI can concentrate in the least costly locations. Furthermore, market-seeking FDI tends to choose investment locations within final markets, which can explain why FDI goes to many developed economies as well as China with large domestic markets.

Another issue associated with the hierarchical order is the effect of what may be called “compressed development”. Historically, the time required for national economies to develop has been shortened, which means that the homogenization (convergence) process tends to take place more rapidly than the heterogenization (divergence) one does. The lack of protection in intellectual property rights in many parts of East Asia has accentuated the compressed development process. As long as Japan faces some earlier industrializers ahead of itself, its own homogenization (or the convergence process by emulation) may still continue. However, being the earliest industrializer in East Asia, Japan is running at the frontiers in many technological fields. As a result, its own heterogenization in the region (or the divergence process by innovation) has been slowing down considerably. The overall implication of this is that the regional catch-up process has tended to “flatten” the regional hierarchy. The issue here will be further discussed in the next section on the sustainability of the FG paradigm in a regional context.

If we accept the idea that the specific pattern of regional hierarchy – as seen in terms of per capita ranking – is a temporary feature, then the FG paradigm may entail some revamping, depending on the magnitude of reordering. Akamatsu (1961; 1962) admits that the ranking is not a permanent feature of reality as the economic performance differs considerably among countries over time.¹¹⁰ Thus, if the ranking is reshuffled, the migratory direction may also change. Many firms in late industrializers, as seen in China, are now actively engaged in merger and acquisition (M&A) activities to get access to strategic assets – such as advanced technology, management know-how, and brand names – of major firms in early industrializers (see Deng 2004, for the case of Chinese outward FDI).

¹¹⁰ Dependency analyses, therefore, highlight the importance of self-help for local industrial development, where efforts must be made for, among others, the acquisition of relevant technology and skills. In this regard, learning is an important prerequisite for firms in those countries to compete effectively in their domestic and export markets. Here, licensing arrangements of technology transfer – for what is called the “original equipment manufacturing” (OEM) – may be a possibility, but not all international major firms are willing to let local firms be engaged in substantive parts of production. The global expansion of production networks has enabled local firms to survive (or revive themselves) as subcontractors to large foreign firms. But again, similar to the licensing arrangements, the production spillovers may be limited.

When discussing the integration/snowballing model, it was stated that its implicit assumption was the sustained regional hierarchical order. This order purportedly provides a rationale that underpins efficiency-seeking FDI¹¹¹ and reverse import in intra-regional relations. Can we verify that intra-regional FDI (as well as export of capital goods) grows as the region expands its geographical coverage (as home- and host-economies) and develops economically? While the regional hierarchy of the model shows the trend of expansion among FDI sources and destinations over time, it does not show the sustainability of such expansions. The model shows the emergence of new FDI destinations, but does not explain the consequence for the older destinations. Obviously, dividing East Asian economies into a few clusters, presumably based on per capita income, to show the similar sequential order as the FDI-source, as the FDI-host is a convenient simplification for illustrative purposes, and contains serious distortions of the regional reality (for instance, South Korea began to invest in the 2nd-tier NIEs and China much later than the rest of the 1st-tier NIEs did). Furthermore, the fact that a large portion of FDI flows originate from extra-regional sources (most notably from the US, and recently from elsewhere as well) complicates this regional logic.

4.5 Sustainability of the FG Paradigm

The following pages will deal with the sustainability of the FG paradigm, as a model of national development as well as that of regional development and integration, by looking into the feasibility of a collective catching-up process (harmonious industrial upgrading) among a group of national economies that form a region. As noted earlier, the FG paradigm contains a great deal of resemblance with Modernization theory. They both uphold the proposition that all societies are bound to evolve, though at different paces, from traditional to modern societies. All late modernizers/industrializers are thought to proceed structurally with the societal/industrial evolution resembling the experience of early modernizers/industrializers. Each late industrializer has the potential to follow the development path of the M-P-X sequence for products, products groups, and manufacturing sectors. At the same time, structural upgrading in manufacturing activities also takes place in an orderly sequence from simple, resource/labour-intensive products to sophisticated, skills/ capital-intensive products.

4.5.1 Replicability of National Development Experience

The modern FG paradigm describes a “rational” pattern of industrial diffusion sequentially along a regional hierarchy among constituent national economies. As the product cycle is repeated for increasingly sophisticated products, the development experience of early industrializers will be replicated by others in a succession of sectors. Putatively, the domestic enabling conditions – variously

¹¹¹ Efficiency-seeking FDI could also be supplemented by other methods of foreign ventures. This top-down flows of FDI scheme can also be supplemented (or replaced) by the export of capital goods (machinery) and parts and components.

referred to as “social capacity”, “social capital” and the like – of the national economies are fairly comparable, and that the different stages of development at which countries have arrived are essentially due to the different timing of external stimulus.

The postulation above is far from the historical reality. Can it be claimed that all countries constituting East Asia contain similar domestic conditions and that their potential for industrialization is exploitable by external stimulus? Each of the region’s economies has its own distinctive development path and history. This implies that the wholesale replication of early industrializers’ (which ones) may not be perceived as the best way forward. As Ozawa (2013) argues, each national economy is totally free to jumble early industrializers’ strategies, take short-cuts by leapfrogging development stages, or even enter all stages simultaneously. But of course, they can also join the regional integrative group at the lowest end in order to avoid unnecessarily acrimonious rivalries. All of these depend on their catch-up strategies, capabilities and circumstances. Thus, they can emulate early industrializers’ development patterns in a broad manner but always customize their own catch-up process in adaptation to their country-specific circumstances.

The most critical view toward East Asian development is the malfunctioning of distributive justice. It is claimed that a hierarchically structured region features highly unequal distributions of value-added generated in the production networks between leading and following countries (Banga 2013). With the growth of FDI to expand overseas production networks, domestic supply of parts and components within manufacturing activities in early industrializers has become considerably internationalized as many overseas subsidiaries of large firms from earlier industries rely significantly on imported inputs (see, for instance, Banga 2013; Bello 1993, 1998; Bello & Rosenfeld 1990; Bernard & Ravenhill 1995; Burkett & Hart-Landsberg 2000).

4.5.2 Sustainability of Dialectics

The FG paradigm is an industrial “trickle-down” model from the more advanced to the less advanced economies. The question here is whether “trickle-down” means the phenomenon of diffusion and the phenomenon of relocation of manufacturing activities. The former which is associated with the geographical extension of productive capacities specific to a particular product (a product group or a sector) tends to raise the level of competition among producers/exporters across national borders, whereas the latter implies structural changes within the original producers/exporters who are facing the catching-up of the later producers/exporters. It could be argued that the phenomenon of industrial relocation is a subgroup of the phenomenon of industrial diffusion. And the FG paradigm basically deals with the case of relocation rather than diffusion of manufacturing activities. However, production skills and technology associated with industrial relocation could be accumulative, thus including an element of diffusion.

When the cascade type of restructuring does not take place smoothly among a group of export-oriented economies, they are likely to crowd themselves in a relatively narrow range of product groups. The situation may lead to what is called the “fallacy of composition” in export-led growth as a development strategy. Following Cline’s (1982) seminal work,¹¹² many researchers have pointed out that the world market can remain large enough to absorb exports from countries that follow such export-led industrialization. As was discussed earlier, the excessive production of a narrow range of manufactured products has the risk of terms-of-trade deterioration. But this is different from the FG paradigm position, since the latter always emphasizes, whether realistically or not, the importance of industrial restructuring.

One serious question here is its sustainability, or more specifically, the assumed compatibility between the dynamics of catching-up on the one hand and the status-quo of hierarchy (development gap) between them. As pointed out earlier, if late industrializing countries are catching up quickly, the FG paradigm could cease to be dynamic. Akamatsu admits the possibility of an eventual leadership change when the pace of heterogenization by leaders is slower than that of homogenization by followers. But this leniency towards structural leapfrogging was acceptable, because Akamatsu considered Japan as the only likely candidate for such a rapid change. As may be recalled, the multiple-country-multiple product framework of the modern FG paradigm shows that the regional ranking (the hierarchy) in the division of manufacturing activities is somehow maintained. But the reality may be that the catching up process has subjected the 1st-tier and 2nd-tier NIEs to a “structural squeeze” in which they are unable to upgrade their industrial structure, failing to graduate into a wide range of advanced capital-intensive sectors while being priced out of their older labor-intensive sectors by rising wage levels. In short, as dependency analyses postulate, the late-industrializers’ upward mobility could be blocked (Brohman 1996: 123).

4.5.3 Consideration of Demand Side

The critical discussion so far in this chapter – with the notable exception of Akamatsu’s original argument of import-led development – has mainly addressed the production side, as opposed to the consumption side, of the national economy. Akamatsu made it very clear that consumer demand for imports (final products) for consumption as well as producer demand for imports (of raw materials, intermediate products and machinery) are both essential for import substituting activities, or industrial catching-up. Later when import substitution has been achieved, then the export phase for surplus

¹¹² Some researchers argue that export-led development cannot be globally replicable because its wide use is likely to provoke protectionist responses from major importers. Cline (1982) sarcastically states: “Elevator salesmen must attach a warning label that their product is safe only if not overloaded by too many passengers at one time; advocates of the East Asian export model would do well to attach a similar caveat to their prescription. More broadly, development planners adopting the increasing strategy of export-led growth must take into account the probable capacity of the international market to absorb the resulting increasing in exports from their own and like-minded developing countries” (Cline 1982: 89).

begins. Meanwhile, it is assumed that the producer demand has altered as local industrialization tends to reduce external dependence on machinery. Therefore, as discussed earlier, the FG mechanism of industrial development is “import-led” (at the early stages) as well as “export-led” (at the later stages), and it depends on openness. Throughout this process, the FG paradigm assumes the continued existence of local demand for locally produced, import-substituting products and accessibility to overseas demand for surplus production. Clearly, autarkic development based totally on local markets and technology is not regarded as a viable policy. Felipe (2012:10) argues that industrialization would be particularly difficult in small economies unless their production is partly oriented towards external markets.

The role of consumer demand for industrialization has become less and less prominent in the FG framework.¹¹³ The modern FG paradigm postulates that the production pattern of early industrializers at earlier periods could be replicated by late industrializers at later periods. This argument assumes that demand for particular products produced by earlier industrializers will remain as strong as, or become even stronger than earlier, when late industrializers begin to replace them. But this could be problematic, since it is difficult to expect that domestic production will grow smoothly if producers perceive that the demand (domestically or internationally) for their products is not very stable. In short, modern FG theorists seem to pay far less attention than Akamatsu to local consumer demand as a factor promoting the catch-up process.¹¹⁴ Yet, some consumer products could be problematic. For instance, colour TV sets, could be excellent items for some late industrializers to engage in at one point of time, but they may be less favourable items should there be a glut in production of such items.

Consumers’ demand (taste) for manufactured products is far from static, and it is difficult to anticipate that consumers who are used to state-of-the-art products are satisfied with products that are produced abroad just because they are cheaper. The products whose production has been relocated abroad are often those products for which consumer demand has declined. The modern FG paradigm practically

¹¹³ They implicitly conceive that the demand for consumer products is likely to grow along with the demographic and income growth. Modern theorists find that the analytical importance lies in the supply side, i.e., cost effectiveness of production rather than the demand side. In any case, all FG theorists share a belief that successful late industrialization entails import-substituting efforts by building productive capacities together with technology for consumer products, prior to the export phase for these products, or more broadly export-led industrialization.

¹¹⁴ Some consumer products, such as refrigerator, have never reached the declining phase of the life cycle. The life cycle of a product group is greatly affected by the levels of their aggregation. The formation of the product's life cycle has much to do with the demand-side consideration. The gasoline-based vehicle may have reached the declining phase of their life-cycle, being increasingly replaced by hybrid vehicles. But the aggregate level of automobiles as a group, the product group has not reached the declining phase. In general, the lower the levels of aggregation for a product, the shorter the life cycle (Taylor 1986).

neglects this demand aspect. The consumers of the original exporter (leader) may no longer have a taste for products whose production has been shifted abroad. It is absurd to expect that Japanese customers remain interested in transistor radios, black-and-white TV sets, cheap vehicles, and low-quality word-processors, just because they can be imported cheaply from abroad. Thus, this change of consumer demand may be explained as a factor contributing to the lack of reverse importing.

If we turn to the issue associated with external demand, especially demand in third-party markets, this is the area Akamatsu, whose model mostly deals with bilateral relations between early industrializers and late industrializers, is reticent about. He only argues that the likely destinations of the exports of late industrializers at the earlier stage of import substitutions are other late industrializers since the quality of the exports are competitive enough for marketing in early industrializers. Akamatsu's original model does not contain the situation of reverse import. Modern FG theorists, especially the PC theorists, explicitly address the demand for consumer goods within the early industrializers (which cause reverse import) as well as that of third-party markets. Modern FG theorists, who focus on the state of affairs in East Asia, present their model as an "externally contingent development model", underlining the significance of demand in third-party markets (most notably those of the US and Europe). They point out that the relocation of manufacturing activities (offshore production) is not mainly due to the rising demand of specific localities to which the manufacturing activities are being transferred. Instead, they argue that the purpose of creating the export platform is to divert the political (protectionist) pressure to rectify the trade imbalance. Indeed, however, such relocation of manufacturing activities are somewhat different from efficiency-oriented relocations (i.e., factor cost consideration) of the modern FG paradigm. This point is especially pertinent for East Asia (Chapter 5 provides an additional discussion).

The lack of attention to demand at the aggregated level is another critical issue. All versions of the FG paradigm fail to take into account the possibility that the market (the overall level of demand) may drive production rather than production driving the market. It is interesting to note that market fluctuations, which occur independently of the product cycles of individual products, may affect the demand for them. Market cycles/fluctuations, therefore, can simultaneously affect a wide range of manufactured products, no matter which stage of product cycle they are at, and whether they are in a similar direction. Consequently, market pressures may disrupt, prolong, or truncate their product cycles.

4.6 Chapter Summary

The chapter presented a critical discussion of the FG paradigm as a generic model for a national economy as well as a group of national economies that form a region, focusing on specific inter-related issues. The FG paradigm, first of all, contains level-of-analysis problems which engender the question

as to what are the geese that are supposedly flying. The geese symbolically imply many different things to different observers and import-substituting production, the key to late industrialization, as shown in the graphic M-P-X sequence may be an inappropriate stylization (or approximation) of reality (regarding domestic and international market conditions). Furthermore, depending on the level of product aggregation, the M-P-X sequence could be shown in a totally different configuration. Specifically, the M-P-X sequence (in late industrializers) may face serious problems in some cases: for instance, i) the existence of local crafts from the outset (e.g. traditional textiles, ceramics, wooden furniture, etc.) which may present limited prospects for export; ii) the case of extremely export-oriented manufacturing (e.g. the “export processing zones” with limited local consumption of products); and iii) the case of re-export operation (e.g. extremely high import contents of exports, or no “real” production process). If the universality of the M-P-X sequence is questioned, then the competitiveness contour cannot be reliable.

The FG paradigm as a national development model may be criticized because of ambiguity in detail. There are uncertainties about the role of the state (including its industrial policy) and the measurement of competitiveness. The FG paradigm as a regional development model compounds many of the problems identified earlier. Furthermore, the sustenance of the regional hierarchy in which the trickle-down of industry development could occur may be seriously questioned. We also see that much of the replicability (imitation) of early industrializers by late industrializers could be problematic. After all, national economies differ from each other in terms of domestic conditions and external relations. It was also pointed out that modern FG paradigm advocates have ignored the dialectical aspect as well as the business cycle aspect of Akamatsu’s model.

Chapter 5

Critiques of the Flying Geese Paradigm: Part II: Validity as a Regional Development Model of East Asia

5.1 Introduction

The critical issues discussed in Chapter 4 were concerned largely with the intrinsic details of the Flying Geese (FG) paradigm as a generic model, singularly and collectively, for late industrializing economies. Occasionally the chapter touched upon East Asian economies because FG paradigm advocates have often discussed their models with these economies in mind. Nevertheless, the chapter refrained from dwelling on its applicability to individual East Asian economies. This chapter undertakes a critical analysis of the FG paradigm explicitly as a model for the “collective” catch-up of a group of late industrializers in East Asia.

This chapter has a series of objectives. First, it succinctly presents the post-World War II (postwar) development paths of the regional economies under discussion in order to set the stage for the analysis. In addition, it provides a brief discussion on Ethnic Chinese communities in the region that have purportedly affected the region’s development – apart from the FG paradigm framework – by facilitating their own business linkages among different national economies. Second, the chapter introduces one important additional actor, the United States (US), as the dominant provider of security, finance, and markets, to its East Asian allies, and discusses how it has affected the development path of East Asia in the postwar geopolitical context. Third, based on the preceding two sections, the chapter discusses major issues related to the FG paradigm as applied to East Asia. Fourth, the chapter dwells on the changes of the geo-economic configuration in East Asia resulting from the shift of the “centre of gravity” from Japan to China, and explores their implications for the applicability of the FG paradigm to the present fluid situation of the region. This is a prelude to a fuller discussion in the next chapter. And fifth, the chapter critically reviews the FG paradigm as a conceptual framework for integrative development. A literature survey of empirical analyses, as a supplement to the present chapter, is presented in Chapter 12.

5.2 Recapitulation of Postwar Economic Development in East Asia

Despite its long intellectual history that goes back to the early 20th century, contemporary observers refer to the FG paradigm mostly in the postwar context of East Asia. Japan, the frontrunner among the East Asian late industrializers, began its development beyond recovery/reconstruction from war damage much earlier than its neighbours. It was only after the early 1960s or even later – by which time the record of political chaos, often under inappropriate leadership, had been largely settled – that the 1st-tier NIEs became able to envisage clearly their development trajectories (see Haggard 1991,

Vogel 1991). Even towards the end of the 1960s, many well-known Western development experts, for example, Myrdal (1968), were pessimistic about the future of Asia as a whole. At any rate, after a time-lag, the 2nd-tier NIEs (Malaysia, Thailand and Indonesia) and China also followed the development path of their predecessors (see Golub 2016, Stubbs 2005).

The FG paradigm came to the fore vividly in the 1980s against the backdrop of East Asia's rapid growth. Unlike many others in the developing world that suffered during the "lost decade" of the 1980s, many East Asian economies thrived and narrowed their income gap vis-à-vis advanced industrialized economies, most importantly Japan. In the 1990s, the geographical area of East Asia with manufacturing activities was further consolidated and expanded, incorporating new sectors into the diffusion/relocation process, and adding new participants (most importantly China) to the regional circle of the collective catch-up movement. To FG advocates, the prediction of their paradigm was borne out fairly well by the generally positive pattern of restructuring and high rates of growth in the region as a whole.

The heyday of the FG paradigm, as a development model for East Asia, however, did not last very long. At least, this is the way many observers perceive the FG paradigm for East Asian development. The region faced a traumatic shock in the late 1990s when the Asian Financial Crisis (1997-1998) engulfed many FG member economies. In light of its contagion effect, East Asian economies have since altered their development policies by arguably taking their regional implications more seriously. Indeed, some critical observers, perhaps even temporarily, found occasion to apply the structuralist/dependency perspective to East Asia (see, for instance, Bello 1998). In the view of some observers, the credibility of the traditional East Asian model, especially the element of the developmental state, has been challenged (see Fine 1999 for a good discussion). By the time of the crisis, China had clearly been recognized as the major contender to Japan's leadership. Now it is Chinese researchers that explicitly or implicitly point to the FG paradigm. As will be discussed later, their perspectives are somewhat different from the one held by Japan in the earlier period (see, for example, Lin & Wang 2017).

Another important group in East Asia is overseas Chinese communities. It is understood that overseas Chinese have formed a distinct minority ethnic group within many East Asian economies, particularly in the 2nd-tier NIEs, and that their linkages have facilitated business cooperation beyond the national boundary. One pertinent question here is: how have the cross-border Chinese linkages in East Asia affected the diffusion of the manufacturing relocation process? Have they facilitated the process in a consistent fashion as formulated by the FG paradigm or in a distinctive fashion of their own?

5.2.1 Japan

Whereas Japan has a long history of catching-up industrialization since the 19th century (see, for example, Ohno 2003: Ch. 5), it is its postwar industrial development, say, from the first-half of the 1950s that provides a prototype in the recent discourse on East Asian late industrialization. Given that Japan has been one of the most important political fortresses for the “Western bloc” in East Asia, its postwar development has been a part of the collective phenomenon that has been nurtured in the prevailing geopolitical parameter.

Japan’s manufacturing has prospered, roughly speaking, first with labour-intensive, light industrial sectors, such as textiles and plastics, followed by heavy industrial sectors, such as shipbuilding, steel, and chemicals in the 1950s and 1960s; then electric/electrical home appliances and automobiles in the 1970s and 1980s; and high-tech sectors such as computer, and information technology (IT) in the 1990s and 2000s. Its economy witnessed the relocation of some maturing sectors, beginning first to the 1st-tier NIEs in the 1960s and 1970s. This does not mean, however, that Japanese firms actually transplanted their operation abroad by FDI. As will be discussed, the 1st-tier NIEs, particularly South Korea and Taiwan, actively imported Japan’s advanced machinery and technologies to nurture their *own* manufacturers, rather than relying on FDI. Offshoring by Japanese firms was more prevalent in relations with the 2nd-tier NIEs in the 1980s.

Historically, many large Japanese firms have built extensive subcontracting relationships in Japan, involving a small group of large primary contractors. These firms transplanted their subcontracting relationships into the regional context, particularly in the 2nd-tier NIEs and China. In the 1990s, for example, Japanese automakers brought core members of their domestic supply networks with them as they expanded into East Asia, especially in the 2nd-tier NIEs, and established relatively cohesive supply groups within many parts in the region. These groups were managed by representatives of key suppliers, but met regularly under the auspices of the assembler, and even carried the same name as the vertical “keiretsu” in Japan after which they were patterned (Hatch 2010: 151-163).

In the 1970s, Japan began to intensify its regional policy towards neighbours with large public assistance programmes, many of them being directed towards their infrastructure projects. For instance, Japan provided large amounts of development aid (grants and “yen loans”) to China from the late 1970s to the late 2000s. Arguably, these public loans have contributed to creating local conditions that facilitate Japanese firms’ overseas operations. Similarly, Japanese private banks also played a major supplementary role with their own loans, promoting the economic integration of a “yen sphere” up to the time of the 1997 Asian Financial Crisis. Again, these financial flows facilitated the migration (as well as the expansion) of manufacturing activities from Japan to East Asian economies. Whereas the present trend of industrial “hollowing out” in Japan can be traced back to

the mid-1980s exchange rate realignment (the Plaza Accord), it is during the first post-bubble decade of the 1990s that many observers began to raise concern about its deindustrialization.

Between 1990 and 1995 Japanese manufacturing firms expanded their employment across East Asia by 180,000, while eliminating 150,000 jobs in Japan (MITI, cited in Hatch 2010: 164). These firms reassigned to non-Japanese Asian women a large proportion of the assembly line work traditionally performed by Japanese women, while continuing to employ men in the managerial and technical positions at prototype plants in Japan and in overseas production facilities (Hatch 2010: 164). One observer, Truong (2000), who is concerned with gender-related issues points out an interesting implication of restructuring, i.e., the regionalization of Japan's male-dominant practices, with its "hollowing out" being felt more by Japanese women than men. This is because Japanese firms purportedly forged a region-wide personnel system that would allow them to better protect the job security of their typical male managers with firm-specific or insider skills, by having them stationed overseas. In any case, the post-bubble recession soon began to limit Japan's capacity to play the dynamic leadership role in the region-wide catching up process. Since the beginning of the new millennium, domestic economic problems have constrained its capacity to undertake the structural changes required for facilitating comparative advantage recycling.

5.2.2 The 1st -tier NIES: South Korea, Taiwan, Singapore and Hong Kong

Like Japan, all of the 1st-tier NIEs are characterized by two facets, namely resource-scarcity and interventionist states (perhaps, except Hong Kong for the second facet);¹¹⁵ however, their industrialization – which is much more "time-compressed" than their Japanese counterpart – is an event of the more recent past. In the early postwar period, the precarious situation in East Asia obliged South Korea and Taiwan to depend on US military/development assistance as well as its security protection, respectively against North Korea and China. Yet, due to the entrenched colonial legacy, South Korea and Taiwan have closely emulated many structural features of Japan's industrialization (see Kang 1995). South Korea and Taiwan later came to share what may be referred to as the Northeast Asian development model,¹¹⁶ although they exhibit some differences (see Amsden 1989; Evans 1995; Johnson 1987; Park 2000; Vogel 1991; Wade 1990).

South Korea is ethnically almost homogeneous, mainly consisting of Koreans. Taiwan is also homogenous, but it consists of two broad groups, the "native" Taiwanese (Formosans) and the

¹¹⁵ The initial momentum of Hong Kong's postwar industrialization began during the second half of the 1940s with the arrival of Shanghai textile firms and Chinese workers fleeing civil war in the mainland.

¹¹⁶ In the 1st-tier NIES (except Hong Kong), the respective central authorities used to tightly control their financial sector and maintained a dominant position over their national economy. In the 1960s, these states also began to underline industrialization as one of the main development goals with various policy initiatives.

mainlanders who took refuge in the island after WWII. In terms of industrial structure, the South Korean economy has developed a small number of giant conglomerates that dominate many sectors of its economy, whereas the Taiwanese economy is composed of numerous private small and medium-sized enterprises (SMEs) coexisting with some large party-/state-owned companies.

South Korea and Taiwan came to resemble each other in their trade relations *after* their industrial take-off, i.e., bilateral trade surplus vis-à-vis the US and bilateral trade deficit vis-à-vis Japan. The effect of Japan on their postwar industrial development was mainly through trade. Certainly, Japan's outward FDI (mostly joint-ventures) was limited in the 1960s and 1970s. In comparison with Taiwan, South Korea was more willing to borrow from abroad, and it was already one of the world's most indebted developing countries in the early 1980s; however, the debt service ratio, a portion of debt service to exports, was not very high due to a rapid increase in its trade, and the ratio actually declined from 19.4% in 1970 to 10.5% at the end of the decade (Castells 1992: 39).

South Korea and Taiwan have also followed Japan's industrial diffusion/relocation process, noticeably since the late 1980s, shedding some of their labour-intensive and other manufacturing activities, to the 2nd-tier NIEs, China and others. Taiwan was rapidly engaged "informally" in FDI in China, in the 1980s, and many of Taiwan's manufacturing activities were transplanted to China. This does not mean that economic pragmatism has overcome the fundamental political/ideological difference between Taiwan and China.¹¹⁷ Perhaps due to the geographical distance and the lack of ethnic Chinese linkages, South Korea's FDI in the 2nd-tier NIEs began much later than Taiwan's, and its FDI in China had to wait until 1992 when it normalized diplomatic relations. By now, however, many firms in South Korea and Taiwan have established extensive business linkages with China through local subsidiaries, most of all, for labour-intensive assembly activities.

In comparison with South Korea and Taiwan, Singapore and Hong Kong did not receive the benefits of US official aid in the Cold War period (Stubbs 2005: 136). These mini-states have been controlled by ethnic Chinese who have become increasingly important as political leaders (particularly in Singapore) but also as entrepreneurs and organizers of Chinese networks in East Asia and beyond (see section 5.2.5 for discussion on Chinese communities). Singapore has the most diverse demographic basis, consisting of Chinese (75%), Malays (15%), Indians (7%) and others (Vogel 1991: 74). Hong Kong, whose population is overwhelmingly Chinese, was administered jointly by British officials and local Chinese until 1997, but it has always exhibited a cosmopolitan outlook.

¹¹⁷ As late as 1995 and 1996, China tested its missiles in the Taiwan straits, allegedly to send a strong political message that Taiwan should not move away from the "one China policy".

Singapore's experience has provided developmental stimulus – in transferring investment capital, manufacturing technologies, and best business and management expertise – to its larger, less-developed neighbours, most of all Malaysia but also Indonesia and others. Similarly, but more recently, Hong Kong has also positively affected industrialization in its adjacent Guangdong Province, and elsewhere in China, including the Shanghai Municipality and Zhejiang Province (Sharif & Tseng 2011). Hong Kong was active, far more than Singapore, as an intermediary to facilitate trade and FDI relations between East Asian economies (including South Korea and Taiwan) and China (see Wong 1990; Taylor 1996).¹¹⁸ These mini-states, more notably Hong Kong, have witnessed much of their manufacturing (production) emigrate, and their domestic economic structure has shifted to various service sectors. In terms of their catching-up process measured in per capita income, Singapore and Hong Kong have been clearly more successful than South Korea and Taiwan, in part due to their small population size (see Chapter 8).

5.2.3 The 2nd-tier NIEs: Malaysia, Thailand and Indonesia

The 2nd-tier NIEs, Malaysia, Thailand and Indonesia, reveal contrasting historical backgrounds. Whereas Thailand (an old Buddhist country) maintained its sovereign statehood and escaped colonization, Malaysia and Indonesia (predominantly Islamic countries) were colonized by the British and the Dutch respectively. These three economies are resource-abundant late industrializers. Arguably, their high degrees of resource-dependence slowed down their drive for industrialization, until the 1970s and 1980s (see Reinhardt 2000; Tadjoeeddin 2007; Urrutia & Yukawa 1988). The ease of generating foreign reserves, it seems, reduced the imperative to rely on foreign capital (particularly FDI) for manufacturing at the earlier stages of their industrialization.¹¹⁹ Furthermore, periodic commodity booms have frustrated the determined drive for “export substitution”, i.e., diversifying exports from raw resources to resource-based products (Sato 2016).

In relative terms, the developmental role of the state is more variegated (nuanced) in the 2nd-tier NIEs than, say, South Korea and Taiwan (Amsden 1995: 794). While the states of the 2nd-tier NIEs have also upheld industrial policy, their effectiveness has been complicated due to contentious political issues, including dealing with minority Chinese entrepreneurs who have dominated these economies. Inter-ethnic distributive politics has been most notable in Malaysia where its state has strenuously

¹¹⁸ The declining political tension between Taiwan and China, however, has reduced Hong Kong's intermediary role between them. Similarly, the formalization of diplomatic relations between South Korea and China in 1992 also brought about the gradual reduction of Hong Kong's intermediary role between them as well.

¹¹⁹ The 2nd-tier NIEs suffered far less from the debt crisis (and the global recession) in the 1980s than many other developing countries in Latin America and Africa. As a result, critical analysis has generally been much more limited on East Asia with respect to its catch-up process except during a brief period following the Asian Financial Crisis (1997-1998).

advocated the improvement of the socio-economic status of the ethnic Malays (the largest ethnic group) against Chinese (a small minority well linked within), whereas in Thailand the ethnic Chinese have most effectively been assimilated into society (see Jomo et al. 1997; Pillay 2000). As the 2nd-tier NIEs sought to diversify their manufacturing activities, state intervention has also increased in the form of state-owned enterprises (SOEs)¹²⁰ in order to cope with, among others, competitive entrepreneurial skills of the ethnic Chinese (see subsection 5.2.5 on Chinese communities in East Asia).

Manufacturing for export became important first in Malaysia (in the 1970s), then in Thailand, and finally in Indonesia. Their remarkable growth from the mid-1980s to 1997 may be attributed considerably to large FDI inflows from Japan and the 1st-tier NIEs (especially Taiwan and Singapore). The major causes of such FDI flows were: i) the more liberalized FDI regimes in the 2nd-tier NIEs; ii) the rapid depreciation of their currencies vis-à-vis the currencies of Japan and the 1st-tier NIEs; iii) the termination of the GSP (Generalized System of Preferences) status of the 1st-tier NIEs in the US, i.e., preferential access to the US market; iv) rising wages, regulatory tightening in Japan and the 1st-tier NIEs (in particular, against industrial pollution and occupational health hazard) (see Bernard and Ravenhill 1995; Chiang 2015; Edgington & Hayter 2000; Felker 2003; Jomo et al. 1997; Thomsen 1999).

Malaysia, Thailand and Indonesia performed impressively from the mid-1980s to the late 1990s, but they all suffered, to varying degrees of intensity and duration, from the 1997 Asian Financial Crisis. Furthermore, the emergence of China as an overwhelmingly attractive FDI destination began to engender a major concern in the 2nd-tier NIEs about the crowding-out (or diversion) of inward FDI. A cursory survey of literature on the effects of China's economic emergence on the 2nd-tier NIEs, however, shows mixed results. It seems that differences among observers boils down to their views on the positional differences in the regional division of labour between the 2nd-tier NIEs and China, whether they are substitutable competitors (pessimists' view) or indispensable collaborators (optimists' view).

The fear of manufacturing “hollowing out” (or deindustrialization) due to the emergence of China seems to be contagious to all East Asian economies, including Japan, the 1st-tier NIEs and now the 2nd-tier NIEs. China's rising demand has encouraged the 2nd-tier NIEs to export “unprocessed” natural resources (such as oil, minerals, agricultural products) rather than manufactured products to China (Sato 2016: 212). China may have activated the Dutch disease – the adverse effects that a natural resource booming on industrialization through real exchange-rate appreciation – in the 2nd-tier NIEs,

¹²⁰ As noted earlier, Taiwan's economy contains a large segment of SOEs. One probable reason for it is that the Nationalist Party (KMT) has been interested in developing the segment that could be placed under control in the Formosan economy.

not only discouraging them from investing in resource processing, but also making them inclined to import low-priced manufactured products from China (see Sato 2016: particularly 212-216).

5.2.4 China

Like Japan, China experienced Western imperial encroachment in the mid-19th century, but unlike Japan, it failed to carry out a unified campaign of nation-building. The chaotic domestic situation remained even after the establishment of the Republic in the mainland (1928-1949), due to internal strife involving strong warlords, warfare with Japanese imperialists (1937-1945) and a civil war between nationalists and communists (1945-1949). The UN embargo due to its intervention in the Korean War (1950-53) deprived China of its commercial opportunities with the West, which obliged it to strengthen its strategic alliance with the Soviet Union. China, however, soon witnessed the schism in its alliance with the Soviet Union developing, and it shifted its development strategy towards “self-reliance” in the 1960s. After facing the devastating consequences of the Great Leap Forward (1958-1961) and the Cultural Revolution (1967-76), rapprochement with the US paved the way to the normalization of diplomatic relations, as well as the historic shift in China’s development strategy towards liberalization.

The contemporary development performance of China began with the arrival of the post-1978 liberalization period with rural agricultural de-collectivization, and its urban industrial development that commenced slightly later when direct interactions with the outside were allowed. Thus, China’s participation in the East Asian, region-wide catch-up process in a fashion advocated in the FG paradigm only began in the early 1980s, when China opened up with a few special economic zones (SEZs) for promoting economic development. During the 1980s, these zones, to which foreign investors were invited, were virtually compelled to export (Taylor 1996: 29), and they turned out to be successful. Built on the confidence and experience gained from the SEZs, the Chinese authorities subsequently took steps to further open up the economy.¹²¹

The Tiananmen incident (1989) and subsequent economic sanctions against China temporarily disrupted its development; however, the public reconfirmation by its leaders of a “socialist market economy” – with market-oriented development strategies – helped it resume growth. This took place in the fluid global landscape accentuated by dramatic political events such as the fall of the Berlin Wall (1989), the Gulf War (1990-1991) and the disintegration of the Soviet Union (1991). By the mid-1990s, China, Hong Kong and Taiwan had developed well-functioning trade and FDI linkages. In some sectors, these “greater China” networks began to seize technological competitiveness from Japan,

¹²¹ During the 1980s, the experiment with SEZs was expanded to coastal cities, and a few “development triangles” in other coastal areas were similarly opened up. Many inland regions were also permitted to attract FDI. The Chinese authorities and SOEs assigned senior managers to work in joint-ventures in SEZs for a period and then moved them to other SOEs, capitalizing on the professional training they acquired.

notably in electronics, more specifically in computer and telecommunications equipment. After the normalization of diplomatic relations with South Korea in 1992, China rapidly developed trade and FDI relations with the latter. While the 1997 Asian Financial Crisis disrupted ongoing regional economic integration in East Asia, China gained greater confidence from its neighbours in light of its decision *not* to devalue its currency for maintaining its market shares.

Observers perceive China as a major factor that affects the regional hierarchy. Since the early 1990s, particularly after the 1994 devaluation of the Chinese currency, investors from earlier industrializers in East Asia (as well as elsewhere) have increasingly bypassed the immediate followers and proceeded straight to China, to take advantage of its huge development potential. As noted earlier, the 2nd-tier NIEs' collective share as FDI recipients in East Asia has subsequently been declining. If China's challenge had merely been displacing the 2nd-tier NIEs, it could be regarded as a matter of local importance. But now, it is increasingly perceived that the rise of China has created international repercussions, certainly far beyond East Asia.

By the end of the 1990s China had become a new FG member, exporting natural resources (most notably oil and coal) and some typical labour-intensive products. Since then, the scale and structure of its foreign economic relations have dramatically changed. China has also altered the understanding of East Asian development, as its rise has affected the region's hierarchical order envisaged in the FG paradigm. Though it has not yet challenged Japan and the 1st-tier NIEs as a major source of technology, it has certainly posed a challenge to the 2nd-tier NIEs (and others), i.e., the recipients of FDI that had been ranked ahead of China in the early years. China has moved to counter this "belligerent" image, especially strong among the 2nd-tier NIEs, through its 2000 proposal for a China-ASEAN Free Trade Agreement (CAFTA) (concluded in 2004), including the early liberalization of certain agricultural products, thereby demonstrating that it was arguably more willing than Japan to open its markets and bear the domestic costs of leading the region.

China's coastal development has attracted large numbers of domestic migrant workers. In the early 2000s, observers started to point out that China had experienced the symptom of labour shortages in urban areas, and as a result firms in the coastal areas began to relocate some factories to inland regions. This is the application of the FG paradigm within China's domestic market. The Chinese authorities have been ready to take additional actions to cope with the purported loss in cost competitiveness for labour-intensive production, by relocating factories to its neighbouring economies, especially Vietnam and Cambodia. In this regard, the state authorities of the coastal provinces, most notably in Guangdong Province, were increasingly undertaking industrial policies – characterized with the local phrase, "Emptying the cage and change birds" (Lim 2016) – to upgrade local industrial activities.

An important question at hand is whether the development networks facilitate or deny the trickle-down effect of the FG paradigm. In any case, China – which seems to have been able to sustain its growth much longer than Japan – plays the greater locomotive role for region-wide development than Japan used to do in the earlier period (Li & Ding 2015). The rapid growth of FDI into China reflects its increasing participation in regional production networks, with the pattern of the division of labour in East Asia shifting from “inter-sectoral” to “intra-sectoral” specialization, spreading the trade of intermediate goods (parts and components) thinly but widely in the region. China has also played a much larger role in integrating the region, due to its extensive operation through numerous regional production networks (MacIntyre & Naughton 2005: 89). As shall be discussed further, China’s central authorities – more than its provincial and local governments – are willing, with various outward-looking campaigns, to replace Japan as the activator of the FG paradigm for an ever expanding geographical coverage, certainly beyond East Asia.

5.2.5 Overseas Chinese Communities (Chinese Diaspora)

The conventional approach to development studies is methodological nationalism, where socioeconomic phenomena are recorded and analyzed basically as national historical events. We must note, however, that interlinking Chinese communities spread in East Asia, which do not fit seamlessly with methodological nationalism, should be taken as important facilitators for industrial diffusion/relocations. These overseas Chinese have steadily increased, and over time many of them have developed an entrenched influential position in new locations. They have maintained personal connection (*guanxi*) among themselves and with their home country, together with preserved traditional units, customs and lifestyles. In fact, in the 2nd-tier NIEs these overseas Chinese (6 million or 34% of the population in Malaysia; 6 million or 14% in Thailand; and 6 million or 3% in Indonesia) have remained a distinct ethnic minority in new locations, and enforced their unity within and across national boundaries (Hamashita 1997: 134-135).¹²²

In the 1950s and 1960s, many European large-scale colonial firms withdrew, and new types of firms (retailers, designers and trading firms from the US) arrived seeking local subcontracting arrangements, and resuscitated many overseas Chinese businesses (Arrighi 2009: 36-37). The greatest opportunities for their enrichment and empowerment came with the reintegration of China into the regional sphere of development from the early 1980s, where inward FDI to China was mainly from overseas Chinese,

¹²² Many ethnic Chinese in the 2nd-tier NIEs are descendants of those who left China after the Treaty of Nanking (1842) following the first Opium War, which opened several treaty ports in China. British ports in Southeast Asia, most notably Singapore, were destinations for many migrant Chinese. These Chinese prospered under Western colonial rule during the rest of the 19th century, but the local assimilation of Chinese at new locations was often difficult, particularly in Malaysia and Indonesia, mainly because Islamic practices discourage intermarriage between Muslims and non-Muslims. As a result, the economic influence of ethnic Chinese has created serious social tensions in Malaysia and Indonesia, whereas the local assimilation with Buddhists in Thailand has been easier.

most importantly from those in Hong Kong (Gao 2003; see also Fuller 2008; Sharif & Tseng 2011; Taylor 1996; Zhu 2002). The large majority of overseas Chinese firms are small family-owned businesses, often characterized by “autocratic management, fast response to market niches and overseas family connections” (Hobday 1995: 56). Some of these Chinese firms have successfully continued to grow, but by and large they have remained still small in comparison with the typical Japanese and South Korean conglomerates. In any case, they have been crucial in establishing local production facilities, mostly for the production of typical labour-intensive consumer products (e.g. athletic shoes) for new foreign firms (such as Wal-Mart).

The linkages of Chinese communities provide a route of industrial diffusion/relocation which is somewhat different from the one envisaged by the FG paradigm. The positive effects of ethnic linkages on development are very plausible, as these linkages help bridge the information gap and contribute to contract enforcement. It is wondered to what extent such linkages are congruent with the rational proposition that the catch-up process of a national economy can proceed as long as the local environment conforms corporate behaviour based on cost-of-production concerns. The consideration of these linkages helps us build such a view that East Asian industrial dynamism does not require the framework of “methodological nationalism”, according to which economic development can be best seen as a “national achievement”.

The importance of Chinese linkages, however, should not be overemphasized, because there has been an increasing trend of “formalizing” the regulatory environment surrounding the relocation of manufacturing activities. The increase in scale, visibility and often poor working conditions in many factories in overseas subsidiaries have captured the attention of international activists who support an international labour code and human rights conventions. Thus, major firms have begun to issue “corporate social responsibility” statements that report compliance with their avowed labour standards. Such formalization arguably reduces the advantage of the “informal” Chinese linkages (Carney 2005: 344).

Some observers question if cultural advantages of ethnic linkages in general, and those of Chinese diaspora in particular, have conferred those Chinese firms involved an enduring competitiveness edge over non-Chinese firms (Huang et al. 2013). Others view that the predominance of overseas Chinese has somewhat declined over time, as Japan, South Korea and Western firms began to establish local production facilities without heavily relying on these traditional overseas Chinese facilitators (Carney 2005; Kim & Mah 2006; Smart & Hsu 2004; Wu 1998). In fact, it is argued that these overseas Chinese who were successful in developing traditional labour-intensive manufacturing sectors could be a major hindrance in the modern, knowledge- and skills-intensive sectors (see Ahlsrom et al. 2004).

In sum, ethnicity factors (more specifically, those related to Chinese ethnocentrism) provide an alternative and nuanced view about the division of labour and differences in achievement within national economies and across national borders in the region. The new view admits positive effects of the linkages (sometimes through clan-like networks) with the volume of transactions (trade, FDI, and other foreign venture arrangements). But the emphasis on ethnic linkages also invites a new question as to whether such linkages – which distinguish insiders and outsiders – may reduce economic efficiency and neglect the building of “modern” institutions and practices that facilitate these transactions in the long run. But one cannot deny altogether the importance of ethnic linkages. Indeed, South Korean firms were seemingly disadvantaged due to their inability to use ethnic Chinese linkages in the early stages of China’s liberalization. Once it established diplomatic relations with China in 1992, however, South Korea quickly began to invest in China’s northeast provinces where a large number of ethnic Koreans reside. As for the question whether Chinese firms in general have outperformed non-Chinese firms in China, Huang et al. (2013) did not find much empirical evidence to support the ethnic-advantage proposition. It is also an exaggeration to consider that all Chinese, no matter where in China their ancestors were from, are homogenous.

5.3. The United States (US)

As alluded to earlier, US foreign policy – which exerted significant impacts on East Asian allies in the Cold War period – should be taken into consideration in understanding regional dynamics. Much of East Asian development, particularly of Japan and the 1st-tier NIES, was nurtured in the postwar geopolitical context, within which the US did play a decisive role towards the region. Indeed, the hegemonic initiatives of the US were extensive, including actions such as occupying (and administering) Japan in the immediate post-WWII transition period, setting up the initial political economy parameters of East Asia, and activating the development of its local allies. Its continued security commitment in the ensuing years also helped to sustain a regional order to which many local leaders adhered in order to gain tangible benefits. Obviously, however, this does not mean that East Asian development was a Cold War phenomenon.¹²³ Indeed, the initial industrial development in Japan and the 1st-tier NIEs took place in the Cold War period, but that of the 2nd-tier NIEs and China was largely the event of the post-Cold War period, induced by rising linkages among East Asian economies. This section briefly delineates changes in US policy toward East Asia during the postwar period, which, it will be argued, had a great bearing upon the region’s development.

¹²³ In East Asia the Cold War tension already began to erode with the historical rapprochement between the United States and China in the 1970s, i.e., at least one decade earlier than in Europe.

5.3.1 Initial posture of US Foreign Policy

Towards East Asia, the initial postwar measure taken by the US aimed at regional pacification by demilitarizing Japan and cutting its external linkages. Soon, however, the rapid escalation of the Cold War, as witnessed with the Chinese civil war (1945-49) and the Korean War (1950-1953), transformed its strategic actions toward the region. The US sought to forge “hub-and-spoke” bilateral security alliances (Pempel 2005a) with “front-line states” in East Asia, namely Japan, South Korea, Taiwan, Thailand and the Philippines, as opposed to a region-wide multilateral security arrangement (Pempel 2005a: 8). Consequently, this dependence on the bilateral alliance constrained the diplomatic discretion of the region’s allies, while they were connected indirectly along separate bilateral tracks to Washington (see Katzenstein 1997: 23-31; Pempel 2005a: 6-12).

The initial spur of the region’s development had much to do with the US assistance to these allies in coping with external and internal threats, most seriously those from Asian communism. For instance, Japan, the most important Asian ally of the US, was a beneficiary of massive, stimulatory procurements resulting from the Korean War. A similar effect was also seen in the case of the Vietnam War on South Korea and Taiwan. In general, the US was supportive towards its East Asian allies’ export drive by allowing them to depend heavily on the US market. The Cold War also provided a “relatively” permissible environment in which these allies continued to protect and nurture their manufacturing sectors, with the US maintaining a tolerant attitude toward them (Beeson 2009: 13; Arvies & Lee 2002: 10). The principal reason for the US attitude (of tolerance) was to compensate for potential costs resulting from its insistence to these allies on not interacting freely with China (Pempel 2005a: 8).

The US in the late 1950s came to encourage regional integration centred on its largest Asian ally, Japan. It was anticipated that non-communist East Asia could function as a large market for Japan’s manufacturing as well as outlets for its exports (Cai 2008: 188). In fact, the aforementioned multiple bilateral security alliances of the US with East Asian allies indirectly provided Japan with a renewed opportunity to initiate intra-regional economic relations. Japan began to give out substantial amounts of aid (economic cooperation) to its neighbours. Japanese official aid has always been one piece of a broader, hybrid programme of economic cooperation that included both public aid and private investments. While the Cold War indirectly helped the “developmental states” to operate in East Asia, it facilitated the emergence of economic regionalism in a particular fashion against this background (for further discussion, see Kasahara 2013). Needless to say, many Asian allies of the US enjoyed massive windfall benefits of war-related procurements and spending (see Stubbs 2005).

The modern versions of the FG paradigm – the snowballing model, in particular – are models of centrifugal industrial diffusion, which depicts that the integrative circle of collective catching-up tends to expand geographically. This reflects the historical dynamism of rising “bottom-up” *de facto* regional integration due to private firms’ strategic moves, though often with assistance from their states, to

build production networks of different kinds. This type of integration is different from, but related to, “top-down” *de jure* regional integration among state officials “formally” agreeing on legally binding “special and differential treatments” through bilateral or regional trade and investment (FDI) agreements.

5.3.2 Rising Intolerance, Criticisms, Pressures

During the 1970s, the US showed a general trend of diminishing tolerance towards East Asian “mercantilism”. The gradual reduction of the Cold War tension in many parts of East Asia from the mid-1970s also indirectly contributed to the rising intolerance of the US towards Asian misbehaviour. In the 1980s, the US was more critical towards Japan and other Asian allies. Indeed, Japan, the most important Asian ally, was a beneficiary of massive, stimulatory procurements resulting from the Korean War. A similar effect was also seen in the case of the Vietnam War on South Korea and Taiwan. In the 1990s, the US strengthened (i.e. globalized) neo-liberal reforms in light of the disintegration of socialist regimes. It was the Asian Financial Crisis (1997-1998) that finally dealt a serious blow to the image of East Asia.¹²⁴ When Thailand and Indonesia (and later South Korea) appealed for emergency funding in 1997, the International Monetary Fund (IMF) instructed them to undertake austerity measures in public spending, and to further liberalize their markets. They were also instructed to impose higher interest rates, and to force their banks, if they failed to meet capital adequacy ratios to shut down. The idea was to cut demand and liquidity and encourage foreign investors to deploy their capital to kick-start the troubled economies again.

In retrospect, the effects of the crisis on the region’s economies turned out to be neither exceedingly detrimental nor long-lasting (with the exception of Indonesia). Many of the region’s leaders shifted blame for the crisis to outside influence. According to Higgot (1998), many East Asian economies that endured the prescribed austerity policy measures were engaged in a “politics of resentment” toward the IMF as well as the US.¹²⁵ One important side-effect of the crisis, Higgot further argues, was a psychological bond among regional leaders on the ground that they were common victims of a major disaster, and that East Asia should become a “single market”. Referring to Malaysia’s experience,

¹²⁴ Its formerly praised state-business relationships were now disparaged as forms of “crony capitalism”, synonymous with corruption and inefficiency (Beeson 2007). But this critical view did not gain universal consent, because it could not explain how some Asian developmental states, such as Taiwan, escaped the crisis. On the contrary, it might have been the gradual exit of the developmental states that had invited the crisis. Chang (1998), for example, argued that the cause of the crisis in South Korea was not due to the existence of its developmental state, but due to its gradual dismantling since the late 1980s. At any rate, the neo-liberal policy prescriptions came to be viewed as a direct threat to the developmental states in East Asia.

¹²⁵ In September 1997, Japan proposed the creation of a US\$100 billion Asian Monetary Fund (AMF). However, the United States’ opposition obliged Japan to return to the position of backing IMF reform programmes. Some of its neighbours then viewed Japan as abdicating its leadership in the region.

one observer argues that the crisis exacerbated tension between East Asia and the US, giving renewed life to Mahathir's aborted proposal for an East Asian Economic Caucus (which would ultimately re-emerge as ASEAN+3) (Beeson, 2007: 210).

There was also a perception that Japan's state and firms were either reluctant (if not unable) to take any steps to restore the region's growth by stimulating demand for imports from its neighbours as well as providing more productive FDI (recall here the heavy trade dependence of East Asia on the US and European markets). The continuing decline of the yen, which reached a new eight-year low of 147 yen to the dollar by August 1998, may have conjured up such a suspicion that Japan's strategy was to allow its currency to depreciate to cope with regional competition and to export its way out of the long-lasting recession. Indeed, the currency depreciation seemed to reduce, at least temporarily, the incentive for Japan, of which the financial sector had already suffering large non-performing loans resulting from the burst of the bubble economy earlier in the decade, to raise its imports from East Asia or boost investment in the region (Kasahara 1994).

Japan began, since late 1998, a series of initiatives for amending its damaged leadership image. First, it announced a US\$124 billion domestic stimulus package that would absorb some of the region's exports. Second, it provided some US\$ 22.5 billion in export credits as a means of promoting intra-regional trade. Third, it also announced plans to increase the transfer of technology through new aid projects to its neighbours. This transfer of technology project – particularly for the 1st-tier and 2nd-tier NIEs – was significant, arguably as a correct reordering of the FG paradigm in the region: “[This was] to allow them to upgrade their industries, move up the ladder of industrial production and ‘fly clear’ of Chinese competition – in the hopes that this would lead to a correct reordering of the ‘flying geese’ pattern of development in the region” (Hook et al. 2012: 225). And fourth, it disclosed a US\$ 30 billion initiative, known as the New Miyazawa Initiative, designated for the guarantee of sovereign bonds in East Asia.

5.4. The FG Paradigm as an East Asian Regional Development Model

Akamatsu was initially concerned with Japan's own catch-up process as seen from his standpoint as an observer in the 1920s and 1930s, without seriously considering the applicability of the process to elsewhere. Japan's initial process began as early as the late 19th century, and it aggressively pursued it up to the 1940s. In fact, there is not much elaboration in Akamatsu's writings as to how non-Japanese East Asian late industrializers could proceed with their catch-up process. As previously argued, the FG paradigm in the 1930s was far from complete, certainly not having reached its completeness to justify the country's expansionism under the banner of “the Greater East Asia Co-prosperity Sphere” (GEACS). It was in the second half of the 1980s that Japan began to elaborate the region-wide catch-up process. The issues in this section are concerned with the validity of the generalization of stylized

late industrialization based on a particular late industrializer, the application of Japan's earlier catch-up process to others. It resumed the pursuit after a relatively rapid post-WWII reconstruction. Before long, Japan became East Asia's sole early industrializer, and it regarded itself as the self-claimed target that its neighbours (late industrializers) were to emulate and to catch up with. One fundamental question then is: which particular aspects and periods of Japan's industrialization should be emulated by other late industrializers? As was noted earlier, it was this fundamental question that motivated Japanese policymakers and bureaucrats to spend a great deal of intellectual effort and finance to re-access its own development experience.

In 1987, Japan, more accurately its Ministry of International Trade and Industry (MITI), disclosed a new initiative, the New Asian Industries Development Plan over five years (1987-1992). With the FG paradigm as the foundation, the new initiative was an attempt to create an industrial plan for Japan's neighbours (particularly the 2nd-tier NIEs) that would harmonize with the needs of Japanese firms. It aimed at not only stimulating their export-oriented manufacturing but also facilitating the upgrading of their industrial structure (including that of Japan). MITI foresaw that the implementation of the plan would be based on three phases. In the first phase, the ministry would assist interested countries in formulating master plans to identify specific export-oriented sectors that – with some nurturing (including Japanese FDI) – could become internationally competitive. In the second phase, Japanese planners (bureaucrats and private consultants) were to recommend programmes to promote those targeted industrial sectors, relying on a mixture of hard and soft infrastructure. And the third phase would involve the dispatch of experts and technical support, together with foreign aid to implement them.

In its post-bubble period, Japan has no longer upheld the FG paradigm in its foreign policy. On the other hand, newly emerging China has provided a more suitable location for the FG paradigm. Towards the end of the 1990s, China's central authorities began to refer to “going out policy” (go global strategy), reversing the orientation of its own internationalization, i.e., linking the domestic economy to the outside by inviting foreign agents to the domestic economy to reaching out to foreign assets (resources, productive assets, brand names). Furthermore, whether the FG paradigm has taken place within China was also debated from the mid-2000s – together with the question of the arrival of what is known as the “Lewisian turning point” (the exhaustion of “unlimited” cheap labour) in the country's coastal areas – as well as the “Go West policy” (the internal-westbound diffusion/relocation of manufacturing activities) (see, for instance, Qu et al. 2012; Qu et al. 2013).¹²⁶ In the 2010s, China

¹²⁶ The point is that as the wages continue to rise in the coastal areas, many manufacturing firms have been obliged to migrate (westbound) labour-intensive activities from these areas to new inland locations that still offer competitively low wage labour in order to minimize the lost cost advantages in the international competition. Some firms may prefer to offshore these activities, say, to Asian neighbours, such as Vietnam, Cambodia, Bangladesh, and the like.

has further upgraded its industrial development of external-westbound diffusion/relocation with the Belt and Road Initiative (BRI). In our view, the FG paradigm has changed its banner carrier, and its scale has also upgraded from East Asia to the world.

The following pages present a critical discussion under the following headings: i) M-P-X sequence, ii) demand-related issues, iii) compatibility with the developmental state, iv) emulation of earlier industrializers, v) validity of life cycle concepts (product, market or enterprise), vi) long-term sustainability of regional development, vii) fallacy of composition, viii) level of analysis problems in East Asian development, and ix) other “miscellaneous ” issues, such as currency stability, regional hierarchy, and others, that were not explicitly discussed previously.

5.4.1 The M-P-X Sequence in East Asia

As noted earlier, it is a problematic exercise to conjure up the notion of product/sector specific production/cost competitiveness out of the M-P-X sequence. It was pointed out, for example, that export may take place without much (if any) “local” consumption (the case of export-processing zones) or “local” production (the case of re-export). If the M-P-X sequence is not accepted, then the concept of competitiveness also becomes shaky. The problem can be compounded when the scope of the M-P-X sequence (and thus competitiveness) is cast in a comparative context of a group of countries constituting a region.

In a regional context, late industrialization is understood to be a process of continuous reoccurrences of the M-P-X sequence across different products and sectors within and among national economies. Each of the region’s economies proceeds with its own industrial structural evolution via a series of product- and sector-specific M-P-X sequences, which purportedly resembles the earlier experience of earlier industrializers – arguably Japan in East Asia – with a certain time lag.¹²⁷ It is thus thought that a series of product- or sector-specific M-P-X sequences of Japan of the past is the same as that of the 1st-tier NIEs of today, and that of the 2nd-tier NIEs and China of the future. Therefore, for example, the burgeoning manufacturing activities in the 2nd-tier NIEs and China are thought to have resulted from emulating some parts of the experiences of their forerunners, Japan and the 1st-tier NIEs.

The stylized presentation of the M-P-X sequence poses several problems. First of all, it does not take into consideration the size of the national economy which affects the “rapidity” of nation-wide completion of each sector-specific M-P-X sequence – and thus the pace of overall industrialization.

¹²⁷ Time-lag is important; otherwise a large number of national economies are concentrated in a narrow range of manufacturing activities for specific products or sectors, which may engender the problem of product- or sector-specific overproduction. When the products are heavily export-oriented, then this situation is likely to lead to the problem of terms-of-trade deterioration. The issue is closely related to the fallacy-of-composition problem (discussed later in further detail).

For each product or sector, we can assume it is easier for small economies rather than larger ones to complete the M-P-X sequence. Arguably, therefore, it is easier for relatively smaller 1st-tier NIEs (most notably Hong Kong and Singapore) than for larger 2nd-tier NIEs and huge China to go through each sector-specific M-P-X sequence. On the other hand, smaller economies are less capable of being engaged in such manufacturing activities that can be feasible only with a certain minimum scale (such as shipbuilding, automobiles). The size of the national economy also affects the feasibility of inter-sectoral shifts along industrialization. After all, East Asia comprises of national economies with wide variations in size. Furthermore, the larger its size, the less likely that a country is engaged in trade with others. Thus, a country that ranks just below a large economy (say, China) may have to wait longer than another that ranks below a smaller economy (say, South Korea) for the external stimulus of industrialization.

Another somewhat different point of contention is about the initiative of import-substituting production. That is whether the initiative has been engendered within the local situation or imposed from outside. It may be questioned, for example, whether the rapid post-1985 growth of the 2nd-tier NIEs' export-oriented manufacturing is attributable to national industrialization projects in these economies or to the explosion of FDI from Japan and the 1st-tier NIEs. Yun argues that South Korea and Taiwan have gone through “double-linear” development, where export-oriented industrialization in labour-intensive sectors and import-substituting industrialization in capital-intensive sectors have synchronized, but the 2nd-tier NIEs have failed in import-substituting industrialization, and, as a result, export activities have depended on foreign firms (Yun 2003). Clearly, import substituting production in many parts of East Asia is characterized by high shares of manufactured exports produced by, or under the control of, foreign firms, and by an absence of local linkages between these foreign-based exporters and locally controlled ones (Burkett & Hart-Landsberg 2000: 248).

According to conventional knowledge, the successful cases of East Asian development are due to the earlier transition in policy stance – compared with other developing regions – from import substitution to export promotion. However, it may be argued that industrial upgrading does not come from a simple *across-the-board* shift from import substitution to export promotion. Instead, by focusing on specific targeted sectors, a country's development policy can start with protection to promote import-substituting production, and then later shifts toward export growth. Given all sectors differ from one another, the periods of sector-specific protection have varied among them. The point of the FG paradigm is that the protectionist measures for nurturing import-substituting production ought to be “incomplete”, not totally delinking the national economy from the outside. They only separate specific sectors for specific periods from the outside, and the sectoral choice of protection also shifts over time as protected sectors achieve some productive capacities.

As noted earlier, the M-P-X sequence for some manufactured products in East Asia is often not built on “genuine” import-substituting industrialization in local firms. More often than not, they are produced by foreign firms’ subsidiaries for overseas markets from the very beginning. There is also a sense of incompleteness regarding import-substitution in East Asia given that intra-regional trade is, to a large extent, the intra-firm trade of parts and components linking up different sites of production work. While it is difficult to make an accurate estimate, the high import-dependency points to the divergent completeness of import substituting industrialization among East Asia economies as well as unequal distributions of value added generated by the divisions of labor in the region (Burkett & Hart-Landsberg 2000: 248). The import-dependency – measured as a share of “foreign total value added (FVA)” in “gross export”¹²⁸ – for the 2000s may be estimated as follows: Japan, 10-20%; the 1st-tiers (except Hong Kong), 40-50% (Hong Kong: < 30%); the 2nd-tier NIEs (except Indonesia), 20-30% (Indonesia: < 20%); and China, 30-40% (see Banga 2013: Table 2).¹²⁹ In the extreme case of re-export, a normal M-P-X sequence does not exist, and M and X heavily overlap, as virtually all imports are to be exported with hardly any real value added. Furthermore, M continues to go up as X goes up.

5.4.2 Demand-related Issues in East Asian Industrialization

Clearly, the consideration of final demand, regardless of whether it is national (domestic), intra-regional (East Asian) or extra-regional, is an important issue. This is because it is pointless to produce goods that do not command market demand. As a late industrialization model, Akamatsu’s original model points to domestic demand for consumer goods as the essential stimulus for instigating import-substituting production. The modern FG paradigm (tinted by the PC theory) with the M-P-X-M’ sequence also assigns early industrializers (e.g. Japan and the 1st-tier NIEs) the task of supplying (export) technology, intermediate products, machinery to late industrializers (e.g. the 2nd-tier NIEs and China), as well as demanding (reverse import) final products from them. Indeed, we have witnessed East Asian regional integration in terms of the rise of intra-regional trade and FDI, but the proportion of “reverse import” (by Japan and the 1st-tier NIEs) in the intra-regional trade is still limited.¹³⁰

¹²⁸ Strictly speaking, the share of foreign value added in total efforts is different from “import content of exports” (see Banga 2013).

¹²⁹ The 2nd-tier NIEs exhibit a lower share of FVA in gross export than the 1st-tier NIEs do, because they are still engaged in the production/export of raw materials and resource-based products that do not require relatively large quantities of imported parts and components. China shows that FVA’s share in its total exports rose rapidly, from 19% in 2000 to 33% in 2008, which means that the assembly activities (with many parts and components) are rising. All in all, the import-dependency of manufactured exports, with the notable exception of Japan, involves inputs containing high per-unit value added in final output, with an unequal distribution of value added generated by vertical divisions of labor between leading and following countries.

¹³⁰ Japan has had difficulties in meeting expectations from its neighbours which have claimed that its market should be more open to their imports. Japan’s own fear for the “hollowing out” of its overall manufacturing sectors has contributed to the slow restructuring of its core industrial sectors. It has not been able to scratch the “full set” industrial structure, with the increasing reluctance to export employment opportunities.

The modern FG paradigm, with the notable exception of the PC theory, is by and large a supply-side argument, focusing on the competitive position of a national economy in producing a particular product group (or more broadly, its specific manufacturing/industrial sector). All in all, East Asians are generally more producers than consumers, meaning that considerable portions of their imported goods are raw materials, intermediate goods (parts and components) and machinery which are for local production (i.e., further processing and export) than local consumption. Thus, the recent rise of East Asian intra-regional trade does *not* necessarily mean that the region has become *less* dependent on extra-regional markets for final consumption. On the contrary, East Asia's development has been highly "externally contingent", with the US, particularly its consumers, being the engine of the region's growth. In short, the rise of regional transactions has been attributed to the corporate strategy of using low-cost economies as export platforms to extra-regional markets.

Of course, the FG paradigm does not state that East Asia presents a self-contained, exclusive region. Evidently, the traditional extra-regional markets have continued to provide major outlets for the region's exports, but such demand has recently been clouded. Diminished growth in these markets, a rising protectionist tide, and strengthened regional trading blocs, all present formidable demand-side limitations to the outlook of the export-led development of East Asian economies. In this regard, China, as the region's dominant export platform, has become the single most significant, regional provider of demand, most of all, for raw materials, parts and components, and machinery. China has begun to absorb more diversified products from within the region, and slowly substituted the US as a major export market for the region's exports. Indeed, China has become the largest importer for most of the East Asian economies, and arguably the strongest promoter of East Asian economic integration. The rise of the FG paradigm within China may have induced the "domestic" reverse import of its coastal areas from its inland areas. Therefore, its contribution to the region's inverse import from its neighbours, such as Laos, Cambodia, and Vietnam as well as elsewhere has been relatively limited. In any case, the recent emphasis in its development strategy on domestic market rather than on overseas markets, may raise the imports of consumer goods. Some observers argue that there are "two" leaders for East Asian follower geese; Japan has performed the role of "industrial upgrading intermediary" and "supply capacity augments", and the US (and now Europe as well) as a provider of market by keeping its markets as open as politically possible so as to allow for its recycling among the Asian economies (Ginzburg & Simonazzi, 2005: 1069-70).

The massive flow of FDI – in the manufacturing sector in particular – from Japan and the 1st-tier NIEs in East Asia was considerably due to the corporate strategy to create an efficient export-platform for final products to service the extra-regional markets of the US and Europe (Yun 2005: 39). But this was not the total picture. Much of that FDI, most notably in the automotive industry, then went directly to these importing markets in order to meet strong protectionist policy measures. Many

production facilities that have been transferred to the US and Western Europe means that FDI – supposedly the most important channel of productive activities and technology transfer – is not always efficiency-seeking but market-seeking.¹³¹ The FG paradigm does not elaborate the shift in relative size (i.e., the change of demand configuration for final and intermediate products) between the regional market and the extra-regional markets. The shift of demand (markets) has caused remarkable impacts on foreign firms operating in the 2nd-tier NIEs and particularly China. It is reported that, for instance, the main motivation for Japanese FDI in China has shifted to gain access to the local market (Terry 1996: 193, see also Liu & Shi 2018). This means that the consideration of production cost, the central tenet of the modern FG paradigm, may be taken over by market access consideration.

5.4.3 FG Paradigm with the Asian Developmental State: Compatibility Question

One interesting question about East Asian development is the conceptual compatibility between the developmental state and the FG paradigm, both of which are regarded as the main hallmarks of the region's late industrialization. It is clear that the Japanese state in the late 19th century articulated national objectives and policy choices, and prioritized specific sectors over others in light of changing national objectives. This characteristic of the state – the developmental state in short – continued to function, although in a steadily evolving fashion. Thus, the state of late industrializers, according to Japan's view, should undertake more than the conventional tasks of a night-watchman.

Japanese political leaders (particularly, top bureaucrats and researchers) long perceived that the developmental role of the state should reach beyond national boundaries. In fact, this idea manifested itself as expansionism – whether enmeshed with militarism or not – since the prewar period to the recent past. As noted earlier, in 1987, Japan's MITI disclosed the 5-year New Asian Industries Development Plan, to create an industrial plan for Japan's neighbours (especially the 2nd-tier NIEs) that would harmonize with the needs of Japanese firms. It aimed at stimulating their export-oriented manufacturing as well as facilitating the upgrading of the industrial structure of the region's economies (including Japan).¹³² This new plan was seeking to link aid money concretely to fostering specific export sectors by offering Japan's expertise in industrial development (Arase, 1994: 129–134). Hatch & Yamamura (1996) argue that this initiative could be viewed as Japan's own attempt to apply its traditional domestic vehicle of “administrative guidance” to a wider geographical area of East Asia

¹³¹ The large volume of Japan's FDI flows to the United States and Europe remained for a few years but slackened later whereas Japan's FDI in different locations in East Asia continued much longer.

¹³² MITI anticipated that the plan would be carried out in three phases. First, Japan would assist interested countries in draw up master plans to identify specific export-oriented sectors that – with some nurturing (including Japanese FDI) – could become internationally competitive. Second, Japanese planners (bureaucrats and private consultants) would recommend programmes to promote those targeted industrial sectors, relying on a mixture of hard and soft infrastructure. And third, Japan would dispatch experts and technical support, together with foreign aid to implement them (Terry 1996).

(more notably, Southeast Asia).¹³³ It showed the ways that all manufacturing firms (particularly Japanese ones) that were operating (or about to operate) in East Asia would benefit from various kinds of Japan's official aid for infrastructure, finance, market access and the like. All in all, therefore, the initiative was to present a blueprint for orderly regional development in a most convenient fashion for Japanese industrial reforms. This would be done by means of "the Asianization of the Japanese economy" or "the Japanization of the East Asian economy" (Hatch & Yamamura, 1996, 27).¹³⁴

All late industrializers face the issue of how to mobilize and guide their scarce resources to promote their catch-up process, and here their states are purported to play a vital role. However, the state's role may be seriously challenged, when the target of emulations (the early industrializer) for late industrializers are exhausted. Implicitly, the FG paradigm, at least Akamatsu's model, assumes that late industrializers can observe ahead of them the existence of forerunners from whom they can gain, among others, the information on new products, their production processes, and required technology. But what if late industrializers come to realize their catch-up process reduces the "advantages of backwardness"? It is likely that beyond a certain stage of development, research and development (R&D) for technological invention and innovation rather imitation becomes more important for further economic growth. It is then questioned whether the state, which is not necessarily well equipped with knowledge of advanced technology, can continue to forge "appropriate" industrial policies. In such a situation, the private sector, according to Wang (2011: 60), can benefit more, if democratization¹³⁵ and decentralized resource allocation are increasingly improved. One implication of the discussion above is that the development role of the state is a transitory function.

It is argued that the developmental state thus reflects the historical context of domestic and international parameters. Johnson's seminal case study on Japan, for example, identifies such a period for the country as 1925 to 1975 (Johnson, 1982). In general, the key period for the developmental states in East Asia is thought to be roughly from the late 1950s through to the 1980s, as the overall

¹³³ Hatch & Yamamura (1996: 139) state: "Just as the Japanese bureaucracy used the carrot of cheap credit to lure firms to invest in strategic industries during the rapid growth period, the government-business network today is using the carrot of foreign aid and investment to entice Asian governments to adopt policies that boost the Japanese economy."

¹³⁴ It is reported that around 1990 Japanese firms – through their production networks – sent 80% of their exports from their affiliates to other East Asian economies, and obtained 95% of their imports from Asian producers (Gill et al. 2007: 6).

¹³⁵ Fearing social injustice (crony capitalism) resulting from the coalition of the state and private interest groups, some observers emphasize democratization is necessary for sustained development before the coalition become entrenched (see, for instance, Wang 2011).

conditions to support the developmental state began to change after that period; yet, the developmental states remained due to the nature of “path dependency” (Stubbs, 2009: 9-10).

The retreat of Japan as the leader of the FG paradigm does not mean that its statist model was also dismissed altogether. As alluded to earlier, the contemporary East Asian intellectual climate has engendered a new leadership that embraces the role of the developmental state. More specifically, the political authorities of Beijing have been vocal about industrial development cooperation with others in light of the new (post-Cold War) geopolitical configuration. Indeed, Beijing authorities (perhaps more so than provincial and local political leaders) have undertaken a series of impressive initiatives to promote the country’s outward-oriented development ¹³⁶(see Deng 2018; Zhu & Pickles 2014). As will be further discussed (see Chapter 6), many of these initiatives in the Chinese diplomatic discourse can be seen as a similar but globalized (scaled-up) version of the FG paradigm that was advocated in and by Japan in the 1980s and 1990s. In other words, there has been the transition of the FG paradigm from a Japan-centric framework to a China-centric one (see further discussion in Chapter 6).

5.4.4 Emulation of Earlier Industrializers

The modern FG paradigm depicts industrial diffusion in a rational and orderly fashion from early industrializers to late industrializers by emulation (learning). They are all similarly active in pursuing export-oriented development, and getting tightly interlinked with their neighbours. It may be questioned whether this trend for greater interdependence (integration) is attributable to the conscious efforts on the part of national economies in the region. Japan was the single most prominent advocate of state interventionism as an alternative to Western free market-orientation. In the 1980s, Japan was confident of its experience, and stressed that its neighbours should emulate its catch-up experience, including the notion of the developmental state. As noted above, therefore, the absorption of Japan’s massive injections of finance (public and private finance) and technical know-how (through trade and FDI) that, according to this East Asian front-runner, would be able to facilitate the diffusion of its export-oriented developmental model.

¹³⁶ Japan’s attempt to regain the leadership with the proposal of the Asian Monetary Fund (AMF) immediately after the outbreak of the Asian Financial Crisis failed to take off. Meanwhile, China began some of its cooperative moves – such as the Chaing-Mai Initiative (CMI) (2000) and free trade agreement with ASEAN – along multilateralism in the 1990s, but the much more dynamic and far-reaching initiatives took place in the 2000s and 2010s. The latest developments of the CMI multilateralization (2009) shows that China offered financial resources just as much as Japan did. This was one of the signs that show Japan has been losing the upper hand in regional economic integration (Lee 2013: 431). The initiatives include the creation of the Shanghai Cooperation Organization (SCO) for Central Asia, the promotion of South-South diplomacy of BRICS (with Brazil, Russia, India and South Africa) together with the establishment of the BRICS New Development Bank, as well as the Asian Infrastructure Investment Bank to promote Eurasian connectivity along the Belt and Road Initiative announced in 2015. See Kasahara (2017a; 2017b).

In this regard, a key question is whether the experience of Japan's developmental state presents a generalized type of late industrialization (import-substituting production) to other late industrializers.¹³⁷ Here, it was thought that the major firms from Japan (and the 1st-tier NIEs, for that matter) would enable all other East Asian economies to acquire the capital and technology to overcome bottlenecks in production and to raise their manufacturing competitiveness. Indeed, it is not far-fetched to expect that the experience of industrialization of Japan, South Korea and Taiwan collectively can provide a development trajectory for others.

Yet, East Asia is a region of diversity, particularly in terms of scale, which makes it difficult for all of its constituent economies to follow (emulate) the same development path. Researchers have long debated as to how well the relatively resource-scarce Japan, South Korea and Taiwan can provide viable models of emulation to resource-abundant economies. To take more extreme cases, how could we expect that Singapore and Hong Kong can offer a viable national development blueprint to many other resource-abundant economies? In the 2nd-tier NIEs, resource abundance has allowed them to capture resource rent, which has been used to finance crucial social services, such as education, training and health, as well as to enhance the legitimacy (redistribution, nation-building) and capacity (bureaucracy, public enterprises, security services) of the regime (Jomo et al. 1997: 11). Furthermore, being heavily influenced by political issues (such as inter-ethnic distributive equity), the 2nd-tier NIEs' interventionism has been more multifaceted, or at least more complicated than achieving the enhancement of national manufacturing competitiveness.

China presents a totally different context altogether. Indeed, in the post-1978 period, China has come to resemble (emulate) earlier industrializers in the region by pursuing an export-oriented development strategy. Its political (party) authorities, i.e., the central state as well as provincial ones, have been heavily involved – with economic planning and public firms, such as state-owned enterprises (SOEs) and communal or township and village enterprises (TVEs) – in the country's economic development. It has emulated neighbouring earlier industrializers in some sense but has also differed from them. But the question still remains as to whether the recent rise in China's share of labour-intensive manufacturing in the region is due to China's conscious emulation of these early industrializers. Given

¹³⁷ From the 1960s to the 1980s, South Korea and Taiwan developed their authoritarian developmental state that resembled Japan's earlier and milder example; similarly, Singapore and Indonesia have also formed their own authoritarian state. These states have differed in specific policy measures, most notably, in dealing with foreign firms to promote local development. Some East Asian states (Japan, South Korea and Taiwan) tightly restricted inward FDI, whereas the 2nd-tier NIEs were initially ambivalent, but later became more willing to accept such FDI. An even more drastic transition was seen in China's policy measures – from negative to positive – towards FDI in the 1980s. And yet some others, such as Singapore and Hong Kong, have almost always welcomed it. As a result, the industrialization processes in East Asian economies have exhibited the rise of local firms as central actors in Japan, South Korea and Taiwan, whereas foreign firms often dominated elsewhere.

that China's forerunner industrializers themselves are so diverse, it is difficult to determine which forerunners' development path China has been intentionally emulating. Some critical observers insist that the role of the state, the developmental state, is not the hallmark of China's recent rise, arguing that it is its general retreat (with liberalization, deregulation and privatization) since the late 1970s that has activated the resurrection of its economy. In other words, the state's "dysfunctionalization" (Breslin 1996) is the key for its development. If this argument would be valid, the issue of emulation becomes unclear (see Chapter 6 for further discussion).

5.4.5 Life Cycle (Product, Market, Enterprise, and Industry)

The verification of the product cycle (PC) theory in East Asia confronts various problems. Both Akamatsu and Vernon argue that production for export in the countries to which manufacturing migrated would build on an experience of import-substituting manufacturing. Such assumptions, however, have become less and less relevant in the East Asian experience, as the production sharing practices for many products indicate that their fragmented offshoring – i.e., the production of their parts and components and the assembling of them into final products – does not neatly coincide with the pattern of their life cycles. Furthermore, offshore manufacturing could be affected by "other types of cycle", say, market cycles (or market fluctuations), enterprise life cycles, or even industry life cycles.¹³⁸ Overall market cycles can affect consumer demand (tastes, preferences and prices) towards products domestically and abroad, and the latter certainly seemingly affects the decision to go abroad. (A discussion on demand will be presented later.)

The life cycle of firms – particularly large ones that produce different product groups – may or may not coincide with the life cycle of their products. (For a literature survey of the "corporate life cycle" and the "industry life cycle", see Miller & Friesen 1984 for the former, and Kelpper 1997 for the latter). Furthermore, firms may flourish independently of market cycles, shifting from one product cycle to another irrespective of the phase each product has reached. Thus, industrial relocation as such must be interpreted as the point and counterpoint of these three possible cycles, rather than exclusively product cycle alone (Taylor 1986: 760). As shall be discussed below, in addition, manufacturing firms may decide to offshore production activities due to reasons other than life cycles of their own, or their products, or the domestic market. We have seen that one of the major factors that had caused major

¹³⁸ Furthermore, a full life cycle for some consumer products may not occur in a single "innovating" economy. In some cases, early industrializers invent new products in a rudimentary form, but fail in commercializing them. For instance, researchers in the United States came up with basic products of home appliances, such as videotape players (VTRs) and flat panel displays (FPDs), but their commercialization towards affordable consumer products took place elsewhere. Even if we accept the existence of product cycles, we cannot say that the manufacturing activities of all products are ultimately regionalized in East Asia. As Taylor (1986) hints, the offshoring of manufacturing activities could be affected not only by product cycle, but also by two other types of cycle, namely, "market cycle" (or business fluctuations) and "enterprise cycle".

outward FDI from Japan and the 1st-tier NIEs in the 1980s and onward were changes in exchange rates (more specifically, currency appreciation). In some extreme cases some firms have survived, or prolonged their enterprise cycle, by shifting the industrial sectors to which they belonged.¹³⁹

The theory predicts that firms of early industrializers that initially produced the consumer product in question will exit from the market during the last phase of the product's life cycle, leaving domestic demand to be met by exports from late industrializers where production has migrated. For many products, however, the phase of "reverse import", i.e., the last phase of the M-P-X-M' sequence, has not taken place in a substantial scale in Japan and the 1st-tier NIEs. This is because from the very beginning East Asian firms have often targeted extra-regional markets, most importantly that of the US. Thus, the shift of production does not imply that former producers, such as Japan and the 1st-tier NIEs, are willing to substitute the US as the overseas markets. This is because the external relocation could be motivated by, among others, protectionist measures in extra-regional markets. However, we must acknowledge that Japan and the 1st-tier NIEs (South Korea and Taiwan) have more recently increased the reverse import of not only intermediate products but also final products.

One life cycle that has not been discussed so far is what may be termed as the "industrial life cycle" of a national economy. It can be intuitively argued that the industrial life cycle tends to be longer for a large country, such as China, compared with small economies, such as Singapore. If a national economy is of a fairly large size, then it is possible for it to go through the "full set" structural shift along its industrial development over time. However, small economies may not be able to accommodate activities of a certain minimum threshold for viable operation. Generally speaking, therefore, it is normal for smaller economies to face the phase of deindustrialization after their peak period of industrial activities. This means that the offshoring of certain manufacturing activities cannot take place in some national economies, as they require the operation of some scale. Again, not all national economies in the region could meet the conditions.

5.4.6 Sustainability of East Asian Development: Dialects

The FG paradigm may appear to be a paradoxical model; by necessity it presumes the different stages of industrial development among national economies, but its working is exactly to reduce the difference. The FG paradigm can sustain as long as early industrializers and late industrializers can effectively deal with the tension emanating from the catching-up process. The catch-up process in East Asia boils down to the question of whether the region's economies can effectively upgrade – in Akamatsu's words, "homogenization" by late industrializers and "heterogenization" by early industrializers – their manufacturing activities.

¹³⁹ For instance, Toyota, a Japanese automaker giant, one of the world's largest enterprises, started as a manufacturer of textile looms in the late 19th century, and later shifted into automobiles.

In the 1970s and 1980s, Japanese FG paradigm advocates were generally optimistic about their country's capacity to upgrade its industrial structure in order to help its neighbours to upgrade theirs. While critical researchers remained suspicious, the collective catch-up then appeared to be taking place relatively smoothly. East Asian economies, particularly the 1st-tier NIEs (particularly, South Korea and Taiwan), managed to upgrade their industrial structures and developed rapidly by adopting handed-down technology from Japan. With the progress of region-wide industrialization, the intensity of competition (or the degree of congestion) is likely to increase as the numbers of East Asian firms regionalize their operations.¹⁴⁰ For instance, the original investors from a forerunner economy (say, Japanese firms) and those from a follower economy (say, South Korean firms) are likely to scramble over their common follower countries (say, Malaysia).

Evidently, the problem of industrial restructuring arose in the 1990s when post-bubble Japan – and similarly, but to a lesser extent, South Korea and Taiwan as well – increasingly found it difficult to generate rapidly new products, new productive techniques and new industrial sectors.¹⁴¹ Japan came to face a technological wall; as a result, a region-wide catching-up process also somewhat slowed down. In other words, the process may become less sustainable (self-defeating), because the continued collective catch-up entails the maintenance of what may be called a technology gap between Japan and its neighbours. Here, many researchers have questioned Japan's prolonged recession (and thus the capacity to proceed with heterogenization) has considerably dampened the dynamics of dialectics. In this regard, all East Asian states have consciously allocated the increasing shares of their public and private finance to research and development (R&D) in order to hasten their upgrading processes.

While discussing the integration/snowballing model, it was argued that its key concept is a sustained hierarchical order and its steady spatial expansion. This stability arguably hinges on the “implicit” presumption of similarity among regional economies, with the only difference (which is very crucial) being where they are located in the modernization process. As will be further elaborated later, the reality is huge diversity among East Asian economies, in terms of not only the levels of development but also institutional and all other settings. Naturally, it is unrealistic for all these economies,

¹⁴⁰ This process may be unsustainable (or self-defeating), because, as discussed earlier, the FG paradigm by necessity presumes interacting national economies are operating at different stages of industrial development, but its working is exactly to reduce the difference. The continued collective catch-up entails the maintenance of what may be called a technology gap between Japan and its neighbours.

¹⁴¹ Already in the early mid-1990s, the inabilities of Japan's successive administrations to take effective steps to tackle its prolonged economic problems undermined any potential for the country to assume a true leadership role in Asia (MacIntyre and Naughton 2005).

particularly those located at the lower parts in the regional ranking order to be content with their position.

The integration/snowballing model shows that intra-regional, efficiency-seeking FDI grows as the interacting region develops, and that host-economies of such FDI will eventually grow (with industrial upgrading) to become home-economies over time. The model explains that the hierarchical order directs efficiency-seeking FDI flows, and shows which economies are likely to be the earlier home- and host-economies and which economies are the late ones. Here, it is questioned to what extent the characteristics of intra-regional FDI and reverse import confirm this explanation in a sustained fashion. See, for instance, the FDI flows from Japan (since the mid-1990s) and South Korea (since the 1997 crisis) declined for a long period. The model shows that new FDI destinations are continuously being added to the integrative circle, but it does not explain much about effects of snowballing on older destinations. Related to the regional hierarchy is the identification of investors, i.e., the ambiguity regarding who are the exact investors undertaking FDI from the 1st-NIEs and the 2nd-tier NIEs. It may be that foreign investors from the 1st-tier NIEs, for instance, are not only their indigenous firms but also subsidiaries of major firms from Japan and elsewhere that had invested there earlier. Similarly, the foreign investors from the 2nd-tier NIEs include not only local firms but also firms from Japan and the 1st-tier NIEs that had invested there earlier as well. Then, the number of firms scrambling for efficiency-seeking FDI destinations tends to increase over time.

As discussed previously, the modern FG paradigm generally places interacting East Asian economies into several clusters, basically being grouped based on per capita income. Such clustering, however, could be problematic. Just because two economies have similar levels of per capita GDP, this does not mean they should be at a similar level of industrial development and receive similar amounts of FDI (perhaps on the per capita basis). We are aware that the 1st-tier NIEs of East Asia are two groups with contrasting FDI policies. While Singapore and Hong Kong have always been open to FDI, South Korea and Taiwan used to be restrictive for some time. Thus, in addition to the level of development as such, government policy affects FDI inflow. This means that industrial development as such can be promoted with or without attractive FDI policy, depending on the local situation.

As discussed earlier, one important factor that has affected FDI flows in East Asia is ethnic networks.¹⁴² The overseas Chinese networks have greatly contributed to FDI flows from the 1st-tier NIEs (except South Korea) to the 2nd-tier NIEs. Hong Kong investors have been particularly active

¹⁴² In addition to the dominant Chinese networks, we also observe the Korean networks. More specifically, South Korean firms have been actively investing in Yanbin prefecture, China – which borders North Korea – that hold a large number of ethnic Koreans (for further discussion of diaspora investments in East Asia, particularly in China, see Wu 1998).

in the special economic zones (SEZs) located in the southeastern, coastal areas of China since the early 1980s. It should be noted, however, that a portion of FDI from Hong Kong is “round trip” investment – of which the magnitude may be estimated to be 40% or more – meaning that it originates from firms within China but is diverted through companies set up in Hong Kong in order to take advantage of various investment incentives offered by the Chinese authorities to attract FDI (Machado 2003: 219). Arrighi points out that Chinese business communities in Hong Kong, Taiwan and Singapore “promptly jumped on the boat of Deng Xiaoping’s ‘market socialism’ [as announced in the early 1990s]” (Arrighi 1996: 33).

Investors from many economies may join the competition over relocating their obsolescent plants, causing an increased congestion in markets. Three possible solutions may come to our mind. The first is to simply expand the membership (or increasing the number of geese flying together) by adding new ones at the bottom – below the 2nd-tier NIEs and China, such as Vietnam, Cambodia and Myanmar – so as to give more space to investors. The second is to improve the market conditions of the existing members or to intensify the exploitation of the market. The third is to get out from the existing group, and go alone, exploring markets outside the region, such as India, Russia and Latin America. Among the non-Japanese Asian economies, the third option may be most popular among South Korean investors who, in term of destination, have invested beyond the region most extensively than others.

The modern FG paradigm does not effectively explain how the regional hierarchy can be maintained. It is plausible that some economies can be caught up by others (thus there will be a hierarchical re-ordering) or even worse, be ejected from the regionally clustered development process. Applying hegemonic stability theory to East Asia, it may be stipulated that this type of “mishap” should be avoided if Japan’s economic behaviour should become hegemonic and maintain “regional stability”, by acting like a traffic-controller of FDI flows (including technology transfer). This is simply an unrealistic stipulation, particularly in the era of globalization (as well as the rise of China). How about China’s new leadership? The question is whether China’s rise is consistent with the traditional catch-up process as postulated by the FG paradigm (see further discussion in Chapter 6).

5.4.7 Fallacy of Composition in East Asian Manufacturing

The fallacy of composition, the idea that the whole and its parts do not share the same characteristic, is applicable to export-led manufacturing development. Akamatsu’s original model postulates that the domestic production of consumer products is initially directed to the local market, and when the local demand is met, export will commence. However, the reality of East Asia does not always follow this pattern. In Akamatsu’s model, the fallacy of composition was not a relevant issue as it dealt with a late-industrializer (Japan) as the unit of analysis without referring to other late industrializers competing with Japan.

The modern FG paradigm as a regional development model includes more than one late industrializer. As explained earlier, large firms may set up overseas production as a platform for both domestic sales – in the local market – and overseas sales – in the original country market (reverse import) as well as third-party markets. In the East Asian catch-up process, the fallacy of composition has manifested itself in one serious issue, overproduction. Although the FG paradigm does not point out this issue, many East Asian economies have been engaged in an export-led development strategy with a similar group of relatively labour-intensive products. Clearly, the region has not been very successful in undertaking wide product/sectoral diversification. At any rate, given the emphasis of export over consumption, one major consequence is the overproduction of targeted products as well as the general deterioration in terms of trade.¹⁴³ Furthermore, the gradual surge of protectionist sentiment (and restrictive measures) has raised the question as to whether the export-oriented development strategy is able to deliver sustained economic growth.

Some observers point out that the 1997 Asian Financial Crisis resulted from the fallacy of composition at work, i.e., the inadequate responses to the overproduction problems afflicting the region (Burkett & Hart-Landsberg 2000; Yun 2003). But this seems to be a rather simplistic argument. Indeed, the 2nd-tier NIEs were increasingly in competition with China, particularly after the latter's currency devaluation in 1994, which generated regional excess capacity in many manufacturing sectors. The lack of export diversification – in terms of products and destinations – could have been avoided if the earlier industrializers in the region (for that matter, those of the world) had more effectively restructured their economies. However, this argument cannot explain adequately why the crisis hit many, but not all, of the East Asian economies that are engaged in the export-led development strategy.

5.4.8 Level-of-Analysis Problems in East Asia

The FG paradigm embraces what may be called methodological nationalism, by focusing on the national economy as a unit of analysis, and the reduction of competitiveness of manufacturing firms means the reduction of sector-specific competitiveness of the national economy. But the level-of-analysis issue is a complex issue, i.e., the manufacturing firms and their original national identity should not be mixed up. It is thus not appropriate any more to take the meaning of “industrial upgrading” only in the context of autonomous national economic development.

¹⁴³ The overproduction issue could be reduced by the sectoral diversification among East Asian economies, as well as the greater reliance of the regional markets as opposed to extra-regional markets. Though historically Japan and the 1st-tier NIEs (particularly South Korea and Taiwan) used to be not actively engaged in reverse import, the recent trend has been more accommodating. And most importantly, the Chinese domestic market with a growing purchasing capacity has somewhat eased the problem of overproduction.

The emergence of production networks in the modern high-tech industries challenge the idea that equates the production (and export) of a particular product group with the stage of development of the national economy. As was discussed earlier, we observed in the East Asian region is the extensive practice of “slicing up the value chain”. The extensive intra-firm trade for intermediate goods in the East Asian region means that trade has occurred increasingly between different parts (subsidiaries) within large firms. Thus industrial upgrading may be re-defined as the “upgrading of a product produced” or as “moving-up into more sophisticated stages within a value chain”, resulting from “co-evolution between industry structure and firm behaviour within international production networks” (Yun, 2004: 174).

In order to understand the East Asian political economy, we should switch our viewpoint from an individual national economy to more firm-level activities, even though a nation state (national economy) continues to be the conventional analytical unit. In other words, the level of analysis focusing on the national performance may have become of increasingly less value in light of transformative manufacturing. The point is that industrial upgrading – the rise of competitiveness – of a national economy does not necessarily mean that all of its firms are upgrading. For that matter, not all of the successfully upgrading firms in the national economy are local/national firms. Clearly, the intensity of competition is likely to increase the numbers of East Asian firms regionalizing their operations. The original investors from an early industrializer (say, Japanese firms) and those from a late industrializer (say, South Korean firms) are likely to scramble relocating their “routinized” operations to “late-late” industrializers (say, Malaysia). But many firms, if possible at all, may avoid competition in choosing the locations for their overseas operations. Contrary to the FG paradigm, governments, viewing them as foreign encroachment, may attempt to control the advancement of foreign manufacturing firms. A case in point is South Korea which severely restricted the import of complete units of automobiles as well as FDI in the automotive sector. The government instead preferred the import of parts, components and technology, as well as special licensing arrangements. Accordingly, Japan’s automotive firms invested much more extensively in the 2nd-tier NIEs (such as Thailand and Malaysia) than in the 1st-tier NIEs (see Chapter 10).

5.4.9 Other Issues: Currency Stability, Migration, WTO Regime, Porous Regionalism, Japan-China Rivalry

We have left out several issues which have some bearing on the FG paradigm as a regional model. At least, in passing we should briefly identify them. The 1997 Asian Financial Crisis underlined the importance of regional cooperation to sustain stable financial relations (through mutual stable foreign exchange rates). The FG paradigm envisages the steady cross-border relocation of manufacturing activities, but this can be disrupted by volatile currency relations. The crisis underlined that each national economy’s self-help in financial management (including that of its foreign exchange regime) is not sufficient, and the contagion effects of negative consequences can aggravate the magnitude of

a crisis. Thus, the Chiang Mai Initiative of 2000 – a pool of foreign exchange reserves among the ASEAN members, China (including Hong Kong), Japan and South Korea to fend off currency speculation – for East Asia may be seen as the reinforcement of the neglected side of the FG paradigm.¹⁴⁴ At least in this aspect, Japan and China have developed an equal co-leadership role.

According to the FG paradigm (the product-cycle version in particular), the product/production standardization makes labour a critically important factor in determining production costs and location. Thus, firms engaged in producing mature products, it is understood, tend to offshore their production process (partly or fully). But this is not the only way of coping with international competition. As discussed previously as part of the critique of the product cycle model, the firms may prefer to retain their production activities at home – whether fully or partly – by using either labour-saving robotics or cheap foreign workers as a solution to rising domestic wage rates. For instance, in the 1980s in Japan there was a rise of illegal foreign workers (mostly from China and South Asia), and this led to political issues in the 1990s when the economy began to experience a post-bubble recessionary period.¹⁴⁵ Thus, the corollary, which is rather politically sensitive, is that strict regulation on immigration (particularly of unskilled labour) in earlier industrializers encourages a greater magnitude of relocation of labour-intensive activities in late industrializers.

It could be argued that the contemporary neo-liberal period of the WTO regime is different from the previous period in which many East Asian economies thrived. As discussed earlier, for many East Asian late-industrializers, the Cold War period was an opportune period in which large extra-regional markets showed their tolerance (or indifference) towards their neo-mercantilist development policies. Now, China, a WTO member (since 2001) as well as an ardent supporter of neo-liberalism, has become the most dominant player in the region. The question is how long (and to what extent) China will continue to tolerate, in the name of regional solidarity, its neighbours' neo-mercantilist development policies.

The international migration of manufacturing activities could be caused by the protectionist measures of major importers, and this was the case in point for East Asia in the 1980s. Massive FDI from Japan (and to a lesser extent by the 1st-tier NIEs) to major importing markets (such as the US and Europe) were initiated as the way to cope with strong protectionist policy measures as well as currency appreciation of the exporters in the second half of the decade. As a consequence, many production

¹⁴⁴ The participants of the Chiang Mai Initiative include all of the national economies under discussion with a single notable exception, Taiwan.

¹⁴⁵ In 1990, Japan passed legislation to authorize the selective legal entry of foreign workers, privileging Japanese descendants (up to the third generation) over non-Japanese ones. The government's justification was that the Japanese descendants (particularly from Brazil) would be more easily integrated into its society.

facilities may be transferred to the importers as well as to Asian neighbours (also large FDI from Japan and the 1st-tier NIEs). This shows that FDI – supposedly as the most important channel of productive activities in general and technology transfer – is not always efficiency-seeking but market-seeking.

No matter how it is defined, East Asian economic regionalism is “porous” in its actual operation. The region’s collective economic weight has greatly gained in the world, but this does not mean it can be self-contained. Its growth has extensively depended on extra-regional sources for raw materials and resources as well as on extra-regional outlets for their final products (Bernard & Ravenhill 1995). Clearly, the industrial development of East Asia, in particular that of China, has depended heavily on the business penetration of extra-regional firms (Fischer 2015). This means that East Asia cannot be self-contained, and its outer boundary continues to remain blurred. When the modern FG paradigm was popularized in the 1980s, the nine economies could be easily identified. At that time, regional development was represented virtually by those economies alone. But as the integrative/snowballing model shows, East Asia’s integrative boundary is porous and fluid. By now, new members have already been a part of regional development, e.g. Vietnam; and additional new members are clearly on their way, e.g. Cambodia, Laos and Myanmar. How about the Philippines, a long forgotten ASEAN member? In due course, East Asia has to forge closer linkages with large South Asian economies, such as Bangladesh and India. How about Australia and New Zealand as well?

In the contemporary situation in East Asia, the discussion on the FG paradigm as a regional development model cannot escape the issue of the rivalry between Japan and China. Japan used to advocate the FG paradigm, when few questioned its regional industrial leadership. In those days, the global acknowledgement of East Asian development was attributed to Japan’s leadership. Then, through the “transitional period” of the 1990s, the centre of gravity shifted from Japan to China. By the end of the 2000s, China’s nominal GDP had surpassed that of Japan.¹⁴⁶ Now it is China that has become the main advocate of the FG paradigm, albeit with some nuances in its interpretation of it (see, for example, Lin 2011, 2014a). The issue that concerns us most here is not the “quantitative” rise of China’s economy as such, since it has been going on since the 1980s and 1990s, but more of Japan’s inability to upgrade its industrial structure in such a way to pull up the rest of the region. The FG paradigm’s functionality is, after all, the trickle-down of industrial activities without the leaders facing serious industrial “hollowing out”, or deindustrialization. If the rise of late industrializers reflects the survival strategy of firms in early industrializers to retain their mundane old activities abroad leaving the early industrializers increasingly deindustrialized or hollowed out, then the regional hierarchy is flattening out.

¹⁴⁶ China had surpassed Japan much earlier in real GDP.

Being a huge economy with a wide range of diversity in development, China is facing the operationalization of the FG paradigm in two types, internal and external. The internal operation is seen in its own domestic relations between advanced industrial zones along the coastal regions. Given the rising living costs in its coastal regions, it seems that the central authorities have increasingly encouraged the westbound diffusion of industrial activities rather than the eastbound migration of industrial labour. The external operation of the FG paradigm is seen in its relations with lesser developed economies (such as those in Southeast Asia, and more recently Central Asia through the One-Belt-One-Road initiative). It is still not certain how smoothly these two types of industrial diffusion/relocation will proceed in the future. Can we expect that the domestic industrial diffusion/relocation will progress within China without causing “hollowing out” in the coastal regions? Furthermore, as Fischer (2015) points out, many industrial activities (particularly export-oriented ones) in China have been undertaken or managed by foreign firms. It is hard to expect that these foreign firms will remain firmly committed to the idea of remaining in China once cost-efficiency becomes a serious concern.

5.5 Chapter Summary

The chapter presented a critical discussion of the modern prototype – as opposed to Akamatsu’s earlier version – of the FG paradigm as a regional development model for East Asia, dwelling on its applicability to individual economies in the region. Its critical analysis from the perspective of historical institutionalism scrutinized the conceptual plausibility of the collective catch-up of late industrializers in the region. Specifically, the chapter presented a brief review of the development experience of these economies – Japan, the 1st-tier NIEs, the 2nd-tier NIEs and China – during the postwar period (a more extended review is presented in Chapter 8). The chapter also discussed the role of the US as the security provider in the Cold War geopolitics for its alliance partners in East Asia. The military spending and various procurement activities during the Cold War period particularly during the Korean War and the Vietnam War greatly benefited many of its regional allies. It is also clear that much of the export-led catch-up process of East Asian late industrializers hinged upon the relatively easy access of US markets. Until the late 1980s, the preferential status to US market access, known as the Generalized System of Preferences, also favoured some of the 1st-tier NIEs.

Whereas the fall of the Berlin Wall in 1989 dramatically symbolized the ending of the Cold War in Europe, it is difficult to find something equivalent to the fall of the Berlin Wall in East Asia. In the region the general easing of geopolitical tension already began in the 1970s with the diplomatic rapprochement between China and the US as well as the latter’s withdrawal from the Vietnam War. Perhaps, the 1978 announcement of China’s market-based liberalization and the open-door policy of inviting FDI to designated areas for local development was an event of symbolic importance that ushered in a new period of East Asian geoeconomics. In the 1980s, Chinese authorities expanded the

officially designated areas open to FDI along its coastal regions. Diplomatic normalization of China with its former enemies in the region in the early 1990s set the stage for China's further integration into East Asian development.

The reduced geopolitical tension lessened US tolerance towards neo-mercantilist foreign policy – a central tenet of the export-led catch-up process – of its East Asian allies. Bilateral pressure from the US towards its major trading partners to rectify their bilateral trade imbalance, most famously Japan, began as early as the late 1960s, and further intensified in the 1970s. In this regard, the Plaza Accord of 1985 was an epochal event that would cause a rapid depreciation of the dollar's exchange rates, which intensified the offshoring of Japanese manufacturing firms in the ensuing years, i.e., the phenomenon of the FG paradigm involving the 2nd-tier NIEs and China. While the 1990s was a lost development decade for Japan, it was a decade of accelerated growth for China. There was then already the sign of shifting development gravity from Japan to China. This is the issue that will be further discussed in Chapter 6.

Chapter 6

The Discourse Transition of the Flying Geese Paradigm: Emergence of a China-centric Model

6.1 Introduction

The Flying Geese (FG) paradigm is now in the midst of a long transition (or the transformation) from a Japan-centric model to a China-centric model in academic discussion and diplomatic discourse. It is foreseen that China will further deploy the model – explicitly and implicitly – in its foreign policy discourse. Clearly, China’s rise has been challenging the regional hierarchy based on Japan-centrality. China is now pushing its own industrial restructuring in light of important economic trends, such as, among others, the rise of manufacturing wages and land prices in urban areas, the surfacing over-capacity of production, the general slow-down of the growth rate, the general trend of currency appreciation, and the growing need for “sustainable” production activities. No matter whether it is Japan-centric or China-centric, the FG paradigm depicts a dynamic catch-up process singularly and/or collectively. But it must be noted that the change of centrality from Japan to China has induced somewhat different implications. For instance, seemingly the Japan-centric model envisioned mostly East Asia as the targeted region of its application. While it appears to be still at an early formative stage, the China-centric model contains a much stronger extra-regional (globalist) proclivity.¹⁴⁷ In any case, this Chinese restructuring will further bring forth spillover effects for the global economy.

This chapter discusses the emergence of China as the new flag-bearer of the FG paradigm. It presents an exploratory understanding of the model as a comparative analysis between the earlier Japan-centric model and the contemporary (emerging) China-centric one.

6.2 Transition from the Japan-centric to the China-centric Model

The dissertation at the outset mentioned that Japan started its modernization drive in the late 19th century, which mirrored the imperative perceived by its Meiji reformers to build a strong nation. The initial model of the FG paradigm of the 1930s therefore pictured these reformers’ determination to

¹⁴⁷ It is possible to identify several factors that have further intensified China’s extravert (global reach) attitude, compared with Japan’s in an earlier period. This emerging economy has been confronted with much greater needs than Japan for primary commodities (raw materials, minerals and fuels), industrial resources (intermediate products, parts and components), and technological assets (know-how, patents, brand-names) and export markets. What is especially pertinent to our discussion is its external venturing for efficiency-seeking purposes resulting from the growing scarcity of cheap labour. The combination of hugely accumulated foreign reserves and currency appreciation resulting from continued current account surpluses has an import finance-related push factor.

catch up with Western powers. The model was silenced by imperialism in the 1940s and by an intellectual hiatus in the 1950s. It then did expose itself beyond a small circle of Japanese researchers (mostly in Hitotsubashi University). It was only in the 1960s that researchers – Japanese and non-Japanese – began again to refer in English to the FG paradigm. Thereafter, Japanese researchers more eagerly highlighted the value of the FG paradigm as a blueprint for East Asian development. This Japan-centric model allegedly depicted the “collective” catch-up process – which Ozawa (2005) calls “concatenated development” – of the region, where Japan played the leadership role and others would emulate its experience. In the late 1980s and the early 1990s Japan’s central bureaucrats (together with academic and non-academic researchers) were most willing to deploy the model in their development policy discourse.

The Japan-centric view of East Asia, however, failed to retain its appeal for long as the country’s economy fell into recession in the 1990s. The combination of the failure in industrial upgrading at home and the rapid pace of overseas relocation of its manufacturing activities accelerated the trend of industrial hollowing out in Japan. After all, the FG paradigm is based on interdependence among economies at different stages of development as it is indispensable for circulation/recycling of comparative advantage. As discussed in Chapter 5, the FG leader (the hegemon) tends to prefer maintaining the orderly industrial diffusion by discouraging followers from trying industrial policy that may be regarded as “comparative-advantage defying”. This is because such policy may engender industrial leap-frogging among late industrializers and thus disturb the regional hierarchy.¹⁴⁸ In any case, as East Asia could no longer retain the Japan-at-the-top regional hierarchy, many advocates of the FG paradigm fell silent as well. At the turn of the century, there was a clear shift of the central source of regional dynamism from Japan to elsewhere.

In the 1980s, China – most of all, its Pacific coastal regions – came to offer attractive locations for industrial migration from abroad in the 1980s. Initially, researchers placed China in the context of the Japan-centric model (at the bottom of the East Asian development ladder). China’s central authorities had been engaged in careful traffic control of external stimuli. Contemporary researchers treat China as a major late industrializer which, by itself, constitutes a framework of the FG paradigm, i.e., the destination of industrial relocation. One fundamental question is how China’s emergence has affected the operation of the Japan-centric FG paradigm (Kwan 2002). Has China’s rise transformed many Asian “flying geese” into “lame ducks” (Saravanamuttu 1998) or “sitting ducks” (Ahearne et al. 2006)? Researchers have slowly contemplated whether China’s new leadership would engender a new version

¹⁴⁸ Akamatsu, the original thinker of the FG paradigm, admitted the possibility of periodic re-shuffling in the international ranking of industrial development. We should be aware that when Akamatsu formulated the FG paradigm, Japan was still a late industrializer on its way of catching up. Thus, Akamatsu’s view reflected more of an ambitious follower rather than a conservative leader of East Asian development configuration.

of the FG paradigm, something like a China-centric model. Whether with or without referring to the FG paradigm, many researchers have dealt with the relocation/diffusion of manufacturing activities (domestically or internationally) in a fashion similar to the model. Perhaps, some of them may prefer to refrain from referring to the FG paradigm due to its traditional Japan-centric connotation (Lin 2011). Some enthusiasts have anticipated that the “unparalleled scale” of industrial relocations from China will facilitate structural changes in many parts of the developing world where a surging youth population is entering the labour markets (Lin 2012).

6.3 Basic Elements of the Japan-centric Model (a Quick Review)

The FG paradigm as a Japan-centric model reached its heyday during the period between the Plaza Accord (1985) and the beginning of a post-bubble recession (in the early 1990s). This section presents some basic elements of the Japan-centric model, specifically highlighting: i) Japan centrality, and ii) Japan’s development model as a regional prototype. (Let us note that the Japan-centric model for regional development is a modern version of the FG paradigm, and it is considerably different from Akamatsu’s original model depicting Japan’s initial development drive in the late 19th century.)

6.3.1 Japan Centrality

During much of the postwar (WWII) period, Japan led a regional development hierarchy as the most advanced and dynamic economy, and its early diplomatic actions, including the provision of development assistance from the 1950s, facilitated the process of forging its sphere of influence. The expansion (snow-balling) of the sphere of influence helped solidify the centrifugal diffusion of manufacturing activities from Japan. Over time, many East Asian economies emulated Japan’s industrial upgrading, by accepting the country’s outreach. Particularly, in the second half of the 1980s, the large scale offshoring of the country’s manufacturing took place.

Japan once accumulated large sums of foreign reserves and overseas assets, which provided it with huge financial leverage in foreign aid diplomacy. Much of its development finance has been targeted to countries in East Asia and South Asia, for their infrastructure. In this regard, the Asian Development Bank (ADB) has been an important multilateral institution to disburse Japan’s development finance. Since its establishment in the late 1960s, the US and Japan have always been the two largest contributors to, and thus the two most powerful members of, the institution. Consequently, East Asian economies were increasingly functioning to facilitate the ongoing restructuring of Japan’s economy as well as its foreign policy (see Hatch and Yamamura 1996). As will be pointed out later, we will find many parallels in China’s contemporary development diplomacy, particularly financing activities.

6.3.2 Japan's Development Model

Japan was once eager to propagate its own development modality, and many parts of East Asia accepted some of the uniquely Japanese characteristics. One principal element of the Japanese development model was the institutional arrangement surrounding the concept of the developmental state (more accurately, its industrial policy in a broad sense).¹⁴⁹ In the late 1980s, the Japanese government was confident about its neo-mercantilist/interventionist development model and at the same time very critical towards the Anglo-Saxon ideology of neoliberalism (the Washington Consensus) (Wade 1996). Many observers in the region also regarded the role of the state as the enabler of social changes, particularly the sector-specific promotion/protection (see Chang 1996).

Japan's development model also contained the element of partnership between public sector bureaucrats and major private-sector stakeholders (major business firms). The authorities of central bureaucrats hinged upon the successful operation of their development strategies, and the effectiveness of these strategies were attributable to their close communications with business groups (Johnson 1982). Thus, Japan often offered development advice by advocating its own successful catch-up operation as a key selling point (see Cohen 2014: Chapter 8). Meanwhile, Japan's ruling political party, the Liberal Democratic Party (LDP), maintained a strong pro-business orientation in parliamentary politics, while refraining from tightly controlling the central bureaucrats (see Wooddall 2015). Japanese politicians were then preoccupied much more with domestic issues and often not very familiar with foreign policy issues.¹⁵⁰ For an exploratory discussion on the relationship between the developmental state and the FG paradigm, see Kasahara (2013).

Clearly, some of Japan's business practices, particularly those in its manufacturing sector – such as subcontracting and just-in-time inventory management – being transplanted by Japanese firms in many outposts in East Asia. (For a discussion of “Japanization” of East Asia, see, e.g., Hatch & Yamamura 1996.)¹⁵¹ The burst of Japan's financial bubble in the early 1990s, however, marked the

¹⁴⁹ Two of its former colonies South Korea and Taiwan have closely followed Japan's interventionist modality. Similarly some others in the region, such as the 2nd-tier NIEs (Malaysia, Thailand and Indonesia) also accepted state interventionism, and export-oriented development.

¹⁵⁰ One sensitive issue in Japan's external relations that politicians are all familiar with is the long tradition of protecting the country's agricultural sector (a major constituent group for the ruling political party). The import of many agricultural products used to be prohibited until the successful conclusion of the Uruguay Round of GATT negotiations in 1994.

¹⁵¹ Japan's influence was due to its overwhelming economic capacity; however, this does not mean that others, particularly those outside the region, did not influence the region. Draper et al. (2016) point out that the “lead geese” in the East Asian production networks for some consumer products (such as electronics products) were firms from the US and Europe.

beginning of a precarious period not only for Japan but also for East Asia as a whole, and questions were raised about the sustainability of the FG paradigm as a Japan-centric model.

6.4 China's Rise and the Flying Geese Paradigm

During much of the Mao period (1949-1976), China was practically outside of interdependent/integrated East Asian development. Even when the World Bank published its famous *Miracle Report* (World Bank 1993), China was still thought of as a transitional economy in a precarious situation suffering from the aftershocks of the Tiananmen incidence (1989), i.e., economic sanctions from many Western countries. In the 1990s Chinese policy-makers became more firmly committed to the strategy of inserting their economy into production networks in East Asia. By the time of the Asian Financial Crisis (1997-1998), China had been a fully-fledged member in East Asian regional development. In a brief period of several years, the World Bank itself came to recognize the significance of this emerging economy's engagement in the region's development dynamism (World Bank 1997). China is now the largest assembly platform for its Asian neighbours that provides it with intermediate products (raw materials, parts and components) as well as some machinery (Hung 2017: 80). This section explores various issues that present some conceptual relevance with (or linkages to) the FG paradigm: i) the domestic application of the FG paradigm, ii) semi-sequential phases of different policy orientations, iii) discussion on the "Go-out" phase of development strategy, and iv) the Belt and Road Initiative (BRI).

6.4.1 Domestic Application vs International Application

Towards the end of the 1990s various researchers, mostly Chinese, began to note the relevance of the FG paradigm to the discussion of China's development. In the 2000s, many of them debated whether the "Lewisian Turning Point" – the exhaustion of the cheap rural workers for urban labour-intensive manufacturing activities¹⁵² – was being reached in China's coastal areas/regions. The researchers were dealing with the FG paradigm discussion in the domestic context of industrial relocation/diffusion. This was because the Chinese economy contains a large internal variety in terms of factor availability (or prices), and many firms (whether foreign, local or hybrid) thought of shifting their production sites within the country (rather than abroad). In this regard, Qu et al. (2013), for instance, attempted to

¹⁵² Yokokawa (2013) argues that in the 1980s and 1990s China managed to maintain the extremely cheap labour for manufacturing (of about 5% of the US level) for two major reasons: i) the existence of a large agricultural sector that could shed a vast amount of surplus labour; and ii) the Chinese currency's large depreciation against the US dollar in the 1980s and the first half of the 1990s (Yokokawa 2013: 60). The currency depreciated from 1.5 yuan to 8.6 yuan to the dollar between 1980 and 1994 (most remarkably with the one-off devaluation of the yuan by 33% in January 1994 as a remedy of the exiting trade deficit) (Hung 2017: 690). Thus, while they were raised dramatically in the local currency, the manufacturing wages in China were kept extremely low, around 5% in terms of the US dollar (Yokokawa 2013: 60).

determine whether (and when) the depletion of cheap labour (and land) in the coastal areas/regions, together with their worsening congestion, had induced the business decisions of domestically relocating labour-intensive activities, to low-cost inland/interior areas/regions (see also Ang 2017; 2018).

Being concerned with the widening development gap within China, together with the attendant political tension in the 1990s, China's central authorities (Beijing) called for greater efforts in upgrading its manufacturing activities across the board so that the "domestic" expansion of industrial activities would proceed more smoothly. These authorities stressed the need to reduce the nation-wide diversity in factor prices, particularly in wages. According to the FG paradigm, the persistent diversity in factor prices in China implies that cross-border industrial relocation to other economies – such as Vietnam, Cambodia, Laos, and Myanmar – that are waiting for the trickle-down (offshoring) of industrial activities from this emerging economy is blocked, and pushes further the timing of these activities into the future.

Many firms operating in China's coastal regions are state-owned enterprises (SOEs), often owned (fully or partly) by non-central states, i.e., province or sub-provincial municipalities. These non-central state authorities generally prioritize their local interests over national interests. Thus, some of these non-central state authorities, particularly those in the southern coastal provinces may prefer to let "their" firms go abroad (with less political problems) rather than go west domestically (with more political problems) but beyond the provincial border. The firms' decision between domestic and international relocation depends on the discretionary judgement of these firms' decision-makers including non-central state authorities. Non-central state authorities may have a specific preference order for their SOEs' foreign ventures, regarding destinations, among Southeast Asian economies (such as Cambodia, Laos, Myanmar, and Vietnam), South Asian economies (such as Bangladesh, India, Pakistan, and Sri Lanka), and other distant destinations, such as African or Latin American economies (see, for example, Draper et al. 2016). Many SOEs and non-SOEs in China have ventured into Southeast Asia, not only in the 2nd-tier NIEs (Malaysia, Thailand and Indonesia) but also in those in Indochina (most notably Vietnam).

6.4.2 Semi-sequential Phases of Different Policy Orientations/Emphases

Zhu and Pickles (2014) stylize different policy phases of the post-Mao period into the following chronological pattern:

- i) **"Bring In" phase:** to invite foreign firms (initially from overseas Chinese communities, but later from others);
- ii) **"Go Up" phase:** to upgrade manufacturing activities (initially in the coastal regions, but later everywhere else) to avoid industrial "hollowing out";

- iii) **“Go West” phase:** to expand westward domestic manufacturing activities, particularly “obsolescent” labour-intensive, resource-based activities (with “west” here symbolically implying non-coastal regions), as well as to open up these regions to FDI;
- iv) **“Go Out” phase:** to go international to get access to raw materials and intermediate products, strategic assets, markets, and less expensive factors of production (low-wage labour).

Zhu and Pickles (2014) refer to the chronological pattern as the sector-specific phenomena for textiles and apparel, but it may be argued that this pattern could be seen as a prototype applicable to other sectors. Whereas the “Bring in” phase involves the invitation of foreign firms to China’s coastal regions, the same phase later involves non-coastal regions dealing with foreign as well as domestic firms.

6.4.3 Development Guidelines for the “Go West” Phase

The chronologically lined-up phases discussed above have been accentuated by a series of development guidelines designed by China’s central authorities for provincial and local administrations. Pertinent to the discussion is the publication of guidelines of policy actions so as to promote the “Go west” aspect (westbound) of industrial relocation *within* the country. According to Ang (2017), by the 2000s the coastal areas had begun to change their roles from the principal destinations of investment (mainly FDI) to the principal sources of domestic (inter-provincial) investment. The “Go west” aspect reflects the geopolitical consideration of China’s central authorities, i.e., curbing the secessional tendencies of ethnic minorities, most notably the Uighurs and the Tibetans. In 1999, the Western Development Programme (WDP) was formulated with the purpose to “spread economic prosperity to the economically backward minority regions and thereby mitigate separatism” (Bhattacharya 2016: 317; see also the State Council 2016). This reflects the central authorities’ determination of “Hanization” to deal with the economic backwardness of large western minority regions in contrast to the wealthy coastal regions which are mainly occupied by the “Han” ethnic group (Bhattacharya 2016: 317).

The “Go west” phase also means the geographical expansion of the “Bring in” phase as well. Purportedly, these guidelines are designed for provincial and local authorities of different regions (particularly coastal regions) who wish to undertake industrial restructuring. The guidelines encourage non-central officials to accelerate local industrial upgrading and to relocate their labour-intensive and low-tech production activities to western, central and north-western regions. These guidelines are also aimed at making the receiving sides of relocation – non-coastal regions – better prepared. The central authorities have been actively funding infrastructure (transport, power plants, tele-communications),

and have simplified approval procedures of relocation. In short, the guidelines have been designed to facilitate the domestic application of the FG paradigm.

To recap, industrial restructuring in the coastal regions during the “Bring in” and “Go up” phases is important for the coastal regions as it induces “obsolescent” activities that can be taken up during the “Go west” and “Go out” phases. As far as the non-coastal regions are concerned, the sequence among the “Bring in” phase, the “Go up” phase and the “Go west” phase is much compressed (or less relevant). These phases can overlap, and each geographical location faces different phases of these sequences among different sectors. As far as China is concerned, the internal migration of manufacturing activities allows it to boast of having the lowest to the highest ends of manufacturing activities within a huge single market.¹⁵³ As will be discussed further, many of China’s recent diplomatic initiatives are seemingly designed with the latent objective of raising the domestic operation of the FG paradigm on a global scale, by facilitating the non-coastal regions to enter in the strategic policy phase of “Go out”.

6.4.4 The FG Paradigm in the “Go Out” Phase

In 1999, the Chinese central authorities announced what is known as the “Go out” strategy which entailed encouraging overseas ventures of Chinese firms, mostly SOEs.¹⁵⁴ The “Go out” phase, a strategic phase following the initial “Bring in” phase of inviting FDI from abroad, was later written formally into the 10th Five-Year Plan (2001-2005).¹⁵⁵ The new phase emphasizes outward FDI in extractive activities (raw materials and energy resources) as well as infrastructure construction (for transporting these materials and resources). While it is relatively small, efficiency-seeking FDI for offshoring labour-intensive activities is slowly growing. The Chinese authorities have indicated their commitment to reducing bureaucratic red tape in screening investment projects, while providing

¹⁵³ The domestic migratory movement of manufacturing activities still remains by and large a bottom-up, market driven process that cannot be manipulated by central or provincial authorities (Ang 2018: 440).

¹⁵⁴ For a while China maintained a highly restrictive policy towards outward FDI; in fact, it was only SOEs that had been allowed to engage in outward FDI until the mid-1980s. Even in the mid-2000s, SOEs (predominantly centrally controlled ones but locally controlled ones as well) accounted for most of the outward FDI stock (Jenkins 2019: 79).

¹⁵⁵ In the new millennium China has been faced with the rapid growth of inward and outward FDI, with an ever-growing number of non-Chinese firms operating in the country and an increasing number of Chinese firms venturing into overseas markets. Indeed, the Chinese situation has intrigued many researchers. This is because while outward FDI is usually understood as the “phenomenon of advanced countries” (Hung & Wang 2011), China is still at the middle-income stage. See the previous discussion on the investment development path (IDP) in Chapter 4. Many researchers had anticipated that the international operation of the FG paradigm as a China-centric model – which may manifest itself with outward FDI from China – would be delayed.

subsidized loans for priority projects that will develop natural resources in short supply in the country, together with insurance for such projects (UNCTAD 2006: 210; see also Jenkins 2019).

Over the 2000-2007 period, China's outward FDI rose from less than US\$2 billion to US\$20 billion. The "Going out" strategy diversified the country's international asset portfolio, rather than simply holding large sums of US government debt (generating low returns). With the outbreak of the Global Financial Crisis (2008-2009), the slowdown of the Chinese economy further sharpened the internal discontents about its holding of US dollar-denominated assets. The discontents were due to the judgement that many of these financial assets would likely lose their value with the deterioration of the US financial situation (see H. Wang 2016). As a follow-up to the ongoing strategy, the central authorities disclosed the "Going further out" strategy in 2005 as part of its 11th Five-Year Plan (2006-2010), and further encouraged outward FDI. In 2007, the government officially launched a special fund, the China Investment Corporation (CIC) to support Chinese firms' outward FDI by providing grants and subsidies for interest payments (UNCTAD 2006: 212).

In the 2000s China became active in multilateral diplomacy, including BRICS, a forum of South-South solidarity, with several emerging economies (Brazil, Russia, India and South Africa).¹⁵⁶ In the first half of the 2010s, these five emerging economies discussed the possibility of establishing a pro-South multilateral financial institution, and eventually agreed to establish the New Development Bank (NDB). Based on a Headquarters Agreement with the Chinese central government as well as a Memorandum of Understanding with the Shanghai municipal government (the host city) in February 2016, the NDB became operational. The NDB aims at financing infrastructure projects in the private and public sectors in emerging economies and developing countries by forgoing partnerships with national and regional development banks as well as multilateral financial institutions. For further discussion on the NDB, see Kasahara (2017a; 2017b).¹⁵⁷

¹⁵⁶ The BRICS grouping started in 2010 when the representatives of the national development banks from Brazil, Russia, India and China held a meeting, and signed a Memorandum of Understanding of cooperation. Since then the governors of these banks (also with South Africa's from 2011) have met in the BRICS Financial Forum, parallel with the BRICS Summits. Over the following few years, the idea of establishing a South-South development bank was further developed. At the 2013 Summit, the host country, South Africa showcased the topic of a new multilateral bank, and the BRICS leaders then agreed to the idea of creating such an institution. For further discussion, see Kasahara (2017a).

¹⁵⁷ The NDB began its operation with the authorized capital of US\$100 billion, of which US\$50 billion has been subscribed by the five BRICS founders, i.e., each equally with the subscription of US\$10 billion. The remaining US\$50 billion is to be subscribed in the future (Kasahara 2017a; 2017b).

6.4.5 Belt and Road Initiative

In 2015, China announced what is known as the Belt and Road Initiative (BRI), which consolidated two Silk Road initiatives that had been disclosed earlier. The BRI may be viewed as the ultimate manifestation of the “Going out” strategy, embellished in the most grandiose fashion. It aims at enhancing connectivity among Eurasian countries, supposedly more than 60 countries along the inland and maritime Silk Road routes. It was envisaged that the BRI would be realized in some 30 years, or more specifically in 2049, a symbolic year commemorating the 100th anniversary of the birth of the present regime of China in 1949 (Casarini 2016: 97-98). In support of this huge undertaking, China also created a bilateral development institution, the Silk Road Fund with US\$40 billion. Meanwhile, China also brought up the idea of creating another financial institution for this initiative. In March 2014, China officially disclosed the idea of establishing the Asian Infrastructure Investment Bank (AIIB). In December 2015, a legally sufficient number from the 57 founding members of the AIIB notified their ratifications. In January 2016, the AIIB was officially inaugurated with an authorized capital of US\$100 billion (Kasahara 2017a).

Indeed, Central Asia – where the Soviet Union disintegrated into many independent states in 1991 – has increasingly presented itself as an area of critical importance to China. Soon after the disintegration of the Soviet Union, China and Russia took the geopolitical joint initiative, and this initiative eventually led to the establishment of a Eurasian alliance, known as the Shanghai Cooperation Organization (SCO) in 2002.¹⁵⁸ Initially, the SCO was created as a cooperative group to settle territorial disputes arising from the Soviet disintegration; however, with the signing of the Framework Agreement for economic cooperation in 2003, this geopolitical organization also strengthened cooperation beyond security alliance.

The BRI – and for that matter, all newly created financial institutions, such as the SRF, the NDB, the AIIB and the like – can be seen as schemes designed to help China address its own domestic economic challenges, perhaps most significantly the slowed economic growth and persistent development diversity between different regions. They also aim at restructuring the national economy that has been burdened by “overcapacity”, for instance, in transportation and energy infrastructure – that was caused by massive public investment after the 2008 Global Financial Crisis (Casarini 2016:98). They reflect Beijing’s hope to find a new stimulus for economic growth through external markets for Chinese products, overcoming the domestic development imbalance, particularly in stagnant peripheral areas (i.e., inland and western provinces).

¹⁵⁸ The Shanghai Five group was created by those countries – China, Kazakhstan, Kyrgyzstan, Russia, and Tajikistan – which signed the “Treaty on Deepening Military Trust in Border Regions” in Shanghai in 1996, and the “Treaty on Reduction of Military Forces in Border Regions” in Moscow in 1997. In 2001, the Shanghai Five and Uzbekistan signed the Declaration of Shanghai Cooperation Organization. In 2017 the SCO officially admitted India and Pakistan as new full members.

6.5 China-centric Model

As discussed earlier, the “Going out” phase ushered in a new era in China’s development discourse, with a series of foreign policy actions/initiatives. But it is still debatable as to whether, or to what extent, these actions (including new institutional arrangements) adumbrate a certain framework resembling the FG paradigm. This is because various issues related to the strategy may or may not appear to be congruent with what we understand about the FG paradigm. For instance, China is not heavily engaged in “conventional” reverse import of those outputs that have been manufactured in offshore production. As a matter of fact, China’s recent outward FDI projects are not about offshoring manufacturing activities to cope with the rising costs of production (most importantly wages) in labour-intensive manufacturing activities. Instead, they are a mixture of different motives, including, most importantly, resource-seeking, but also market-seeking, strategic asset-seeking, and, of course, efficiency-seeking.

6.5.1 Prelude to Referencing of the FG Paradigm

As previously discussed, the arrival of the Lewisian turning point in China’s coastal regions in the mid-2000s set the stage for offshoring of some of its manufacturing activities. So far, however, efficiency-seeking industrial investment (as in the FG paradigm) has been prevalent internally (within China) rather than internationally (from China). The rural labour condition in China is more complex than the Lewisian turning point depicts. We know that early migrant workers were mostly surplus farmers within the same province, and that it was the congestion in urban centres that made it difficult for firms to continue to absorb rural migrant workers as before. The congestion has raised the rental costs of residential spaces in urban centres, which in turn caused upward pressure on migrant workers’ wages. The alternative solution, as seen in the FG paradigm, would be the relocation of such activities from urban to rural areas within and across provincial boundaries. But as a matter of priority, the urban municipality authorities have encouraged the “Go up” strategy of industrial restructuring, and thereby avoiding “hollowing out” and/or structural unemployment. For instance, Guangdong provincial authorities have advocated the campaign of industrial upgrading with a policy slogan: “Empty the cage and change the birds” (Lim 2016).

6.5.2 World Bank Hinting at China’s Flying Geese

The late 2000s witnessed the rise of an optimistic view that China would be in a position to apply the FG paradigm to many developing countries, particularly sub-Saharan African countries. More specifically, in 2009, Robert Zoellick, then the World Bank President, suggested that China should diversify its outward FDI in Africa, not only for resource extraction and infrastructure projects alone but also for manufacturing projects as well. The idea was to let a “new” type of Chinese FDIs – i.e., efficiency-seeking projects – to activate the FG paradigm formation in Africa by jump-starting labour-

intensive manufacturing activities there. It was further envisaged that China's experiences with its own SEZs since the 1980s could be replicated in specifically designated locations. This was because it was thought that such zones could be one of the key enabling conditions for the late industrializers' catch-up process.¹⁵⁹

6.5.3 Explicit Reference to the FG Paradigm¹⁶⁰

Since the late 2000s, China has begun to refer to the FG paradigm for its global reach, not only to secure supplies of energy and raw materials but to offshore its manufacturing activities, particularly for resource-based and labour-intensive sectors. For instance, Chinese economist Justin Yin Lin, a former Vice President of the World Bank, advocates the FG paradigm to contemporary late industrializers in the world economy. He argues that these economies should make efforts under state initiatives (with industrial policy) to develop specific manufacturing sectors by exploiting their advantage of backwardness. This means that these late industrializers should follow rather than defy the local manufacturing sectors that hold "comparative advantage".¹⁶¹ By emulating suitable earlier industrializers, Lin (2012) thinks that late industrializers, including those in Africa can develop their manufacturing sectors as China, now "on the verge of graduating from low-skilled manufacturing jobs" and soon freeing up "nearly 100 million labor-intensive manufacturing jobs, enough to more than quadruple manufacturing employment in low income countries" (Lin 2012: 398).

The outward FDI in the modern FG paradigm is typically efficiency-seeking, i.e., for offshoring of low-wage assembly operation. Chinese FDI, however, has not exhibited much of such type of FDI, until recently.¹⁶² This was because its relatively low labour costs have not sparked the efficiency-

¹⁵⁹ In the 2000s China began to formalize the institutional setting of its diplomatic relations with African countries with the establishment of the Forum of China-African Cooperation (FOCAC). The periodic meetings at the Summit level have carried the increasing diplomatic weight of the Forum itself, and the cooperative linkage has also deepened the African dependence on Chinese development finance. This has been overshadowing Japan's diplomatic initiative called the TICAD (Tokyo International Conference for African Development) process, which was built to enhance Japan's initiative to promote African development.

¹⁶⁰ The researchers who have explicitly referred to the FG paradigm as the framework of industrial relocation beyond the Japan-centric East Asian context include, among others, Brautigam (2008), Brautigam (2010), Draper et al. (2016), Lin (2012), Ozawa (2016), Thorborg (2017).

¹⁶¹ The "correct" industrial policy, according to Lin, has much to do with selecting the appropriate sectors. He argues: "policies supporting new industries that are inconsistent with the comparative advantage of the economy or attempting to protect old industries that have lost comparative advantage generally fail, while policies facilitating the development of new industries that are consistent with the comparative advantage of the economy often succeed" (Lin 2012: 402).

¹⁶² Chinese outward FDI contains two distinct features. One is the critical role of the Chinese government as private firms were legally prohibited from investing abroad until as late as 2003 (Buckley et al. 2007: 500), and the other is the increasing use of merger and acquisition (M&A) as a mode of entry (Deng 2007: 72).

seeking motive. In fact, Chinese firms have tended to invest more in high-wage, industrialized countries (such as the US), partly because of their “superior investment environment, high technology, and advanced management methods” (Deng 2007: 72). Resource-seeking (as a subset of strategic-asset-seeking) may also be seen in China’s outward FDI, in those countries that have significant energy reserves and raw material (such as Australia and Canada) (Buckley et al. 2007: 501). The “Going out” strategy discussed above also aims at promoting the brand recognition of Chinese firms in global markets. In order to have better access to overseas markets, therefore, major Chinese firms have begun to move part of their R&D, marketing and designing activities abroad.

While it is a Eurasian development project, China ensures that the BRI involves several African countries, specifically, Egypt, Djibouti, and Kenya. Egypt and Djibouti are located in the Horn of Africa, an area critically important for trade (Egypt with the Suez Canal) and security (Djibouti with China’s overseas military base) along the maritime Silk Road framework. Egypt is purportedly the only African country that has signed bilateral agreements with China on the BRI, and Djibouti’s importance is due to the fact that 30% of world shipping goes through the entrance of the Red Sea from the Indian Ocean (and on to the Suez Canal) (Farooq et al. 2018: 27). And Kenya is the point of entry into Africa through the maritime Silk Road routes. It is anticipated that South Africa (the African member of the BRICS group) is likely to offer its service as an “African gateway” to facilitate China’s further involvement in manufacturing activities in the African continent (see Khan 2011).¹⁶³

Some countries – particularly Japan, and for that matter the US as well – have been ambivalent if not suspicious towards the BRI as it is an expansionist scheme unilaterally operated by Beijing. Since early 2017, however, these countries’ critical attitude has been subtly modified toward cautious optimism, now more willing to see the possible positive effects of China’s large-scale investments for the development of infrastructure in many parts of the world that have been relatively neglected, such as Central Asia (Cai 2018: 842). In 2015, China also announced the “Made in China 2015” initiatives, one of its ambitious projects aimed at increasing the competitiveness of Chinese manufacturing sectors (brands), by promoting innovation and thereby reducing its reliance on foreign technology. An updated version of the initiative was released in 2018, according to which China aims at becoming one of the world’s leading manufacturers. It is feared that the specific targeted sectors – including, for example, telecommunication, railways, electric power equipment, robotics, high-end automation, new energy vehicles – are likely to be assisted through multifaceted industrial policies for nurturing them (Morrison 2018: 47).

¹⁶³ A similar argument may be made about the role of Brazil (the Latin America member of the BRICS group) as the gateway for China’s advance to Latin America. It must be noted, however, that most Latin American countries have been faced with the trend of “premature deindustrialization”, certainly more notable than African countries. (Most African countries have never developed industrial development, beyond some mineral and resource refining.)

6.6 Comparative Analysis: Japan Centricity and China Centricity

Since the beginning of the new millennium, the economic landscape of East Asia has been going through the transition from a Japan-centric to a China-centric dynamism. Virtually all East Asian economies across the board have witnessed that the weight of Japan as their trade partner has been replaced by that of China. It may be argued, however, that the current regional dynamism is fairly consistent with the FG paradigm. It certainly does not challenge the trickle-down effects of industrial relocation/diffusion. Both models postulate that interactions among economies at different stages of development can create positive spillover effects in terms of industrial development. The following pages highlight the major issues areas where we can observe similarities as well as differences between the two models.

6.6.1 East Asian Hierarchy

When Japanese researchers eagerly deployed the FG paradigm in the 1980s, they easily divided East Asian economies into several clustered layers (say, in terms of income levels): Japan, the 1st-tier NIEs, the 2nd-tier NIEs and China. In the mid-1980s, Japan's economy was huge in East Asia, and its per capita income was also large in nominal terms, whereas each of the 1st-tier NIEs' per capita income was fairly close to each other, ranging from South Korea's 22% to Singapore's 59% of Japan's level. Similarly, in 1985 the per capita income of each of the 2nd-tier NIEs was relatively close to that of the other two (ranging from 5% for Indonesia to 18% for Malaysia, with 7% for Thailand). Needless to say, China's per capita income in the mid-1980s was still a fraction (3%) of Japan's (see Chapter 8 for further data). Admittedly, Singapore and Hong Kong had reached fairly high levels in terms of per capita income by the 1980s, but their "minuscule" size in comparison with Japan's scale failed to affect the overall geoeconomic feature of the latter's dominance in East Asia, and nobody seriously questioned the "robustness" of Japan's leadership (at least until the early 1990s or even later). Diversity in development is essential for the FG paradigm, as their existence can allow "obsolescent" manufacturing activities in higher income economies (early industrializers) to migrate to lower income economies (late industrializers) along the hierarchy.

In fact, the region's development hierarchy is a prerequisite for the smooth and orderly industrial diffusion (or trickle-down) among different national economies. The discussion on the developmental state underlines the importance of industrial policy, specifically sectoral choice among different manufacturing activities (see Kasahara 2013). But the existence of a development hierarchy (a necessary condition for the FG paradigm) is different from the sustenance of the hierarchy (not a necessary condition). Each economy is engaged in industrial upgrading (by following new activities of comparative advantage) in accordance with its income level, and shedding its obsolescent

manufacturing activities (of comparative disadvantage) to its less developed (lower income) neighbours.

6.6.2 Industrial Policy: Conforming or Defying Comparative Advantage

What does the FG paradigm say about late industrializers' industrial policy, in terms of sectoral choice? Should the industrial policy conform or defy the countries' "potential" comparative advantage? Arguably, however, even if all countries should follow their comparative advantage, they would not necessarily maintain the hierarchical order. This is because the potential capacity of growth among countries within a similar income range may differ, which can be translated into different paces of structural change. Nevertheless, it is difficult to identify the best industrial policy for circulating and recycling comparative advantage among countries. But if countries may defy their comparative advantage, they may simply re-shuffle the hierarchical order (rather than reduce the hierarchy). In its heyday, Japan's overwhelming capacity in East Asia (or simply, the self-imposed confidence) trivialized the whole debate on the choice of preferred industrial policy between two types (conforming or defying comparative advantage). This was because the choice of sectors in East Asian neighbours' industrial policy would unlikely threaten Japan's technological superiority. Yet, Japan was eager to facilitate negotiations among ASEAN members with respect to their sectoral choices of industrial policy.

As will be discussed further, Justin Lin, one of the most vocal contemporary Chinese advocates of the Asian developmental state model as well as the FG paradigm, strongly underlines the importance of comparative advantage recycling among different national economies, with their governments carefully selecting sectors that conform to their current comparative advantage. He argues that the typical failures of developing countries in industrialization is due to the sectoral "mis-choice" in their industrial policy. China's campaign of promoting heavy industrial sectors (such as iron and steel) – which constituted the industrial policy of defying comparative advantage – in the 1950s and 1960s was a major reason for the country's difficulties in that period (Lin 2012).

6.6.3 Open Regionalism

The Japan-centric FG paradigm – focusing on Japanese manufacturing activities – tended to expand its geographical space of operation like a snowball growing in size as it rolls down on a snow-covered slope. The model, however, has never been intended to represent an East Asian development model. The dynamic nature of its operation exactly denies an outer boundary of its dynamism. When Japanese observers prompted the FG paradigm, the regional boundary of East Asia was understood. However this would not deny the possibility of the development sphere beyond East Asia, incorporating, say, South Asian countries (such as, for example, India, Bangladesh, and Pakistan). After all, the concept of a region where the FG paradigm may apply has been increasingly fluid.

It was discussed that the destinations of the final products manufactured in East Asia historically include major extra-regional markets of North America as well as Western Europe. This means that East Asia has developed as an integrated geographical region, but not self-contained. Instead, its integrative development – interdependent production sites as well as complex export platforms for intra- and extra-regional shipping – is far from self-contained or exclusive. Thus, East Asia is facing open regionalism due to marketing linkages with the outside. Another element that intensifies the Japan-centric model of open regionalism is that much of Japanese FDI in manufacturing has been market-seeking, overcoming some of the trade barriers of these extra-regional markets. Thus, Japan's FDI in East Asia was intended to reduce the diplomatic pressure due to prevailing bilateral trade imbalance with its major trading partners (most importantly the US). Let us also recall that the major destinations of Japanese outward FDI were North America and Western Europe. These Japanese FDI projects (in these advanced markets) could NOT be understood as the phenomenon of the trickle-down effect as understood in the FG paradigm.

As will be further elaborated later, China's contemporary development phenomenon began with the reform policy package announced in the late 1970s, which also included the strategy of inviting foreign firms to jump-start its export performance. China's central authorities then did not specify which foreign firms should be sought after as joint venture partners and where the products could be exported. It turned out that much of early inward FDI to China was made by Chinese business establishments (large and small) in East Asia. However, later foreign investors were more diversified geographically. Just as in the case of the 2nd-tier NIEs in the Japan-centric model, China has actively participated in production networks of global value chains. In fact, China has become the main platform for production of final products that are destined for extra-regional markets.

6.6.4 Manufacturing Activities via External Stimulus

The Japan-centric model and the China-centric model share the view that international industrial relocation/diffusion is the essence of late industrialization, and that late industrializers should not seclude their economy from external stimulus. They tend to underline the policy of taking advantage of opportunities of integrating themselves in production networks (global value chains). In both models, their main advocates also stress the developmental role of the state. As discussed earlier, the Japanese government was well known for its developmental role, with its industrial and trade policies to protect and nurture the country's domestic manufacturing. In a similar fashion, advocates of "Chinese development model" emphasize the developmental role of state authorities in terms of introduction and allocation of external stimulus to various locations, as well as upgrading the industrial/manufacturing activities. In the case of China, however, the central and non-central state authorities may differ from each other in the framework (particularly the scope of operation) of industrial development.

In the 1980s and 1990s, Japan-centric model advocates – mostly Japanese researchers – underlined the benefits of outward FDI by Japanese firms to East Asian neighbours, particularly the 2nd-tier NIEs (in Southeast Asia). The Japanese government also facilitated the offshoring of some Japanese manufacturing activities by easing investment regulation on outward FDI, together with financial assistance (to recipient countries) bilaterally and multilaterally. In a similar fashion, contemporary researchers are increasingly looking at China’s “Going-out” strategy as the overall background in which the country can contribute to manufacturing development abroad.¹⁶⁴ Here, many Chinese diplomatic initiatives – including the establishment of new forums (e. g. BRICS, FOCAC, SCO) and new financial institutions (e. g. AIIB, NDB, Silk Road Fund) – have stimulated those late industrializers that are willing to accept such external stimulus.

As noted earlier, even at the heydays of the FG paradigm in the late 1980s, not all Japanese FDI projects were efficiency-seeking. In fact, Japanese firms had continued to be resource-seeking (to secure imports of minerals, energy resources and raw materials) in many parts of the world. Furthermore, and perhaps more importantly, Japanese firms – particularly in the automobile industry – were extensively engaged in market-seeking to secure final markets in the US and Europe. This was a strategic move as an alternative to creating an overseas export platform in East Asia for extra-regional markets. Even in its heyday, therefore, not all Japanese outward FDI projects followed the framework of the FG paradigm.

The availability of low-wage labour in China’s coastal regions (and the country as a whole) became an important factor to think of industrial diffusion (domestically and internationally). Thus, researchers underline the importance of the FG paradigm operating first domestically prior, or at the same time as internationally. However, “non-efficiency-seeking” projects, particularly, “strategic assets-seeking” ones, occupy a much greater portion in China’s outward FDI than in Japan’s case. This is because not only does the Chinese economy still entail a great deal of raw materials and minerals, but Chinese wages have risen¹⁶⁵ and as a result suitable locations for efficiency-seeking FDI have become scarce in East Asia.

¹⁶⁴ Let us recall that given the vast size of the economy together with regional diversities, researchers have applied the FG paradigm to China’s domestic development as well as its external relations. In this regard, the China-centric model refers to China’s external relations.

¹⁶⁵ The rise of industrial workers wages in China was not exactly due to the increasing scarcity of surplus labour in agrarian areas alone. The increasing congestion of residential space for migrant workers raised the rental costs of living quarters, which in turn had caused knock-on effects on wages.

6.6.5 Trickle-down Effect (Industrial Relocation/Diffusion)

In the heyday of the Japan-centric model of development for East Asia, one observed that the trickle-down of industrial relocation emanated from Japan (as well as other early industrializers from around the world) to the region's late industrializers (see Chapter 12 for empirical details of major research). Many researchers then argued that empirical data on production and export of East Asian economies endorsed the region-wide trend of industrial restructuring (meaning deepening and expansion). Does a similar argument hold for the China-centric model? As was discussed earlier, in China's case much of the trickle-down effect has been domestic – that is the movement of manufacturing activities from coastal to non-coastal provinces and areas. The limited cross-border trickle-down phenomenon as manifested in offshoring of China's manufacturing activities has been limited, partly because the country's economy is quantitatively large but not qualitatively advanced.

A typical contemporary view on efficiency-seeking FDI is that late industrializers can be beneficiaries of such investment as it is likely to promote local development through providing local workers with hands-on experience in manufacturing activities. However, resource-seeking FDI projects may also include some value-added activities (of refinery and processing) apart from extraction. They are different from efficiency-seeking FDI along the product cycle argument. China has been actively establishing many SEZs in different developing countries. As these SEZs have been planned and constructed in light of China's early experiences, they have incorporated in them some institutional elements of successful Chinese cases. In that sense, they can be seen as the manifestations of trickle-down effect for industrial development. It seems that Chinese industrial planners who have undergone ample experience with SEZs from the 1980s must be confident with their capability to transplant these manufacturing enclaves.

6.6.6 Scale of Operation

When the FG paradigm surfaced in English – Akamatsu (1961; 1962) – for the first time in the early 1960s, it was its modern version that attracted international attention. At that time, the model still regarded Japan as a country in transition, something like a semi-periphery state located between the centre (early industrializers) and the periphery (late industrializers) in the world systems framework. The model then did not clearly indicate the geographical demarcation of its application. By the time Japanese researchers were more willing to embrace the model in the 1980s, its geographical application was generally understood to be East Asia.¹⁶⁶ Japanese protagonists of the FG paradigm, particularly

¹⁶⁶ Even then, the geographical demarcation was not definitive. Japanese researchers were uncertain whether China should be regarded as a member of East Asian developmental states. Many skeptics also wondered whether China's development has been attributable to the departure from (rather than the adherence to) the earlier Maoist interventionist regime.

its snow-balling model, generally accepted China as its most recent member. In any case, the snow-balling version of the modern FG paradigm alluded to the possibility (or fluidity) that regional development can expand the external boundary. But again, the geographical directions of its expansion were not clear. Thus, in addition to the East Asian high performers, namely Japan, the 1st-tier NIEs, the 2nd-tier NIEs, and China, the FG paradigm could include some of the less developed ASEAN members: Cambodia, Laos, Myanmar and Vietnam.

China has taken the diplomatic initiative to upgrade its non-principal (underdog) position within a globalized scale operation. Thus, the geographical demarcation of the China-centric model is fluid as it is still in the process of making, but potentially it is global. China's commercial diplomacy encompasses virtually all parts of the world. While China has become one of the largest source countries of FDI, its efficiency-seeking FDI is slowly expanding. As touched upon earlier, the most notable geographical region to which the Chinese firms are expected to relocate its labour-intensive activities is Africa. Justin Yin Lin, the former Vice President of the World Bank, is one of the most vocal supporters of the FG paradigm for contemporary late industrializers in the world economy. By emulating suitable earlier industrializers, Lin (2012) thinks that late industrializers, including those in Africa, can develop their manufacturing sectors as China, now "on the verge of graduating from low skilled manufacturing jobs", is soon freeing up "nearly 100 million labor intensive manufacturing jobs, enough to more than quadruple manufacturing employment in low income countries" (Lin 2012: 398). Purportedly, for that purpose, China has been actively constructing many SEZs in many parts in Africa. Given that these SEZs are still relatively new, it is hard to judge whether they are successful in jump-starting industrialization. China has also been active in resource-seeking FDI in many developing countries. While this emerging economy has greatly benefited many resource-exporting Latin American economies, it has also been accused of causing premature deindustrialization (Jenkins 2019). This is certainly inconsistent with the FG paradigm.

Bhattacharya (2016) states that China's grand development initiative, the BRI, can be seen as the country's "periphery policy", i.e., the policy to activate the underdeveloped peripheral regions by linking them via economic corridors directly with the economies of contiguous countries. The initiative intends to connect many national economies in Eurasia, together with some African countries. This argument can be taken to postulate that the BRI represents something like a "China-centered order" (Bhattacharya: 311), just like the China-centric model of the FG paradigm. As noted earlier, China has actively developed new diplomatic forums and financial institutions. They can be seen as part of the preparatory process of promoting the domestic FG paradigm and expanding its operation beyond its peripheries. Thus, what we have seen so far is the beginning of the globalization of the FG paradigm.

6.6.7 Policy Implications

In the 1980s and 1990s, the Japanese government advocated the country's development experience, basically the catch-up process and thereafter. The developmental role of the state has been one of the central pillars. Its broad industrial policy has been proudly upheld. In the context of the regional development of East Asia, the Japanese government (MITI) advocated various plans for the local government, particularly towards the 2nd-tier NIEs. Meanwhile, Japan became one of the largest ODA providers to its neighbours. As one of the two largest stakeholders (with the US), Japan has underlined the importance of public financing via the Asian Development Bank for economic infrastructure in many parts of Asia.

On the other hand, the central and provincial authorities of China have supported outward FDI as a way of “offshoring” labour-intensive, low-wage parts of the production process. This has been a way for them to assist Chinese firms in dealing with financial and social problems facing low value-added manufacturing activities. For example, the central authorities (the Ministry of Commerce) have published directories of specific overseas destinations for Chinese firms. China's initiatives have been visible with the establishment of new multilateral financial institutions (such as the New Development Bank and the Asian Infrastructure Investment Bank) that was the parallel to Japan's early efforts with the ADB.

6.7 Chapter Summary

The FG paradigm is a model that has developed over several decades, but its existential foundation is the catch-up process in the prewar period. From the 1960s to 1990s, the model gradually transformed into a framework to depict the regional development of East Asia. From the mid-1980s, the model was a key element of Japan's foreign policy; however, in the new millennium, China's emergence has come to overshadow Japan's leadership. Furthermore, towards the end of the 2000s, researchers also began to uphold the FG paradigm in their own framework. Indeed, the comparative analysis shows the development discourse of these two major economies in East Asia with their own versions of the FG paradigm: the Japan-centric model and the China-centric model.

The Japan-centric model has been referred to when dealing with the modern model Japan advocated in the postwar period rather than the initial model formulated in the 1930s. Japan's initial modernization drive in the 19th century reflected the perceived imperative to undertake catch-up through emulating various experiences of Western early industrializers. The initial (prewar) model of the FG paradigm was not Japan-centric, as the country belongs to the global periphery of late industrializers. By the time Japan began to uphold the Japan-centric model in the postwar period, it had become the preponderant economic power in East Asia. Japan's diplomacy towards its neighbors was to promote the “orderly” migration of manufacturing activities along the region's development

ladder. Japan also cherished the notion of the “developmental state” as well as public-private partnership as desired institutional ingredients for late industrializers. Japan also emphasized export-oriented development, exploiting overseas markets that provide a much larger outlet than its own domestic market and that such efforts yield the foreign exchanges needed for financing essential imports.

In the late 1980s and the early 1990s, the Japan-centric model was considered analogous to a regional development model of East Asia depicting the “collective” catch-up process, with Japan playing a leadership role and others emulating the leader’s experience. Then Japan’s central bureaucrats (as well as academic and non-academic observers) confidently pointed to the model in their development discourse. Japan’s failure in industrial upgrading at home since the 1990s has slowed down the pace of offshoring of its “obsolescent” manufacturing activities. In short, the Japan-centric model became dysfunctional as Japan’s leadership rapidly depleted and the Japan-at-the-top regional hierarchy began to be challenged. The advocates of the Japan-centric model subsequently fell silent. Since then, the central source of regional dynamism has shifted from Japan to China.

China began its post-Mao industrialization by inviting foreign firms (mostly from overseas Chinese businesses rather than Western early industrializers) in the early 1980s. China’s position was then as a recipient of industrial activities from abroad. This resembles Japan’s early catch-up drive to some extent. Whereas Japan spent many decades (and a war) to reach the status of the development leader in East Asia, China’s transition was relatively rapid, although the transition is still incomplete. One reason is that its domestic economy is so large and diverse that each stage of development takes a longer period than smaller economies. Thus, the application of the FG paradigm to China has not proceeded without dual track consideration, one pertaining to domestic application and the other to its external relations. In any case, the China-centric model came the fore in the new millennium. Just as its predecessor, the new model underlines industrial development with active public sector involvement.

These models exhibit certain common characteristics, but the analysis is exploratory in nature, and far from complete. This is because whereas the Japan-centric model can be seen largely as a model of the past, the China-centric model is a model that is still unfolding. While Japan once actively advocated the FG paradigm (the Japan-centric model) as the East Asian development model, China has not clearly indicated the geographical scope of its FG paradigm (the China-centric model). It has been argued here that the diplomatic initiative of linking up the vast Eurasian region may be interpreted as a super-charged version of the FG paradigm.

Chapter 7

Conclusion

7.1 Introduction

This dissertation has grappled with the long history of intellectual discourse on industrial development in East Asia. Its overarching goal was to examine the value of the flying geese (FG) paradigm, particularly in the context of contemporary East Asia (and beyond). Its intellectual evolution shows that researchers have interpreted the model in different ways and used it with different intents and purposes (Schröppel & Nakajima 2002). Critical observers may consider FG paradigm advocates as naively optimistic, as these advocates openly confirm the possibility of the “upward mobility” of peripheral areas of the world economy through late industrialization. Haggard (1990), for instance, highlights this possibility in his well-known book with the title: *Pathways from the Periphery*. But as Rodrik (2016) points out, East Asia is now the only exception that has escaped the global trend of deindustrialization.¹⁶⁷ In any case, the broad research interest of this thesis may be distilled into a fundamental question: “What intellectual significance does the FG paradigm still present, if it does at all?”

The thesis undertook three types of broad research exercises: i) to identify the lineage of the FG paradigm through archival research of diffusionist ideas of late industrialization; ii) to critique the FG paradigm, both the original model for a late industrializer with import-substituting industrialization in Japan before World War II (WWII), and its modern versions as a collective/regional development model after the war; and iii) to look into the contemporary discourse transition related to the FG paradigm, resulting from China’s emergence that has challenged Japan’s developmental leadership. This concluding chapter highlights some of the significant findings from these three exercises, and points out major caveats which may be viewed as shortcomings and thus possibly issues for future research efforts.

7.2 Intellectual Lineage of the FG Paradigm

Based on archival research, Chapter 2 sought to establish the intellectual lineage of the FG paradigm – mostly as a national catch-up model with import substitution – from the 1930s when Professor

¹⁶⁷ We sense the global trend of deindustrialization when we check the sectoral value-added and/or labour size in manufacturing against the total output and/or total labour. Referring to premature deindustrialization, Rodrik (2016) explains that “output deindustrialization” as well as “employment deindustrialization” at the national level has been occurring increasingly at the earlier stages of development (in terms of per capita income) than before. This author is grateful to Mansoob Murshed who brought up the issue of premature deindustrialization at the Full Draft Seminar of this dissertation (27 June 2019).

Kaname Akamatsu came up with the initial prototype. Akamatsu formulated his seminal model based on historical research on Japan's industrialization from the late-19th century, arguably the first successful case of late industrialization beyond Europe and Northern America. Furthermore, Japan's case – together with others in East Asia in the more recent past – demonstrates the viability of late industrialization even in those economies that are located far away from the early (Western) industrializers.

7.2.1 Prewar FG paradigm: A National Catch-up Model

Chapter 2 documented that the Meiji government actively orchestrated the country's multifaceted “modernization” campaign to catch up with Western powers. In the 1870s, the government promoted the local absorption of modern scientific knowledge and technology from numerous Western engineers, technicians and scholars hired at newly established educational institutions and training facilities. A wide range of Western knowledge (classic and modern) was rapidly translated into Japanese. It also initiated the installation of modern infrastructure of public transportation (e.g. ports and railways) and communications (telephone/telegram networks) as well as numerous state-owned plants and factories for many consumer products. In the 1880s, newly emerging private entrepreneurs came to reinforce the industrialization drive by taking over many of the previously established state-owned enterprises.

Japan's expansionist ambitions towards Korea ended with a war with China (1894-1895). China's war reparation brought large financial benefit to Japan, which eased much of the pending financial difficulty resulting from its ongoing, costly modernization campaign. In the early 20th century, the patriotic diligence of the general public further supported Japan's expansionism, and the country's modernized military (particularly its navy) was victorious in a war with Russia (1904-1905). The rise of militarism in Japan, however, led to various calamitous and violent collisions in its politics and eventually to WWII. It was in the dynamic but precarious situation of the 1930s that the FG paradigm was developed. Chapter 9 (a supplement to Chapter 2) presents the case of Japan's cotton industry in the Meiji period which Akamatsu studied as a classic case of sector-specific, import-substituting development.

In the increasingly militarized environment, heavy industry (including, among others, ammunition, chemical, metal and machinery sectors) – together with the existing strong textile base – came to dominate Japan's economic scene (Korhonen 1994: 39). The thesis examined the retrospective view held among critical observers of the dependency argument in the postwar period about the wartime function of the FG paradigm. These observers typically argued that the Japanese government deployed the FG paradigm as a propaganda tool to rationalize the project of creating a Japan-centred Pan-Asianist sphere. However, this is doubtful as it is unlikely that by the end of the 1930s the FG paradigm had been well established and deeply embedded in Japan's intellectual psyche. Though admittedly the

model may have been easily linked to the sentiment of economic nationalism (and possibly, of xenophobia), there is no evidence that the model ever contained the sentiment of anti-Westernism. In any case, at the time of WWII the FG paradigm was still a national-level model of import-substituting development rather than a regional-level model of integrative development for East Asia.

Akamatsu's biographical profile indicates that in much of the first half of the 1940s he was in Southeast Asia as Japan's high-ranking researcher-cum-military officer (Akao 2008). It is unclear, however, whether Akamatsu himself became an advocate of Japanese imperial (hegemonic) aggression (Ohtsuki 2017). Akamatsu purportedly admitted later that at the time of Japan's surrender in WWII, he and his colleagues in Singapore had destroyed much of their accumulated research results. Thus, one cannot tell the nature of his actual wartime research. It is likely that the wartime assignment in Southeast Asia deprived him of the academic opportunity to polish the model's details. Even after returning to Japan, Akamatsu remained purged from public service as a former military-collaborator, not being allowed to return to his academic life until December 1948 (Ikeo 2008; Ohtsuki 2010).

The thesis documented that the early experiences of Japan's industrial take-off in the late 19th century provided Akamatsu with fertile ground for formulating the initial model of the FG paradigm. Japan used to exhibit the German Historical School's neo-mercantilist trade policy, even though the country could not fully deploy protectionist policy because it could not enjoy tariff autonomy for several decades (see Chapter 9 for the early history of Japan's cotton industry, particularly its production and trade performance). The Meiji government stressed the rapid localization of advanced scientific knowledge and technology from abroad, without relying too heavily on inward FDI or incurring external debt.¹⁶⁸ The government underlined the policy of promoting product/sector-specific import-substituting production and export-led catch-up process. In a similar fashion, the East Asian experience in the postwar period showed that many rapidly developing economies typically combined the policy of import-substituting production and export-led catch-up process (Krugman 1974).

7.2.2 Postwar FG Paradigm: A Regional Development Model

The rise of development economics as a newly recognized academic discipline in the early postwar period enhanced the impact on Akamatsu's model of import-substituting development. After an intellectual hiatus following WWII, the FG paradigm resurfaced in the 1950s and 1960s, and the consideration of inter-sectoral linkages, one aspect of new thinking in development economics – the

¹⁶⁸ The Meiji government could not raise much foreign loans as it did not possess high international creditworthiness. According to conventional knowledge, until very recently Japanese policy-makers had severely restricted inward FDI. But recent archival information on limited and scattered data indicates that Japan had accepted fair amounts of inward FDI from the US (often for joint ventures) before facing the international economic sanctions by the League of Nations.

significance of raw materials and more importantly capital goods (manufacturing machinery) imported from abroad for the commencement of import-substituting production of consumer goods – enriched the original framework of Akamatsu’s national development model (see Figures 2.16 & 3.2 in Chapters 2 & 3, respectively).¹⁶⁹ At this stage, FG paradigm advocates may have treated Japan as a semi-periphery at an advanced stage in the process of catching-up.

As was documented in Chapter 3, the FG paradigm re-emerged as an East Asian development model in the postwar period with the core element of Japan-centrality, where Japan’s industrial development was seen as an exemplary target for other Asian late industrializers to emulate for their own development. Thus, East Asian economies could be expected to continue transforming the sectoral composition of manufacturing, which would resemble the Japanese counterpart of an earlier period. However, the extent to which Japan’s specific development experience with structural changes – and of which period(s)? – is deployable by non-Japanese late industrializers is open to debate. Given that each late industrializer is faced with its own historically unique internal and external parameters, the thesis underlined the difficulty in creating a stylized blueprint of generalized mode of emulation¹⁷⁰ (see Section 7.3).

According to the modern FG paradigm as a region-wide model, East Asian economies operating at diverse stages of development exhibit different types of comparative advantage among themselves, which has purportedly encouraged them to enhance their mutual trade and investment flows. As long as this diversity persists among the region’s economies, mutually gainful industrial diffusion continues to underpin the process of region-wide industrial development. Again, the key is the persistent diversity of development among national economies in the region. If the diversity declines over time as less developed national economies catch up with the more advanced ones, the dialectics for overall

¹⁶⁹ Does late industrialization entail the steady upgrading of imports of machinery in order to underpin the import-substituting production of better-quality consumer goods? This seems to be the case for Japan, South Korea and Taiwan, all of which are resource-scarce late industrializers. But this may not be ideal for resource-abundant late industrializers, such as the 2nd-tier NIEs, particularly, say, Indonesia, where its policy-makers strived for “export-substituting industrialization”, i.e., upgrading the quality of exports. It may imply, for instance, adding manufacturing activities of heavy industrial sectors to their traditional raw material exploitation (for example, the refinery process being added to the initial crude oil extraction). This discussion alone challenges the standardized sectoral “upgrading” among East Asian economies.

¹⁷⁰ South Korea and Taiwan have followed Japan’s development path rather closely by internalizing its experience (perhaps, as part of the institutionalized legacy) from the colonial period. Such emulation, however, would be more difficult for Singapore and Hong Kong, as their period of “Japanese occupation” had been much shorter, and their small territorial size has severely constrained their manufacturing activities. The emulation is also difficult for the resource-abundant 2nd-tier NIEs that are obliged to undertake, at least initially, the task of developing resource-based manufacturing.

development will cease to continue. This is one issue that has not been well addressed in modern versions of the FG paradigm (see Section 7.5).

Compositional changes in the US markets for consumer products sourced from different Asian exporters demonstrate that East Asian economies are experiencing a cascading type of development diffusion (see Figure 3.8 in Chapter 3). The share of Japanese products in many consumer goods categories marketed in the US has steadily declined, while the shares of others' have risen. The thesis pointed out that the modern FG paradigm – most of all, a “snowballing model” – exhibits the trend of geoeconomic expansion of diffusion, because late industrializers with rising levels of sophistication in manufacturing are likely to let their obsolescent activities migrate to less-developed neighbours. In other words, integrative development is “downward oriented” with new destinations being added to the list of locations for possible offshoring manufacturing activities. In this regard, China with a wide range of diversity in its landmass makes cross-border relocations more time-consuming. Most of all, it is normal to expect that domestic relocations would be prioritized. Evidently, the westbound “domestic” snowballing phenomena taking place in China (see Ang 2017, Ang 2018, Ruan & Zhang 2014) (see Section 7.4).

Calling the most recent version of the FG paradigm the fragmented production model (popularly known as global value chains, see Figure 3.8 in Chapter 5),¹⁷¹ the thesis noted that contemporary merchandise trade in East Asia involves heavy cross-border movements of parts and components. Indeed, contemporary East Asia exhibits the ongoing development of networks among different localities engaged in fragmented production activities. For instance, in the electronics sector with a relatively long process of production and assembling, globally active firms (say, those from Japan as well as from the US) have created vertically layered “intra-firm” or “intra-network” supply chains.¹⁷² These networks of manufacturing activities often deploy, in stylized terms, technology-intensive production in Japan, capital-intensive production in the 1st-tier NIEs, and labour-intensive production in the 2nd-tier NIEs and China. The fragmented production model was characterized as the “FG paradigm in a hurry”, given that offshoring (diffusion/relocation) can take place rapidly but

¹⁷¹ Figure 3.5 shows, just for an illustrative purpose, one of the simplest cases of multinational fragmentation. Admittedly, the reality of institutionalized division of labour along value chains has been more complex and has numerous variations.

¹⁷² Gereffi (1994) refers to such networks as “producer-driven” type. It is centred on major manufacturing firms of capital- and technology-intensive sectors, which often retain their core operation of research and development of product design and marketing with a widespread use of overseas contracts for manufacturing labour-intensive parts and components as well as assembling them into final products. Gereffi also mentions another kind, “buyer-driven” type, centred on major retailers, brand-named merchandizers and trading companies, which is prevalent among export-oriented, labour-intensive, consumer products of mass production such as textiles and garments, footwear, and toys. However, the distinction between them has become less and less clear.

incrementally in the transformation of production processes, more so now than before.¹⁷³ This is especially significant in the case of globalized mass-production, Global Fordism.

7.2.3 Prewar Model vs Postwar Model: An Analytical Comparison

As a model of national industrial development, the FG paradigm stipulates that late industrializers can achieve development (including accompanying structural changes) through interacting with early industrializers. Here, industrial development, as manifested in intra-sectoral and inter-sectoral shifts in manufacturing, entails a specific mixture of external stimulus to instigate the national drive for industrialization and appropriate internal capacity to effectively indigenize the external stimulus. But what is meant by external stimulus here? In Akamatsu's original model it would be "imported products of superior quality" that would stimulate consumers' tastes, which would in turn instigate local manufacturers to begin import-substituting production. Or alternatively, the external stimulus could be the imported technology and machinery (together with scientific knowledge embedded therein) or the joint venture operation with foreign firms. FG paradigm advocates are generally optimistic about the factors of production in late industrializers, most of all labour, being highly deployable in the development process. They postulate that the problem of structural unemployment emanating from ongoing sectoral shifts in manufacturing would not be formidable. But we must also consider the physical availability of non-labour inputs, such as land, raw material, parts and components. Obviously, we cannot expect small economies, such as Singapore and Hong Kong, to build a full-scale operation of the modern automobile industry due to their locational constraints.

The term "Flying Geese" is a *trope*, or a symbolic titular expression, that Akamatsu initially deployed to characterize the process of late industrialization, i.e., import-substituting production, in a single national economy. The thesis questioned what is meant by "geese", not to mention "flying ones". The archival research indicates that the "Flying Geese" implies "orderliness", signifying the pattern of steady sectoral development (without leapfrogging) in the national catch-up process, and cascading regional development (collective catch-up) without causing much reshuffling in the existing hierarchical order among national economies (see Section 7.3).

¹⁷³ We must recognize, therefore, the much limited development in the indigenous capital goods sectors in the region, prominently in the 2nd-tier NIEs and China, where export manufacturing heavily relies on foreign technology as well as parts and components that are often imported or produced by subsidiaries of major foreign firms (see Section 7.3). As critical observers stress, therefore, East Asian economies – whether being importers, or exporters, or both, of manufactured products – are often not built on a solid foundation of manufacturing these products. East Asia is far more complex than the early "methodological nationalism of product life cycle" depicts. Here methodological nationalism identifies the "final" manufactured exports as the indicator of their exporter's industrial development, without looking into components of their imported parts and components. In any case, one important implication of such intra-regional trade is that import-substituting production has not fully and widely occurred in East Asia.

7.3 Critique of the FG paradigm: A Selective Recapitulation

The thesis examined various aspects of the FG paradigm, and presented critical thoughts in two parts (Chapters 4 and 5). In Chapter 4 the FG paradigm was critiqued in terms of its role as a generic model of late industrialization for national economies, individually and collectively; and in Chapter 5 as a regional development model for East Asia. While there is no need to provide details here, the paragraphs below highlight some of the major elements of concern.

Competitiveness: The thesis scrutinized the concept of competitiveness (or productive capacity). Specifically, the process of deriving the configuration of competitiveness from import-substituting production, i.e., the M-P-X sequence (see Figure 2.9 in Chapter 2) was questioned. After all, competitiveness is a “relative” concept, meaning that the indication of competitiveness of a national economy in manufacturing a specific product can make sense only when it is compared with its own past (see Figures 2.14 & 2.15 in Chapter 2), and perhaps more importantly with its competitors’ performance (see Figures 3.3, 3.4 & 3.5 in Chapter 3). The thesis also questioned whether the stylized “rise and fall” configuration – being “timely and orderly” – of national competitiveness is plausible, given the diversity (most importantly of size) among national economies. Clearly, one cannot consider that industrial development ought to follow a strict sectoral sequence with respect to production activities.¹⁷⁴ It is easy to imagine that the rise-and-fall configuration of product-specific competitiveness could be generally short in small economies, such as Singapore and Hong Kong, whereas it would be much longer in large economies such as China as a whole.¹⁷⁵

Life cycle: The relevance of product life cycle was questioned. It was documented that Vernon’s (1966) product life cycle theory heavily influenced many modern versions of the FG paradigm. In the 1960s, Akamatsu, then already late in his professional life, accepted the soaring popularity of Vernon’s framework as the way of rationalizing the diffusion/relocation of product/sector-specific manufacturing activities. Indeed, the life cycle of a consumer product may induce “efficiency-seeking” FDI, thereby forming a particular pattern of offshore manufacturing. But other factors also affect

¹⁷⁴ The M-P-X sequence as observed in Japan cannot be generalized, because some of its sequential element phases – import, production and export – have been omitted. (See Section 7.2 for a discussion on the production network model.)

¹⁷⁵ China’s large and divergent domestic areas (for instance, coastal, internal and western areas) cause the recycling of the rise-and-fall configuration among these areas, which would prolong the rise-and-fall configuration of China as a whole (see Section 7.4).

offshore manufacturing.¹⁷⁶ It was noted that the location of product-specific demand and market cycles (business fluctuations) – domestic and global – all affect the quantity and distribution of FDI flows for offshore production. Furthermore, the life cycle pattern associated with each product/sector differs considerably among different national economies. Another related question is about the relationship between the state of maturity of products along their life cycle and the location of their production. In this regard, Vernon’s product cycle theory presents just one case of many alternative possibilities. If a capital-intensive production process – say, with the extensive use of robotics – could be deployed for labour-intensive products as effectively as before, then cheap labour alone may not induce offshore production. For instance, the production of special quality textiles – such as those of durable automobile seatbelts or industrial belts, for example – may neither remain labour-intensive, nor search for locations of abundant labour, domestically or internationally.

Japan bias vs China bias: The FG paradigm implicitly overvalues Japan’s experience as the case for emulation. In that sense, the model can be criticized exactly for its “Japan bias”, just as Modernization theory used to be criticized for its European bias in the 1950s and 1960s. Late industrializers should carefully determine what aspects of Japan’s experience – or for that matter, of successful others, such as the 1st- and 2nd-tier NIEs as well as China – could be emulated in light of their own potential development capacity as well as their likely competitors. Certainly, they should not fall in the trap of the “fallacy of composition”, where numerous producers are specialized in narrow areas of low-cost, export-oriented manufacturing. It is feared that this is what many East Asian economies are now facing.¹⁷⁷ While the argument is slightly different, Akamatsu was quite aware that cross-border industrial diffusion can engender trade conflicts between early and late industrializers. In this regard, the modern view of the FG paradigm optimistically romanticizes the collective catch-up process. In addition, the recent application of the FG paradigm – which is centred on China, more specifically

¹⁷⁶ The case in point is China’s outward FDI. This emerging economy has also become one of the largest FDI source countries of the 2000s. Deng (2004) notes that China’s recent outward FDI has been activated by five types of motivation, all of which deal with acquisition of some sorts: natural resources, sophisticated technology, market access, risk diversification and strategic assets.

¹⁷⁷ East Asia has recently experienced a deteriorating trend in terms of trade, more specifically a secular deterioration in “net barter terms of trade”, i.e., the declining trend of the unit price of exports (predominantly manufactured consumer products) of the region’s economies compared with that of their imports. As noted in the text, one reason for the trend is the “fallacy of composition”, i.e., a large number of producers are engaged in manufacturing similar products which have caused excess supply. Of course the general rise of productivity of the region has also reduced the cost of production of each unit of exports. But the dramatic rise of productive capacity of the region as a whole has raised its overall export earnings. Thus, the index of “income terms of trade” – the measurement of import capacity with the changes in export earnings – of the region has sharply risen. Meanwhile the declining unit prices of many consumer products on the global scale have wiped out traditional manufacturers, i.e., deindustrialization, in many other regions of the world.

internal (domestic) and external (East Asia and beyond) relocations of its manufacturing activities – tends to have a “China bias” (see Section 7.3).¹⁷⁸

Stable regional order: Regional stability is another issue. How can we expect that East Asia can provide a “stable” process of collective regional catch-up? One classic criticism about Asian stability is the high likelihood of tension between the territoriality-based inter-state system (politics) and the regionalized production networks (economics) (Bernard & Ravenhill, 1995: 172). The tension has in fact affected the structure and character of the East Asian political economy, and it has occasionally caused new elements of instability that challenged regional cohesiveness. Akamatsu himself was doubtful about the permanent rigidity of regional rankings.¹⁷⁹ On the other hand, it seems that modern FG paradigm advocates assume the sustained hierarchy among national economies in East Asia, as important background against which industrial diffusion can take place in an orderly fashion. However, industrial activities can migrate across boundaries in such a matter to take advantage of exiting different production structures across time and space, depending on local configuration of various factors and specific historical settings.

Leapfrogging: The possibility of industrial leapfrogging is another cause of intellectual disagreement. While the regional transfer of manufacturing activities can trickle down along the hierarchy, it cannot be assumed that this always takes place in a cascading fashion (i.e., one rung of the ladder at a time). On the contrary, while encountering opportunities of “leapfrogging” within the regional ranking, the national economies – being competitive in upgrading their relative position – are likely to take advantage of them, even though such an act may shake the “orderly” hierarchy from the inside. The concept of “advantages of backwardness” (Gerschenkron 1962) indicates that late industrializers are facing a large pool of advanced technology that has been invented and standardized and proved to be viable, which may prove the possibility of industrial leapfrogging. Large private firms – from within or outside the region – themselves are not concerned with the potential disorder of regional hierarchy due to leapfrogging when they choose offshore production sites.

Other pertinent issues: A market-based explanation alone cannot explain East Asia’s integrative development. The initial impetus of the region’s development was attributed to US security policy towards its allies, with concrete manifestations of various spending (military and development aid) and

¹⁷⁸ The FG paradigm operation (industrial relocation) is a two-tier – international and domestic – system, as it has recently been taken up as a model for internal industrial diffusion within China just like East Asia as a whole.

¹⁷⁹ Regarding Japan as a late industrializer in the process of catching up, Akamatsu initially did not care at all about the “disturbance” to the existing hierarchy resulting from Japan’s performance. In fact, the challenge to the existing West-dominant hierarchy was exactly the goal of Japan’s early modernization drive.

procurements (military-related spending). As noted before, US markets used to be wide open to Asian manufactured products. Those geopolitics-related factors may not sit well with the FG paradigm. The second non-market factor that affected the pattern of intra-regional linkages in East Asia is ethnicity. Much of the 2nd-tier NIEs development has been due to the ethnic connection between Singapore and Taiwan on the one hand and ethnic Chinese firms in the 2nd-tier NIEs on the other. Special historical linkages between Hong Kong and China, and for that matter those between Taiwan and China, have facilitated industrial diffusion. Obviously, the logic of FG paradigm cannot explain why such extra-economic factors occupy an important factor in East Asian dynamics. In any case, the lack of such ethnic links in the region on the part of Japan and South Korea caused a considerable delay in manufacturing offshoring from Japan and South Korea to the 2nd-tier NIEs.

7.4 Discourse Transition: A Consequence of China's Emergence

The emergence of China in the 1990s has been one of the most notable events in manufacturing activities in East Asia. It also signified “the shift in progress” of the region’s development gravity from Japan to China (MacIntyre & Naughton 2005). When the FG paradigm was revived in the 1960s and subsequently popularized in the 1980s, Japan occupied the centre of the East Asian miracle. The 1990s, however, presented a period of irreversible transition during which Japan’s economic performance continued to suffer. Meanwhile, China’s central authorities re-confirmed their market-oriented policy for the foreseeable future. The year 1992 opened the floodgate of FDI inflows to China which had been facing economic sanctions imposed by major Western economies.¹⁸⁰ China’s emergence has affected the development discourse in various ways. Specifically, it was argued that the rise of China as a major destination and source of FDI confirms this emerging economy’s willingness to integrate its development into the global economy.

Indeed, it is the transition from the earlier introverted development strategy of passive orientation to an extroverted strategy as a pro-active way of integrating itself into the global economy. Towards the end of the 1990s, China’s development strategies clearly became more externally oriented. In addition to inviting outside investors in, China’s central authorities began to encourage – with the “Go Out policy” – Chinese firms go out in order to secure raw materials and markets. After all, Chinese firms themselves had already wanted to “escape the cut-throat competition – much of it with foreign firms” (Jacques 2009: 218) as well as to cope with thinner profit margins in China as a result of the intensified

¹⁸⁰ During the 1992 “Southern Tour” to some of the key Specialized Economic Zones (SEZs) in southern China, Den Xiaoping repeatedly re-confirmed China’s commitment to the reform policy that he had launched in 1978. He also refuted the idea that foreign influence had been responsible for the difficult political events, particularly in Beijing in 1989 (for further discussion, see Zhao 1993).

competition with imports following its imminent accession to the World Trade Organization (WTO) (see Deng 2004).

7.4.1 Domestic FG paradigm

Of more direct relevance is the new type of discourse related to the FG paradigm in the overall discussion on Chinese development. In the first decade of the new millennium, researchers who closely observed developments in China began to refer to its arrival of demographic transition from labour surplus to labour shortage. They wondered if the “Lewisian Turning Point” – the moment at which surplus rural farmers are no longer available as cheap migrant workers in urban industrial sectors – has already arrived in its coastal provinces that have been active with regard to labour-intensive manufacturing. Recognizing the general rise of production costs in many coastal areas, researchers have further questioned whether the FG paradigm – the systematic relocation of labour-intensive manufacturing activities – was occurring within China. This was because Chinese firms appear to make the relocation of production facilities to lower-costs locations within the country rather than outside (Deng 2004: 15; also see Ang 2017; 2018).

As noted earlier, the rise of industrial wages in China was not solely due to the thinning surplus of rural labour in the coastal provinces. If this had been the case, then the solution would be the increased recruitment of rural labour from far-flung locations beyond the coastal provinces, say from internal and western provinces. Let us note that the wage hikes in coastal cities were due to, most of all, the soaring living costs of increasingly congested urban life, particularly housing costs. Thus, the alternative solution would be the westbound relocation of manufacturing activities in order to hire surplus labour at the locations of lower living costs. In any case, given that the earlier framework of the FG paradigm used to be for rationalizing the phenomena of offshore manufacturing activities, the consideration of domestic relocation was an interesting new addition to the FG paradigm. Many westbound movements, therefore, can be regarded as the phenomenon of “domesticated” flying geese (see Ang 2017; 2018).

7.4.2 Go Global Policy

As noted earlier, in the new millennium, China has become the central force of development with outward FDI (Deng 2004). An increasing number of observers have referred to the diffusion of labour-intensive activities not only within but also from China. Indeed, Chinese coastal firms are relocating themselves to western provinces within China. Furthermore, labour-intensive manufacturing activities have also migrated to Southeast Asia, including ASEAN countries, and recently also to central Asia and beyond. While China’s outward FDI in Northeast Asia (such as Japan, South Korea and Taiwan) is still limited, it has been expanding, particularly through mergers and acquisitions (M&As) vis-à-vis fairly well-established global firms. It is anticipated that the scope of

China's regional integrative framework, or the China-centric FG paradigm, is much greater than East Asia.

One of the earliest references to the China-centric model of the FG paradigm was in the late 2000s, when researchers began to refer to China's contribution in terms of its experience with labour-intensive, export-oriented manufacturing activities. Lin (2012), for instance, highlights the possibility of the offshore production of labour-intensive manufacturing of Chinese firms, together with the idea of establishing SEZs in many parts of the world – for instance, Africa – where Chinese firms would share their own experience and finance with local development partners.

Because of its internal diversity and vastness as well as ethnicity-facilitated business linkages among Chinese businesses, the Chinese economy can be the most “destabilizing” (or “dynamic”) factor in the regional industrial hierarchy. Bilateral trade channels within East Asia have recently grown very rapidly, with many involving China. Indeed, China has become a sort of “Black Hole” absorbing an increasing portion of the total private financial flows to the region. The situation of possible “crowding out effect” may lead to the increasing “marginalizing” of the region's smaller economies. In this regard, could the recent Free Trade Agreement between China and ASEAN be a double-edged sword as far as ASEAN members are concerned? Let us recall that given that Japan and the 1st-tier NIEs (South Korea and Taiwan in particular) have not absorbed manufactured products in large quantities from the 2nd-tier and China, the 2nd-tier NIEs have increasingly relied on China as a market outlet for their exports. Can we anticipate the coordinated intervention of the various states in the region to systematically organize an industrial upgrading blueprint on a regional basis and to curb turbulent market forces? Such intervention may help not only reduce excessive competition among the region's firms in some specific manufacturing activities, but also reduce the risks of social costs associated with private sector initiatives. But this may contradict the dominant concept of globalization.

7.4.3 The Belt and Road Initiative:

The newest framework for the China-centric FG Paradigm

The international community has been amazed by what is now known as “the Belt and Road Initiative” (BRI), China's most recent and grandest project in foreign policy. While this is not an appropriate place to present a lengthy discussion, it is still important to point out that the BRI has emphasized infrastructure development to improve connectivity within the huge Eurasia landmass via land and maritime routes.¹⁸¹ There is no doubt that the development of connectivity will facilitate the

¹⁸¹ The BRI is the short-hand expression for the totality of two projects: “the Silk Road Economic Belt” (to link China with Central Asia, the Middle East and Europe), and “the 21st Century Maritime Silk Road” (to link China with Southeast Asia, and later also with Europe and Africa via the Indian Ocean). These projects were separately presented by Chinese President Xi Jinping on two different occasions in 2013, but were merged

westbound movement of the FG paradigm, with Western Europe – together with many others on the routes as well – being targeted as the outlets of manufactured products. The BRI can be seen as an upgraded (but perhaps more regionally focused) version of China’s “Go Out policy”, where the emphasis on securing natural resources and markets seems to have been reinforced (Kasahara 2017: 4). The participation of many west European countries in the recently established Asian Infrastructure Investment Bank (AIIB), a large multilateral development bank – in a way the main financing arm of the BRI – under China’s initiative, may imply global support (with the notable exceptions of the US and Japan) towards the initiative to activate the FG paradigm.

7.5 Last words: caveats

Let us go back to the fundamental question that was posed: What intellectual significance does the FG paradigm still present? It was argued that the model, particularly in its modern versions, provides a sense of comfort among market participants with the common belief that the relocation of manufacturing activities can systematically occur along the industrial ladder. This process reinforces not only the incentive of mutual interactions (most importantly, through trade and FDI) within the region, but also strengthens the propensity to strive for greater integration. A question here is whether this is consistent with the sense of distributive justice. For the region, a key question is whether the industrial hierarchy presents fairly justifiable costs and benefits to its members.

As noted the steady erosion of Japan’s diplomatic posture along the FG paradigm started in the 1990s and onward. Japan’s impetus to keep its own economy ahead of the others’ in the region has been challenged, and various shocks and internal calamities have compounded its economy’s difficulty. This does not mean, however, that the country has lost its own industrial, technological and financial lead in the region. The discussion here has a critical shortcoming regarding the lack of consideration of the firm-level perspective of the ongoing inter-national reconfiguration. In other words, the macro-level decline of Japanese national economy as a whole does not necessarily mean the micro-level decline of Japanese manufacturing’s firms. In other words, the FG paradigm may indicate Japanese firms’ offshoring activities of manufacturing, which may mean that non-Japanese economies are increasing in the process of “dependent development”.

The major disruption of the networks of East Asia assembly lines at the occasion of the 2011 earthquake/tsunami disaster questioned the “just-in-time” system, of inventory management. In a way, these incidents may have provided incentives to non-Japanese firms to rely less on Japanese parts and components, thereby possibly increasing the momentum to strive for a more complete version of

together into the BRI in the following year. Some optimists quickly call it the contemporary Marshall Plan (a massive American initiative to rebuild Western Europe after WWII).

the FG paradigm in practice. Another shortcomings of the dissertation regarding the contemporary leadership rivalry in East Asia (and beyond) was that it hardly touched upon Japan's position and attitude since the new millennium in the light of China's emergence.¹⁸² The debate has not been settled as to whether China's emergence has resulted from a genuine rise of its own business sector, or a disguised one that hides the role of foreign interests that took advantage of its large markets.

One major element that has been lost in the historical evolution of the FG paradigm is the conceptual framework of dialectics operating between early and late industrializers. Akamatsu continued this aspect of global dynamism in the postwar period, when his students were busy elaborating on their modern versions (typically along the neo-classical framework) of the model. Though still a minority, some researchers have recently been taking up the dialectics mechanism. Akamatsu stressed that the interplay between the homogenization drive of late industrializers (to catch up, thereby forging convergence) on the one hand and the heterogenization drive of early industrializers (to innovate, thereby forging divergence) on the other is the base for overall global upgrading. However, the paces of convergence and divergence are not always congruent, as in some periods convergence overwhelms divergence whereas in some other periods the reverse is the case. Particularly important in this regard is the frequency of early industrializers' major innovations (the fundamental cause of global divergence), which may be called the "Akamatsu wave" or "Akamatsu cycle", arguably as important as the Kondratieff long wave. This aspect may deserve more intellectual attention.

While the discussion of the FG paradigm has mostly been centred on the context of East Asia, the demarcation of the geographical boundary of manufacturing activities cannot be rigid. However, the model does not stipulate that the regional system ought to be neither geographically demarcated nor functionally self-contained. After all, Japan inherited the textiles sector from Western early industrializers, before initiating its own industrial shedding in accordance with the FG paradigm in the context of the regional industrial catch-up process. One cannot easily assume that China will continue to leave out European outposts, such as Australia and New Zealand as well as important Asian economies with abundant labour such as India, Pakistan and Bangladesh from its geoeconomic blueprint. The FG paradigm does not explain well "how" new national economies – which are historical rivals among themselves, for instance, India and Pakistan – could join the collective catch-up scheme without creating tension with existing members.

¹⁸² This author is grateful to Saori Shibata, one of the external reviewers, who, among others, raised this valid criticism as a blind spot of the dissertation at the Full Draft Seminar (27 June 2019).

Appendices

Chapter 8 (Supplement for Chapter 1)

Nine East Asian economies: A brief historical profile¹⁸³

8.1 Introduction: Background Profiles

The term, East Asia, has derived from burgeoning research in the recent past on the impressive performance of some Asian economies that are relatively closely located. Specifically, we deal with nine East Asian economies that are presented into four-layer clusters. They are:

- i) Japan;
- ii) 1st-tier NIES (South Korea, Taiwan, Singapore, and Hong Kong);
- iii) 2nd-tier NIEs (Malaysia, Thailand and Indonesia);
- iv) China.¹⁸⁴

These economies' postcolonial industrialization in the postwar period has coincided with a continued expansion of world trade, particularly for manufactured products.

Japan has long been seen as the leader of the dynamism of East Asian industrialization. The 1st-tier NIEs are located immediately underneath the leader in the regional hierarchy. Like Japan, these economies are also characterized by their resource-scarcity as well as interventionist states (except Hong Kong). Among them, South Korea and Taiwan have emulated most closely the structural features of Japanese manufacturing. Singapore and Hong Kong also rapidly industrialized, but the geographical and demographic conditions have contributed to their relatively early exit from (labour-intensive) manufacturing activities. The three Southeast Asian economies of the 2nd-tier NIEs began their own industrialization drive later, in the late 1970s and 1980s. China, the latest member of this group, has made an impressive industrial development leap with the emphasis on labour-intensive manufacturing in the 1980s and onward, and it has transformed the regional industrial landscape.

The following pages provide a brief historical overview of each of the four-layer clusters, with the emphasis on their structural changes and economic activities.

¹⁸³ We consulted various sources for this chapter, of which the principal sources include Amsden (2001), Cai (2011), Campos & Root (1996), Chia (198), Chang (2002), Das (1996), Deyo (1998), Dixon (1991), Golub (2016), Haggard (1991), Jomo et al. (1997), Ohno (2002), Pasuk (1990), Perkins (2013), Stubbs (2005), Stubbs (2018), World Bank (1993) and Vogel (1991).

¹⁸⁴ The list could be more inclusive, with other Southeast Asian economies such as Cambodia, Laos, Myanmar, the Philippines, Vietnam, etc.

8.2 Japan

Japan, a resource-scarce, highly populated island country, has the longest period of sustained industrialization that began soon after the Meiji Restoration (1868). The preparation for its industrial development started with various initiatives by the Meiji political leaders, including the establishment of state-owned enterprises (SOEs) for specific manufacturing sectors including shipbuilding, iron & steel, machine tools, cement and glass (see Chang 2002: 46-51). Even though many of these SOEs were privatized in the 1880s, the state continued to play an active role in their development. The state also initiated the development of basic infrastructure, such as transport (including railways) and communications (postal services and telephone/telegram services).

Japan recovered full tariff autonomy in 1911, and its protectionist measures thereafter helped it progress its industrialization, particularly during World War I (1914-1915). Japan then benefited greatly from the inability of European suppliers – who were then preoccupied with events at home – to trade with Asia, thereby generating a trade surplus for the first time in the second half of the 1910s. Throughout the 1920s, however, the Japanese economy suffered from a series of frequent, short-lived recessions and banking crises (Ohio 2018: 84). At the same time, a widening range of manufacturing, including the heavy and chemical industrial sectors, came to be controlled in an oligopolistic fashion by a few financial/industrial conglomerates (*zaibatsu*). In the 1930s, the Japanese economy suffered from the Great Depression, but much less so than early industrializers did. Manufacturing and mining continued to grow, and much of industrial growth was geared towards the enhancement of its military power. It was around this period that Akamatsu came up with the initial idea of the FG paradigm (see Chapter 2).

In the late 1930s Japan upheld the foreign policy slogan that the country would guide its East Asian neighbours to form the “New Order in East Asia” (1938) and the “Greater East Asia Co-prosperity Sphere” (1940). Purportedly, these campaigns were aimed at forging East Asian economies’ collectively catching-up with the West, by means of forming “an indigenously based, autarkic region that excluded Western influence” (Cha 1998: 36). The Japanese empire reached its spatial peak in the early 1940s, with an extensive area in East Asia – including Taiwan, Korea, as well as extensive parts of Northern China, Southeast Asian and others – under its imperial control. Since its imperial economy was obliged to devote dominant portions of its production to satisfy its own military needs, Japan could not meet its own commercial needs. The Western allies’ maritime blockade against Japan disabled its transport, and the destruction wrought by the bombing of most of its urban centres shattered its industrial production in urban areas. In short, the destruction wrought by WWII eventually brought the Japanese economy to a virtual standstill.

Right after WWII, the Allied Occupation Period (1945-52) was fraught with difficulties, with the Japanese economy struggling to rebuild its demolished plants. It was the Korean War (1950-1953) with the war-related special procurements of US\$ 2.3 billion (Golub 2016: 66) on top of economic assistance rendered by the United States (US) that enabled Japan to climb out of the extremely difficult situation (for the positive effects of the Korean War on Japan and many East Asian economies, see Stubbs 2005: 63-91; Stubbs 2018: 50-62). Meanwhile, the recovery of key sectors in Japan was aided by its state's industrial policy known as the priority production programme.

The starting point for Japan's economic "re-entry" into East Asia was in the late 1950s when Japan and some of its neighbours agreed on the provision of its official assistance under various reparation agreements – often in a prototype FG pattern of shipping out its obsolescent technology and industrial plants (Cumings 1984). Japan has since further enhanced its economic interests by "tying" its assistance to the purchase of goods and services from its firms, for large infrastructure projects relocation (see Arase 1995; Hatch 2010; Hatch & Yamamura 1996; Hook & Zhang 1998). In any case, Japan's assistance helped set up the platform for its firms to re-enter regional markets and create the production/market linkages with East Asian economies. Nevertheless, in the 1950s and 1960s, Japanese outward FDI, which was limited in size, was largely for the purpose of securing supplies of natural resources (Cai 2011: 74; Jomo et al. 1997: 36; Pempel 1998; Shiraishi 1997; Stubbs 2018). (As discussed in Chapter 6, this is reminiscent of the present situation of Chinese outward FDI.) Some Japanese firms – for overseas venturing (often with local counterparts) – also made use of other channels, such as licensing and franchising arrangements of technology and equipment transfer.

Japan's experience in the post-Korean War period has presented a series of continued sectoral shifts in the existing manufacturing activities. In the wake of the export successes of the iron & steel and shipbuilding sectors, and others – such as precision machinery and electronic and optical equipment – also turned to export-led growth. In addition, high investments were made for heavy industrial sectors that are located primarily in the Tokaido megalopolis that stretches from Tokyo/Yokohama to Osaka/Kobe along Honshu's Pacific coast in the 1960s and onward. The external environment of Japan – most importantly the US markets – in the 1960s was generally favourable for its exports. From the late 1960s to the early 1970s, the Japanese economy witnessed a further rise in the production of iron & steel as its most important exports, together with construction, construction machinery, and pharmaceutical products.

Japans' outward FDI flows grew in three historic surges:

- i) ***First surge:*** The initial debacle of the Bretton Woods regime (1971) and the first oil shock of (1973/1974). Around this period, the Japanese state removed capital

restrictions in stages, to accommodate the need for outward FDI.¹⁸⁵ As a result, we witnessed the offshoring of growing segments of the country's heavy and polluting sectors and its labour-intensive manufacturing activities, to the 1st-tier NIEs. Some FDI also went to the 2nd-tier NIEs as well as other ASEAN (the Association of Southeast Asian Nations) countries¹⁸⁶ due to the imposition of import restrictions on Japanese goods as part of their import substitution development policies (Cai 2011: 74; see also Stubbs 2018).

- ii) **Second surge:** The second oil shock (1979) together with upward changes in wages in the country: The rise of FDI reflected the ongoing restructuring process of Japan's manufacturing, where the emphasis was further shifted to those sectors that utilize high-tech/sophisticated machinery. The country kept on downsizing the metallurgical and chemical sectors, whereas it promoted the electric/electronics and automobiles sectors. The manufacturing of computers and semiconductors also began to grow rapidly with various innovations, such as the mounting of small computers on machine tools, as well as well-developed numerically controlled equipment. Throughout the 1970s and the early 1980s, Japan was criticized by its Western trade partners for not taking action to stimulate domestic demand, but relying heavily on exports for its economic recovery. (For a concise but excellent discussion on Japanese FDI in East Asia in the 1970s and 1980s, see Pasuk 1990.)
- iii) **Third surge:** The most dramatic surge took place aftermath of the Plaza Accord (1985). The accord brought about another round of the yen's appreciation of 92% against the US dollar over the 1985-1988 period (Das 1996: 102; for a discussion on the effect of Japanese FDI towards the formation of a *de facto* Asian economic bloc, see also Graham & Anzai 1994). While much of Japan's FDI then went to the US and the European Union (EU) for establishing production/assembly facilities,¹⁸⁷ a fair (and growing) portion of it also went to the 1st-tier and 2nd-tier NIEs for shifting the production of parts and components as well (Pempel 1996: 60). In terms of sectoral composition, Japan's FDI was increasingly concentrated in electronics, automobiles and manufacturing assembly. By this time, China's special economic zones (SEZs) became attractive destinations for Japanese firms engaged together with local joint venture partners in export-oriented manufacturing activities.

¹⁸⁵ It seems, however, the oil shock induced less severe effects on the machinery sector, given its relatively low consumption of energy and raw material, than on those sectors such as iron & steel, petrochemical, aluminum refining, and cement.

¹⁸⁶ ASEAN, an inter-governmental organization, came to exist in 1967, of which the membership consists of the five original founders: Indonesia, Malaysia, the Philippines, Singapore and Thailand, together with five newer members: Brunei (1984), Cambodia (1999), Laos (1997), Myanmar (1997) and Vietnam (1995). For a good discussion of ASEAN's early history (up to the mid-1990s), see Dixson (1991; 1999). Stubbs (2018:131-135) explains that Singapore facilitated the flow of investment capital from Japan to some ASEAN countries.

¹⁸⁷ In the 1980s, as high as 75% of Japan's outward FDI was concentrated in the industrialized countries, where the US alone received over 50% of the total (Pekkanen & Tsai 2014: 331).

- iv) **Fourth surge:** Another surge took place in the early 1990s, due to another round of the yen's appreciation.¹⁸⁸ By 1995, the share of East Asian economies in Japan's total world FDI reached more than 20% with a greater concentration in the 2nd-tier NIEs, much higher than that (10-15%) recorded in the second half of the 1980s. Since the mid-1990s, the geographical focus of Japan's FDI to East Asia (including the 1st-tier NIEs, especially South Korea) has generally declined in total dollar terms, and fluctuated in terms of the region's share in its world FDI, with China (after its currency devaluation in 1994) occupying the lion's share. (The increasing weight of China as a destination of FDI has also been seen in other economies in the region, particularly the 1st-tier NIEs). Again, much of Japanese FDI was devoted to manufacturing, most notably in electronic, automobile and metallurgical sectors. The waves of Japanese FDI to East Asia gradually came to form a "concatenated" regional division of labour and the degree of East Asia's single-market dependence on the US also relatively declined (Golub 2016: 25).

Indeed, the period of accelerated industrial relocation of sunset manufacturing sectors from Japan (and the 1st-tier NIEs) after the mid-1980s provided an "ideal" period for FG paradigm researchers to advocate their model of integrative catching-up in East Asia. These FG protagonists saw their model to be quite rational for Japan – and for that matter, for the 1st-tier NIEs as well – to move some of their manufacturing activities to the 1st-tier NIEs and China. Many Japanese observers viewed the East Asian success as a large-scale local emulation of Japanese success. In a sense, this was much along the Meiji development trajectory in the late 19th century when Japan embarked on a massive campaign of learning from the success of early industrializers. It did so in an incremental fashion, without aiming to create brand new and original industrial sectors of its own, but concentrating on labour-intensive industrial sectors, and then moving from low-value-added to high-value-added sectors (Heng 2010).

In retrospect, Japan has functioned as the most important political fortress of the Western bloc in the post-WWII Cold War containment policy in East Asia. Hence, the early development dynamism of Japan (and others in East Asia) was a collective phenomenon that emanated from, or has been nurtured, in the Cold War parameter. From the 1970s to the 1990s, Japan intensified its financial assistance, known as "yen loans", to its neighbours, largely directed towards infrastructure projects, purportedly supporting Japanese export-oriented operations. Various "push" factors confronting Japan's manufacturing firms have motivated intra-regional industrial relocation and the development of production networks. Pull factors such as external pressures from Japan's major importers on its

¹⁸⁸ The yen appreciation in the early 1990s also induced greater imports of Japan from the 1st-tier NIEs, particularly from South Korea and Taiwan – rather than from Singapore and Hong Kong – due to geographical proximity and historically closer economic ties (Das 1996: 153).

trade practices have also induced the overseas relocation of manufacturing activities to these importers or third-party export platforms (many in East Asia).

8.3 1st-tier NIEs: Subgroup I and Subgroup II

Subgroup I: Japan's isolation immediately after WWII obliged South Korea and Taiwan to depend on the US security protection – against their hostile neighbours, i.e., North Korea for South Korea, and China for Taiwan, respectively – and its massive official assistance. They continued to be important US allies in much of the post-WWII period. Nevertheless, the Japanese colonial legacy regarding soft and hard infrastructure and human resource enhancement also contributed to the launching of development drives, which paved the way to the concerted campaign for industrialization in the early 1960s (Amsden 1979; Cumings 1984).¹⁸⁹ They differed in intensity of their critical view toward the Japanese colonial influence: the South Koreans have generally been much more critical than the Taiwanese. The native Taiwanese (Formosans) may have perceived that the Japanese colonialists had not been as exploitative and heavy-handed to them as the immigrant mainlanders who were concerned with the task of re-taking the mainland than that of elevating overall well-being of the Formosans.

In Vogel's view, South Korea's problems in the early years of its post-independence period were more serious than Taiwan's for various reasons. First, the initial national unification process was much more formidable and time-consuming in South Korea than in Taiwan (due to, in the latter's case, the overwhelming power of immigrant Nationalists). Second, whereas many South Korean communities before the Korean War (1950-53) had been split between communist sympathizers and their opponents, Chinese Nationalists did not have to face communists in Taiwan, with the Chinese civil war having been fought on the mainland and communists remaining on the mainland. Third, whereas South Korea was almost totally devastated by the Korean War, Taiwan was spared from any large-scale physical destruction – except the 1947 uprising – by internal strives (Vogel 1991: 42-45).

Although exhibiting some differences, South Korea and Taiwan followed the example of Japan's experience, forming what may be referred to as the (Northeast) Asian development model (see Amsden 1989; Evans 1995; Johnson 1987; Park 2000; Vogel 1991; Wade 1990). For both, the security threat from communism (internal and external) was an important geopolitical factor that pushed their respective state to promote rapid industrialization as a way of making their societies more “resilient”

¹⁸⁹ According to Amsden's observation, the Japanese colonialists contributed to modern infrastructure in South Korea and Taiwan in the areas of finance, transportation and commerce. Their spending in local education, including that at the university level, was unusually high by colonial standards, even though it was motivated by politics designed to assimilate Koreans into Japanese society as the “lower” elements (see Amsden 1989: 32-33 for Korea; Amsden 1979: 347-348 for Taiwan).

(Zhu 2002). The interventionist state with the control of their financial sector had a dominant position in their respective national economy. In the early 1960s, the South Korean and Taiwanese states also began to stress industrial development with various policy initiatives (Rodrik 2013: 147). Over time, South Korea and Taiwan have also come to resemble each other in their trade relations, in which they have run varying sizes of trade surplus with the US and a trade deficit with Japan.

In terms of industrial structure, South Korea has developed high concentration of the power of a relatively few, giant conglomerates covering many sectors that dominate the national economy, whereas Taiwan's economy has been composed of numerous private small and medium sized enterprises (SMEs) and some party-owned (or state-owned) large companies. And more recently, South Korea was seriously affected by the Asian Financial Crisis (1997-1998), whereas Taiwan managed to escape any serious disruption. Even though Korean firms began their FDI (particularly in manufacturing sectors) in the 2nd-tier NIEs and China much later than Taiwanese counterparts did, both South Korea and Taiwan have over time established extensively business linkages with China through establishing local subsidiaries for labour-intensive assembly activities.

Sub-group II: Singapore and Hong Kong have developed from Britain's enclaves engaged in the empire's colonial trade with East Asia. British colonialism was far less interested in industrializing Singapore and Hong Kong than its Japanese counterpart in industrializing Korea and Taiwan; according to Henderson & Appelbaum (1992: 8), Singapore and Hong Kong were "insignificant backwaters of the British empire" whereas Korea and Taiwan were "jewels in the crown" for the Japanese. Singapore and Hong Kong have shared one particular feature, i.e., the emphasis on utilizing external finance to spur development. Between them, Hong Kong began its postwar industrialization much earlier (in the late-1940s when it witnessed a major inflow of entrepreneurs and workers, fleeing the Chinese civil war), which helped create the initial impetus for its industrialization (notably textiles). This similarity, however, is outweighed by many differences, most of all, in their respective sovereignty status. Singapore achieved its present sovereign statehood in 1965 when it was ousted from the Federation of Malaysia but Hong Kong, which remained as a British colony until 1997. In addition, they present a pair of contrasting cases with respect to state interventionism: a heavily interventionist state (Singapore) vs. a non-interventionist state (Hong Kong) (Amsden 1995: 795).

Singapore and Hong Kong have been controlled by ethnic Chinese. They have been important not only as political leaders (very notably in Singapore), but also as entrepreneurs and organizers of informal overseas Chinese networks (in East Asia and possibly beyond). Whereas Singapore has the more diverse demographic basis, consisting of Chinese (75%), Malays (15%), Indians (7%) and others (Vogel 1991: 74), Hong Kong's population is practically all Chinese though with many "temporary" foreign residents, but until 1997 it was administered jointly by British officials and local Chinese. These "mini-states", particularly Hong Kong, have witnessed much of their manufacturing emigrate to their neighbours, and their economic structure has shifted to various service sectors. As for their catch-up

performance, measured in per capita income, Singapore and Hong Kong have been clearly more successful than South Korea and Taiwan thanks to the small size of their population.

8.3.1 South Korea (Subgroup I)

Just as in the case of Meiji Japan in the mid-19th century, Korea (present North and South Korea) – the Joseon Dynasty, a “Sinicized” state in the China-centric “tribute system” in East Asia (Kang 2012) – also found that its isolationist policy could no longer be maintained. Japan declared Korea a protectorate right after the Russo-Japanese War (1904-1905), and formally annexed it in 1910 when the Korean army was dissolved. Subsequently, Korea was occupied by Japan until the end of WWII. With the annexation of Manchuria (with the establishment of Manchukuo in 1932), Japan intensified its industrial promotion in Korea for its own imperial ambitions (see Kwak & Lee 1997). Its geographical location made Korea – more so than Taiwan – perform the economic base for the Japanese imperial advance into China (Golub 2016: 51). Cheap hydroelectricity and raw materials from northern Korea were used to pursue the colony’s industrialization. By the early 1940s, Japan had placed particular emphasis on chemical and steel production in the north, and on machinery, machine tools, heavy vehicles, electric machinery and airplane parts, and consumer products including textiles, in the south (Stubbs 2005: 44).

Immediately after the end of WWII in 1945, the Korea peninsula was divided – as a temporary measure prior to an envisaged peninsula-wide election – into two entities: North Korea (above the 38th parallel under the influence and protection of the Soviet Union) and South Korea (underneath the 38th parallel under that of the US). Before long, the spread of the Cold War made it clear that a unified election would not be feasible. Particularly, after the communist victory in mainland China in 1949, the strategic significance of South Korea became all the more evident to the US. With the country divided, trade with Manchuria and Japan abruptly terminated resulting in the loss of Japanese managerial skills. The economies of both parts of Korea were seriously troubled. In 1948 the Americans held elections amid accusations of bribery and other forms of corruption, and formally established the Republic of Korea (South Korea). One of the major political acts in the early period in South Korea was a land reform (1945-1950), where all land held by the Japanese colonial administration, firms and individuals were confiscated and distributed. Furthermore, the South Korean state carried out a rural reform to redistribute farm land to tillers.¹⁹⁰

¹⁹⁰ According to Amsden (1989: 37), although the land reform failed to enrich the peasantry or to stop much of the overflow of the state tax revenue, it had long-term effects of redirecting idle capital from land speculation to manufacturing and uprooting a class that had not proved itself progressive. Furthermore, it somewhat relieved the shortage of food supply, which in turn reduced inflationary pressures.

The Korean War broke out in June 1950 and ended up with the killing of 4 million Koreans, Chinese and UN forces by the time of the 1953 armistice (cited in Stubbs 2005: 56). South Korea faced a flood of about 2 million refugees who fled the fighting, rushing to its already chaotic and economically destitute towns and cities (Ibid). In 1953, the US and South Korea signed the Mutual Defense Treaty, whereby Seoul was officially incorporated into the US-led anti-communist security framework in East Asia. During the several years following the Korean War, South Korea's political institutions remained precarious under President Syngman Rhee (1953-1960). Political parties remained legal, but were often suppressed by the regime that used anti-communism and national unification as a justification for organized violence (Stubbs 2004: 104). South Korea's politics then failed at building a clear vision of economic development and forging a capacity to implement any viable policy, since it was preoccupied with the task of unifying the peninsula by force (Park 2000: 143-144). The bureaucracy suffering from the infighting was not a dominant player, and the military – which was massively aided by the US – gained strength and stature during the 1950s as the central institution to keep Asian communism at bay. Despite the large external assistance, however, some indicators showed that the national economy had remained stalling: inflation remaining high; unemployment widespread; the currency overvalued; bank interest rates low; and tax collection ineffective.

In 1960, the precarious situation produced a crisis, where student-led riots forced Rhee's regime and the installation of another civilian administration under Chang Myon. The real transformation of the South Korean economy started only after the 1961 military coup against the newly established civilian administration. In the following year, Park Chung-Hee, the coup leader, established a military-control authoritarian state. The commercial banks and all financial intermediaries were nationalized. Business leaders were fined for their shady activities under the previous regimes and brought firmly under the state's control (Stubbs 2005: 106-107). South Korea's modern industrialization process began with the first (1962-1966) of its five-year economic development plans that were to transform the national economy in subsequent years. These plans set out the state's policies and objectives, and played a significant role in guiding and coordinating the national economy towards the direction of export-led industrialization. Especially in the early years, the state focused on the production and export of labour-intensive products, with a series of policy measures, such as the adoption of the US dollar-pegged exchange rate system, the high interest-rate policy to increase domestic savings and curb inflation, the provision of incentives to promote exports, and the imposition of high tariffs on a wide range of imports (Cai 2008: 90).

As the US brought its assistance to an end in the mid-1960s, Park became committed to normalizing South Korea's diplomatic relations with Japan. With the signing of the Treaty of Basic Relations in

1965,¹⁹¹ Japan began to extend loans, and South Korea began to turn to Japan for a large market. It also provided capital, technology and manufacturing equipment, and for an overall model of development (Vogel 1991: 53). During its take-off period for ten years after the announcement of the first five-year plan, the South Korean state promoted exports and constructed some core manufacturing sectors – such as iron & steel, fertilizer, cement, oil refinery, and electricity – together with social infrastructure, including highways, harbors, and irrigation facilities. South Korea’s economic ties with Japan were also built into the pattern of a “triangle economic relationship” (Cai 2008: 86-87) with the US functioning as the most important market to absorb South Korean products.

The process toward “overt authoritarianism” (Haggard 1990: 130) began in 1969 when Park won a controversial national referendum that allowed him to stand for a third term, and in 1972 he narrowly defeated Kim Dae-Jung and declared a state of emergency, purportedly to deal with the threat from the north. Later in the same year, martial law was declared, and consequently the constitution was suspended, the National Assembly was dissolved, and all political parties were banned. Thus, executive supremacy reached its peak, together with serious economic problems, namely a growing reliance on external borrowing, weakening financial structures among leading firms, and balance-of-payments difficulties as associated with an expansionist policy.

In 1973, the South Korean state announced the famous Heavy and Chemical Industry Plan, a new industrial policy, intended to promote such strategic sectors as iron & steel, nonferrous metals, shipbuilding, industrial machinery, electronics and petrochemical processing. To implement the policy, the state established a National Investment Fund, managed by state-owned banks, to mobilize public employee pensions and a fixed portion of all bank deposits in order to provide subsidized loans to designated projects and sectors (Haggard 1990: 131-132). The state also implemented preferential tax policies (via exemptions or reduction of corporate taxes) and protected these sectors from external competition (via prohibitive tariffs and other import restrictions). Furthermore, the state encouraged the growth of *chaebol* in order to strengthen major firms’ competitiveness through economies of scale. Subsequently, by the end of the 1970s, the heavy and chemical products had been well established. Whereas South Korea’s total export rose from less than US\$1 billion in 1970 to US\$15 billion in 1979, the share of the heavy and chemical products rose in the same period from 12.8% to 38.5% (Cai 2008: 98). It turned out, however, that the development of these energy-intensive sectors made the South Korean economy more susceptible to external shocks, most notably the oil shocks, and that the state’s financing machinery fueled the inflationary trend in the wage rates.

¹⁹¹ Japan and South Korea began their difficult normalization talks as early as 1952, but the negotiations were repeatedly suspended before reaching the eventual agreement, the Treaty of Basic Relations in 1965. In a separate treaty, Japan also agreed to provide South Korea with US\$500 million in official aid (Hook et al. 2001: 175).

Since the end of the 1970s, South Korea came to confront the new challenges emanating from some internal events (such as President Park's assassination in 1979 and the precarious political consequences thereafter) as well as external ones (most importantly, the second oil shock). These challenges were compounded further by the increased difficulty in accessing overseas markets due to the rise of protectionism, and the erosion of competitiveness in traditional labour-intensive sectors. As a result, South Korea's economy contracted by 2.1% in 1980, which prompted its state to undertake a series of structural adjustment measures to streamline the economy (Cai 2008: 98). Although the heavy and chemical sectors were still emphasized, domestic markets for these sectors were much less protected by the state. In 1986 the regulations that severely restricted inward FDI were removed, and thereafter there was a rapid rise of such investment (most notably from Japan).¹⁹² These measures, aided by subsequent low prices of primary commodities, low international interest rates and low exchange rates of the won, paved the way for resumed growth in the rest of the 1980s. Nevertheless, despite its strong emphasis on pursuing an export-led development strategy, South Korea was not able to run trade surpluses until the mid-1980s (Kang 2014: 204).

In the early 1990s, South Korea entered a new stage of development, i.e., the promotion of further industrial reform with a series of financial liberalization measures¹⁹³ as well as diversified external relations. The establishment of diplomatic relations with China in 1992 kicked off the rapid expansion of its economic ties with this emerging economy, as well as the greater diversification of its own economic relations (Kim & Mah 2006). While the Asian Financial Crisis¹⁹⁴ caused a reduction in the growth rate to 4.7% in 1997 and a contraction of 6.9% in 1998, the economy recovered and registered a growth of 9.5% in 1999 and 8.5% in 2000; as a result, between 1990 and 2000 South Korea achieved an annual growth average of 5.5% (Cai 2008: 99). In 2002, China replaced the US as the largest FDI destination from South Korea (Kim & Mah 2006: 890). Since the mid-2000s, China has been South

¹⁹² The Chu Doo-Whan administration (1981-1988) began to deregulate cross-border capital flows in the second half of the 1980s. Under the Roh Tae-Woo administration (1988-1993), the Foreign Exchange Management Act (FEMA) was amended, now permitting firms to raise funds abroad, regardless of the amount (cited in Kang 2014: 208).

¹⁹³ The Kim Young-Sam administration (1993-1997) stepped up its liberalization drive further with a series of deregulatory measures, by complying with two OECD legal codes: The Code of Liberalization of Capital Movements and the Code of Liberalization of Current Invisible Operation. The succeeding Kim Dae-Jung administration (1997-2001) continued liberalization on capital transactions from a "positive" system to a "negative" one, thereby fully deregulating foreign exchange transactions (Kang 2014: 209-210).

¹⁹⁴ South Korea mobilized a large amount of public funds to recapitalize failing financial institutions in the 1998- 1999 period, and then began to privatize those temporarily nationalized institutions through foreign sales in 2000 (Kang 2014: 211).

Korea's largest trade partner, and the largest source of its trade surplus (Kang 2014: 204-205). South Korea's FDI to China has predominantly been in manufacturing, where consumer product sectors, such as clothing and textiles, footwear and leather, which once occupied large shares in its exports, have been gradually replaced by capital goods (Kim & Mah 2006: 890). According to one observer, it is South Korea alone among the 1st-tier NIEs that has been able to "foster the private businesses large enough to possess financial, industrial and marketing resources needed for independent exporters" (Numazaki 1998: 82).

Over time, one particular sector that has consistently underpinned the overall industrial development of South Korea is construction. After the Korean War, the reconstruction of its physical infrastructure was urgently needed, and Korean workers quickly mastered modern construction equipment provided by the US (Vogel 1991: 62). During the Vietnam War, when the US sought contractors for construction work for Vietnam, Korean firms were often the lowest bidders. After the first oil shock, oil producers in the Middle East contracted out projects to foreign construction firms. Many of Korean *chaebol* experienced explosive growth because of their success in the Middle East construction (Vogel 1991: 62-63). In short, South Korea has successfully upgraded its manufacturing structure, using China since the early 1990s as an important site for its industrial shedding.

8.3.2 Taiwan (Subgroup I)

At the end of the 19th century, Japan brought to Taiwan many of the policies that had modernized its economy. The colonial administration initially prioritized the development of two agricultural crops, sugar and rice, of which the outputs were mainly shipped to Japan. A period of limited political liberalization in Taiwan of the 1920s was followed, beginning in the early 1930s, by a greater degree of repression and assimilation. From the mid-1930s onward the Japanese began to broaden Taiwan's economic base beyond agricultural production, increasing fertilizer production to satisfy the growing Taiwanese market and to ensure a further increase in agricultural exports (Amsden 1979: 347). Some Japanese textile machinery was moved to Taiwan, and metal products – most notably aluminum – and industrial chemical plants were also built (Stubbs 2005: 42). As an increasingly militarized Japan ventured into Manchuria and eventually went to war with China in 1937, Taiwan was drawn even more tightly into the Japanese imperial economy, and its role was rapidly amended to support Tokyo's expansionism.

The centralized colonial authorities with a strongly coercive and bureaucratic capacity brought about a relatively stable social order in Taiwan. An extensive infrastructure, the provision of universal public education, and the availability of investment capital and guaranteed markets facilitated the intensified mobilization of the island's resources. While the Japanese occupied the top positions in all elements of society, more than half of the bureaucrats – though mostly at the lower levels – were native Taiwanese (Formosans), and many Taiwanese workers in Japanese manufacturing plants also gained

some knowledge of modern industrial techniques (Stubbs 2005: 43). The overall result of Japan's modernization of the island was noticeable improvement in income, and the population's general standard of living (Morris 2004).

However, the wartime bombing of urban areas and the repatriation of all Japanese settlers after 1945 meant that Taiwan, like South Korea, had to initiate its post-WWII development with a very low level of income. After Japan's surrender, China – whose administration (the Nationalists: Kuamintang: KMT) was largely unknown to the general public in Taiwan – became the trustee of the island on behalf of the Allied Powers. Being somewhat suspicious of the Taiwanese as “Japanese collaborators” (Morris 2004: 5), China appropriated large amounts of raw materials (including sugar, coal, salt and cement) in Taiwan and shipped them to the mainland. Furthermore, much of the industrial machinery and equipment as well as entire factories that had been left behind on the island were also shipped to the mainland coastal cities (Morris 2004: 20).

The initiative of establishing local autonomy by native Taiwanese – as seen in the 1947 uprising – was brutally suppressed (Morris 2004: 22-23; Vogel 1991: 13-17). All in all, the island also faced a massive migration from the mainland during the second half of the 1940s, the time of the Chinese civil war (1945-1949). The eventual defeat of the KMT in the Chinese civil war led to the transfer of the state apparatus of the Republic of China to Taiwan in 1949. The Nationalists acquired the assets of the former colonial state, and ensured that banks would remain under their control (Bernard 1996: 660). The island's population rose from six to almost eight million during the civil war period (Vogel 1991: 13). In 1949, the Nationalists/mainlanders began to implement land reform in order to build broad support among the island's predominantly rural population.¹⁹⁵ The land reform turned out to be successful thanks to the absence of strong internal opposition among the Nationalists because they were mostly new immigrants from the mainland (Campos & Root 1996: 32). Nevertheless, the primary concern of the KMT, being to recapture the mainland (even at the cost of neglecting the need to build up Taiwan), the situation exacerbated the friction between the mainlanders and the Formosans. As noted earlier, the KMT preferred a dual development strategy of supporting private SMEs for the export sector and large public enterprises oriented primarily to the domestic market (Clark & Roy 1997: 55-56; Numazaki 1998: 82). The former element of the strategy, the support of SMEs, was arguably to ensure that local Taiwanese economic elites would not become powerful enough to challenge the monopolized political power of mainlanders (Campos & Root 1996: 110; Bernard 1996:

¹⁹⁵ Taiwan's agricultural reform was progressed through three stages: i) Farm rent was set with the maximum limit of 37.5% of the total main crop yield (1949); ii) Public land formerly owned by Japanese nationals was distributed on easy terms, with preferences given to the tenant claimants (1951); and iii) Landlords were obliged to divest themselves of their holdings above a minimum size by selling them out to their tenants (Amsden 1979: 352).

660). For decades, most bureaucratic posts at any significant level of responsibility and most military officers were former mainlanders (Perking 2013: 84).

Immediately after WWII, the US, being preoccupied with the task of governing Japan and South Korea, was somewhat inactive toward Taiwan, taking the view that the domestic warfare in the mainland as China's internal matter. With the outbreak of the Korean War in 1950, however, it quickly decided to protect the island from possible attack from the mainland. Furthermore, the US fortified the strategic relationship with Taiwan through the Mutual Defense Treaty in 1954, i.e., with massive military aid (ammunition, artillery, aircraft, tanks, ships and vehicles) and development assistance (for budgetary support, technical training & advice, and various infrastructure facilities) (Cai 2008: 117-118). As a result, Taiwan was transformed into one of the strongest anti-communist allies of the US in the region. While its official assistance¹⁹⁶ gradually declined from 1951 (10% of Taiwan's GNP) to 1965 (2%) (Vogel 1991: 21), the US was consistently the most dominant source of FDI to Taiwan in the 1950s and 1960s. Throughout the 1950s, Taiwan had few exports of which nearly 90% were raw or processed agricultural products (Ibid: 20) and ran large trade deficits, which were financed mostly by the US.

As the prospect of recapturing the mainland dwindled in the 1950s, the KMT began to turn their attention to the economic development of Taiwan (Park 2000: 156). Many observers point out that like South Korea, Taiwan experienced the strategic shift of development strategy from import-substituting industrialization (ISI) to export-oriented industrialization (EOI) from the late 1950s to the early 1960s (e.g. Haggard 1990: 79-99), with the gradual sectoral transition in production from primary products to manufacturing products (Shive & Lee 1999: 93-98; Hsiao 1995: 78). After years of maintaining an overvalued exchange rate of the Taiwan dollar and thereby keeping manufactured imports relatively cheap, the Taiwanese state – virtually analogous to the KMT until 2000 – halved its value in the late 1950s (Gwynne et al. 2003: 99). In the early 1960s, its export-oriented development strategy was primarily based on the labour-intensive sectors that produced, among others, textiles, processed food products, leather products, wood products, and paper products. As in the case of others in East Asia, the Vietnam War provided a timely and huge stimulus to the Taiwanese economy. However, the geopolitical situation surrounding Taiwan became increasingly precarious due to, most of all, the ebbing of the Cold War in the region.

During the 1970s, many Taiwanese felt an increasing political vulnerability of their island, which obliged the state to reduce “mercantilist” policies (Haggard 1991: 139). This was because of the need

¹⁹⁶ The US assistance to Taiwan also helped to re-establish the island's linkages with Japan, as the assistance often required the recipient to purchase Japanese machinery and materials from important manufacturing sectors, such as textiles (Bernard 1996: 660).

on the part of Taiwan to maintain and foster international economic ties – with sustained efforts to keep trade and investment channels open even where political ties were severed – as a surrogate for political ties. Indeed, the decade was full of traumatic political events: the expulsion of Taipei – the replacement by Beijing – as the sole representative of China at the United Nations (UN) in 1971, the gradual rapprochement between its major traditional allies (such as the US and Japan) on the one hand and China on the other. As in the case of South Korea, the first oil shock (1973-1974) also heavily affected Taiwan's economy. There was the emergence of labour shortage, which raised wage costs rather dramatically. Yet, Taiwan's economy proved to be resilient; it continued to grow, and investment capital remained available.

In the 1970s, the Taiwanese state emulated Japan and South Korea in developing such heavy industries as steel, chemicals and shipbuilding, as a way of helping the national defense apparatus. Most of the large public enterprises in Taiwan were oriented to the domestic market (Numazawa 1988: 82; Vogel 1991: 31). Its businesses in the export market were predominantly SMEs, acting typically as subcontractors, supplying intermediate components or finished products under foreign brand names of well-known Western retailers. In the early 1980s, Taiwan's SMEs also began to invest – albeit informally or indirectly via Hong Kong or other channels – in China (i.e., SEZs) by taking advantage of its newly announced Open Door Policy. These SMEs accelerated the pace of internationalization (i.e., FDI in the 2nd-tier NIEs) in light of the sharp appreciation of its currency against the US dollar in the late 1980s. In 1987, Taiwan also lifted martial law that had been in effect since 1949, and allowed its citizens to visit China for the first time (Fuller 2008: 240). In the same year, Taiwan also ended its “formal” ban on the growing indirect trade and investment with China.

In the 1990s, Taiwan's firms further intensified their on-going efforts to expand domestic subcontracting networks abroad in the 2nd-tier NIEs, through joint ventures and FDI (Numazaki, 1998). This was due to the state's “Go South” strategy in the mid-1990s, reflecting its security concern about the heavily lopsided reliance of its businesses on China. Reportedly, China accounted for about half of Taiwan's total outward FDI by 1995, and further more thereafter (Wong 2005: 42). Perhaps, the immediate cause of the strategy was the Taiwan Strait Crisis (1995-1996), a crisis caused by China's intimidating military conducts of amphibious assault exercises and a series of missile tests in the waters surrounding the island (Ravenhill 2014: 349-350). In contrast to the case of Hong Kong whose local factories have mostly moved to China, “a crucial role in industrial adjustment” of the Taiwanese state has so far managed to avoid wholesale “industrial hallowing-out” of the island (Fuller 2008: 250). In other words, the state has responded to the risk of deindustrialization by attempting to regulate the “nature” rather than “volume” of FDI to China, where its basic regulatory tenets are that firms using older and more standard technology are permitted offshore to China, whereas more advanced technology is required to remain at home (Driffield and Chiang 2009: 34). This is fairly consistent with the prescription of the FG paradigm.

8.3.3 Singapore (Subgroup II)

The function as an important British entrepôt since the 1870s allowed Singapore to prosper, which was stimulated initially by the growth of rubber plantations and tin mining in the Malay Peninsula (Haggard 1990: 101-102; Stubbs 2005: 47). After the Japanese occupation (1942-45), Singapore, together with Labuan of Borneo, was returned to the UK, forming the Crown Colony in 1946, and gaining a “status of self-governance” in 1959. Singapore achieved its present sovereign statehood in 1965, following a brief period of the Federation of Malaysia (1963-1965).¹⁹⁷ Meanwhile, the precarious period of “Indonesian Confrontation” (1963-1967) negatively affected Singapore’s economy (Lee 1973: 212). In the mid-1960s, Singapore’s political leaders in the People’s Action Party (PAP), who were mostly English-educated Chinese, began the development strategy of state-driven industrialization by integrating inward FDI – due to its limited investment capital – with policies of skills development and technology transfer (Nederveen Pietrese 2015: 269).

During the Vietnam War, war-related spending by the US accelerated the economic development of East Asia in general, and bolstered Singapore’s entrepôt trade in particular. The war also promoted Singapore’s ship repair activities, as its large dockyards previously used for the British navy were now employed to repair and fuel American battleships (Stubbs 2005: 137). All in all, the war helped transform Singapore from a newly independent mini-state concerned with internal communist subversion and external threats from its neighbours, to a thriving export-oriented economy with growing positive links to all of its non-communist neighbours as well as the US and Western Europe.

In the 1970s, Singapore began to face rising wages/production costs, and growing competition from its neighbouring low-cost production sites. By the end of the decade, its “competitiveness crunch” (Yeung 2000: 142) made it no longer competitive in attracting FDI for low-cost assembly operations. This prompted Singapore to revise its national strategies, with the 1979 announcement of the Second Industrial Revolution, favouring high-tech and high value-added manufacturing and business services.¹⁹⁸ As a result, the local situation engendered a “centrifugal tendency” (Yeung 1998: 396) of its economy with its firms in labour-intensive sectors (such as textiles and garments) investing abroad

¹⁹⁷ In 1948 the Communist Party of Malaya attempted to take over Malaya as well as Singapore by force. A state of emergency was then declared, which lasted the following 12 years. When Singapore declared independence in 1963, its political leaders, being concerned about national security, forged the merger with Malaya, Sabah and Sarawak in 1963 to form the Federation of Malaysia.

¹⁹⁸ Labour wages were raised substantially to drive out labour-intensive manufacturing activities, and labour productivity and skills were upgraded to attract world-class high-tech manufacturing FDI (Yeung 2000: 142).

(mostly Malaysia), earlier than the other 1st-tier NIEs' firms.¹⁹⁹ Unlike Hong Kong with most of its manufacturing activities moving out, Singapore emphasized upgrading the technological base of its economy, thereby retaining within itself a substantial export-oriented manufacturing base. Thus, Singapore was progressive through the activities of manufacturing firms that invested in 14 industrial zones and assembled products for export (Numazaki, 1998: 83). The electronics sectors grew from producing labour-intensive, relatively low-tech electronic parts and products to manufacturing computers, computer peripherals and components, and large semiconductors (Stubbs 2005: 174). This is a mini-FG paradigm phenomenon.

In 1989, Singapore proposed the idea of the Singapore-Indonesia-Malaysia Growth Triangle in response to the imperative of industrial restructuring because of its labour and land constraints, and the idea received complement from its partners (Yeung 1998: 403). The Singaporean state perceived that greater regionalization of its economy with the active involvement in integrative. This was because it would not only reduce the heavy dependence on foreign capital for its production and export, but also provide a useful platform for developing indigenous corporate capital (ibid: 412). Most of all, the new initiative continued to provide Singapore with a pivotal role in building up the “external wing” (ibid: 143) of the Singapore economy in East Asia. By the early 1990s, Singapore's unique location with its well-developed financial sector and good communication and transportation facilities had transformed it into a regional – Southeast Asian, if not East Asian – coordination centre for a new regional division of labour, where its role has involved sophisticated procurement activities for numerous subcontractors and suppliers as well as management of complex intra- and inter-firm transactions in raw materials, half-finished components, and finished goods, all across national boundaries, often, “just in time” (Numazawa 1998: 84).

8.3.4 Hong Kong (Subgroup II)

Hong Kong was ceded to the British in 1842 under the Treaty of Nanking at the end of the first Anglo-Chinese Opium War, and it remained as a British colony until 1997.²⁰⁰ Its entrepôt role developed with opium and illicit trade, and later more broadly for China's coastal trade. Hong Kong was also one of the main departure ports for a large number of Chinese emigrants. By 1900 limited local manufacturing developed, and the British Imperial Preference System provided the colony's

¹⁹⁹ In the 1980s and 1990s, Singapore's outward FDI was mainly directed towards East Asia, with Malaysia alone occupying some 60% of its total; however, this spatial pattern has since changed with a wider range of destinations in Asia and beyond (Yeung 1998: 396).

²⁰⁰ Portion of the Kowloon Peninsula facing Hong Kong and Stonecutter's Island were ceded at the second Opium War in 1860, and the New Territories were leased in 1898 for 99 years. This last element constituted the base of the 1997 reversion of Hong Kong to China.

manufacturers with an incentive to export their products to world markets, but the core of its main economic activities still remained to be *entrepôt* trade (Haggard 1990: 116). The inter-war period was a period of mercantilist rivalry, depression, and a new concern over Hong Kong's commercial status. The most worrisome development then was its relationships with China. Anti-imperialism and opposition to the "unequal treaties" became central issues in Chinese politics, with negative effects on Hong Kong's trade. In 1925 anti-foreign boycotts swept the Chinese coast. Flight capital to Hong Kong began with the outbreak of the full crash with imperialist Japan on the mainland in 1937, and some of the capital fleeing the mainland went into manufacturing of light industries in Hong Kong.

During WWII, Japanese occupation brought Hong Kong's business to a halt and reduced its population from 1.5 million to 500,000 (Haggard 1990: 118). But the population began to grow again, first with a large migration of workers and peasants together with their families from Guangdong (Wong 1999: 147), and even more after 1947 as a result of the ongoing Chinese civil war. The great inflation of 1948/1949 in the mainland also caused large financial flows to Hong Kong from wealthy Chinese who wanted to retain their assets in hard currencies in accounts held in the colony. When Communist victory became imminent, equipment and raw materials that Shanghai textile entrepreneurs imported were diverted to Hong Kong, and later, the colony also accepted a large influx of entrepreneurs and workers for light manufacturing sectors, mainly textiles and clothing (Clark & Roy 1997: 68; Vogel 1991: 68-69). Since then, the British scrupulously avoided such actions that might provoke the new Chinese regime to overrun its colony (Vogel 1991: 69).

The Korean War (1950-1953) was another major geopolitical event in the early Cold War period that affected the prospect of Hong Kong's economy. In December 1950 Hong Kong faced an extremely challenging period ahead of the US imposing an embargo on the mainland (Wong 1999: 147; Haggard 1990: 120). And China itself also began to rely less on the British colony, with the reoriented preference of trade with the Soviet Union and other Eastern bloc economies. Consequently, Hong Kong's business community had little choice but to become one of the earliest export "manufacturing" enclaves (Stubbs 2005: 111-112), with more diversified trade partners (rather than relying solely on China). It was therefore Hong Kong that took off at the earliest period among the 1st-tier NIEs after WWII. During the 1950s its production expanded from textile and clothing sectors to miscellaneous manufactured products, such as artificial flowers and plastic toys and dolls, wigs as well as some electronics²⁰¹ for export orientation (Riedel 1973). Somewhat similar to Taiwan's case, Hong Kong's

²⁰¹ In the late 1950s, a few Japanese firms, for instance Sony, came to Hong Kong to initiate a small-scale local electronics sector for local firms to assemble final products, such as radios and other consumer products, from parts and components made in Japan (Stubbs 2005: 112). Following suit, by the mid-1960s almost all major American producers of consumer electronics and semiconductors moved their production facilities to Hong Kong (Clark & Roy 1997: 68-69; Hobday 1995: 1173).

development was driven by small and medium-sized enterprises (SMEs), many of them family owned and operated, and the upgrading of the local economy thereafter involved foreign firms.

While Hong Kong's manufacturing (both domestic and foreign) moved into more sophisticated production in the 1950s and 1960s, local SMEs remained engaged mostly in labour-intensive activities. The composition of the colony's exports was also concentrated in a few labour-intensive products such as clothing, textiles, electronics, and miscellaneous manufactured products.²⁰² During the 1970s, successive waves of local firms entering the consumer electronics sector increasingly diversified into higher-grade products, mainly to supply US markets, and this sectoral development gave rise to a range of supporting sectors, such as plastic molding, metal plating, metal working and parts (Hobday 1995: 1174). In the late 1970s, assembly operations in Hong Kong (with ever-rising wages) began to be priced out from international competition, but China's Open Door Policy in the early 1980s fortuitously provided Hong Kong firms with a new lease of life as foreign investors. Again, like Singapore's case, this was a mini-FG phenomenon.

In the late 1970s many of the local residents were also concerned about Hong Kong's political future. Subsequent bilateral negotiations finally led to the signing of the Sino-British Joint Declaration on the Future of Hong Kong (1984), the official agreement of returning the colony to China in 1997, as a Special Administrative Region. The Declaration stipulated the principle of "one country, two systems", which would leave Hong Kong economically separate from the mainland, with foreign exchange and trade controls remaining in place as well as restrictions on the movement of people.²⁰³ Since the signing of the Declaration, there was a surge of Japanese firms investing in Hong Kong (Wiggham 1989: 17). In the 1980s, these manufacturers, particularly those in the textile and garment sectors, as well as electronics, relocated their production activities to the Pearl River Delta in the neighbouring province of Guangdong to take advantage of the abundant low-wage labour, and enjoyed a "second golden era" (Wong 1999: 148). Some local firms also began to shift their production to high-value segments, such as fashion and design, as well as to redirect their own activities towards marketing (Deyo 1998: 192-193), but the lack of confidence in intellectual property rights and the

²⁰² Over the 1954-1970 period, the share of each of these product groups in Hong Kong's total exports changed as follows: clothing from 26% to 35%; textiles from 33% to 10%; low-grade electronics from 0% to 10%; and miscellaneous manufactured products from 7% to 25% (Riedel 1973: 15, Table II). Meanwhile, the share of the US as a destination of its total exports rose from 3% to 42%, where that of Asia declined from 71% to 12% (Riedel 1973: 15, Table III).

²⁰³ In 1982, China rejected the initial British proposal for the continuation of its colonial administration. The Declaration also affirmed that Hong Kong would keep its economic system, separate customs status and independence for 50 years (Joggi et al. 1996: 12).

arbitrariness in public policy may have considerably deterred Hong Kong firms' FDI in R&D and the adoption of high value-added production processes in China (Wong 1999: 149). At any rate, the official return of Hong Kong to China in 1997 – which coincided with the outbreak of the Asian Financial Crisis – proceeded without much political disruption.

Though its function has changed over time, the importance of Hong Kong to East Asia in general and to China in particular has been recognized. In the post-WWII period, it was an important haven for Chinese entrepreneurs who fled the Chinese civil war. The colony was a principal gateway for China to interact, though rather limited, with the Western powers (for some limited foreign exchange earnings). In the 1980s and 1990s, Hong Kong's intermediary functions grew further not only as a supply facilitator of investment capital and machinery for Chinese industrial development (predominantly for its adjacent Shenzhen SEZ in Guangdong Province), but also as a provider of key business and marketing services and strategic supply chain infrastructure. Meanwhile, however, its indigenous manufacturing sectors has rapidly declined (Fuller 2008; Sharif & Tseng 2011).

8.4 2nd-tier NIEs

The 2nd-tier NIEs, Malaysia, Thailand and Indonesia, reveal contrasting historical backgrounds among themselves. Malaysia and Indonesia were colonized by the British and the Dutch respectively, and were occupied by Japan during WWII, whereas Thailand maintained its sovereign statehood and escaped colonization by any foreign powers. Being resource-rich late industrializers, these economies could long rely on exports of primary commodities (oil, minerals and agricultural products) to accumulate foreign reserves. Exports of these primary commodities continued to account for a large share of their exports throughout the 1970s, which may have mirrored persistent legacies of colonial trade practices (McCawley 2017: 59). Arguably, their ability of earning foreign exchange via primary commodity exports reduced their imperative to undertake the serious industrialization process by relying on foreign capital for such industrialization (see Reinhardt 2000; Tadjoeeddin 2007; Urrutia & Yukawa 1988). Furthermore, we observed the more modest developmental role of the state in the 2nd-tier NIEs more so than in South Korea and Taiwan (Amsden 1995: 794; see also Jomo et al. 1996).

Among the 2nd-tier NIEs, manufacturing for export became important first in Malaysia (say, in the 1970s), then in Thailand, and last in Indonesia. The global debt crisis in the early 1980s caused only a limited effect to these economies; in fact, their recovery and further acceleration of growth was remarkable from the second half of the 1980s, partly due to large FDI flows from Japan and the 1st-tier NIEs (especially, Taiwan and Singapore) and the accompanying relocation of their manufacturing activities. This was thought as a typical FDI-assisted FG pattern, where numerous researchers presented causes of this rapid rise of regional FDI. They argued that regional FDI was caused by various reasons (push factors) found in Japan and the 1st-tier NIEs: the foreign exchange appreciation;

the withdrawal of their preferential access to US markets (i.e., the graduation from the GSP status); rising local wages; and regulatory tightening in particular, against industrial pollution and occupational health hazard (Jomo et al. 1997: 154; see also Bernard & Ravenhill 1995; Chiang 2015; Edgington & Hayter 2000; Felker 2003; Thomsen 1999).

While the states of the 2nd-tier NIEs have also upheld industrial policy, their effectiveness has been complicated by, among others, ethnic politics, i.e., the issue of how to cope with minority Chinese entrepreneurs that have been dominant in these economies. Inter-ethnic distributive politics has been particularly notable in Malaysia where the state has consciously advocated the improvement in the socio-economic status of ethnic Malays against Chinese (Pillay 2000). In Thailand, however, ethnic Chinese have most effectively been integrated into society and the local inter-ethnic tension has not been an issue (Jomo et al. 1997).²⁰⁴ As the 2nd-tier NIEs sought to diversify their manufacturing activities, state intervention increased in the form of state-owned enterprises (SOEs) to cope with competitive entrepreneurial skills on the part of the ethnic Chinese population (Amsden 1995: 794).

The 2nd-tier NIEs performed impressively up until the late 1990s; however, they all suffered, to varying degrees of intensity and duration, from the devastating economic dislocation caused by the outbreak of the Asian Financial Crisis in 1997.²⁰⁵ Furthermore, since the mid-1990s, due to the emergence of China as an attractive FDI destination, the 2nd-tier NIEs have become concerned with what is known as the middle-income trap, the crowding-out trend (or diversion) of inward FDI due to increasing competition with China, and possibly the “hollowing out” of their manufacturing. A cursory survey of literature on the effects of China’s economic emergence on the 2nd-tier NIEs, however, shows mixed results. It seems that the differences among observers boil down to their views on the hierarchical positions between the 2nd-tier NIEs and China, whether they are substitutable competitors (pessimists’ view) or indispensable collaborators (optimists’ view).

²⁰⁴ Not all researchers are critical about the efficacy of industrial policy in the 2nd-tier NIEs. For instance, Malaysia has continued to uphold the overall policy goal of inter-ethnic distributive justice, but its state has occasionally sidelined it for the purpose of achieving more pressing objectives, namely growth and development. Purportedly, the Malaysian state has succeeded in attaining conflicting goals (Setapa & Abe 1999: 170).

²⁰⁵ The crisis was preceded by a large depreciation of two major currencies, namely the Chinese yuan (1994) and Japanese yen (1995). Subsequently, many East Asian economies, with the exception of China, faced a sizeable reduction of Japanese FDI inflows as well as their notable diversion to China. Historically, the overall performance of East Asia (except Japan) has been influenced by the exchange rate of the Japanese yen; the growth rate of East Asia tended to rise during the high yen phases, such as the 1986-1988 period, and the 1991-1995 period, whereas it tended to fall during the low yen phases, such as the 1989-1990 period and the post-1996 period.

8.4.1 Malaysia

Prior to its independence in 1957 as Malaya,²⁰⁶ it had achieved a fairly high degree of prosperity by exploring natural-resource-based products, such as rubber and tin. During the colonial period, however, the development of manufacturing, which was largely confined to processing raw materials and producing certain consumer items for local consumption, was limited. In the early years after independence, the national economy continued to be dominated by primary commodity production, initially rubber and tin, then extended to pepper, palm oil and tropical hardwoods.

In 1963, the British colonies of Sarawak and Sabah of northern Borneo joined Malaya to form the enlarged Federation of Malaysia, which also included Singapore (only from 1963 to 1965). During the 1960s, there was a considerable erosion of support for the Alliance Party (a coalition of three parties formed along ethnic lines, the Malays, Chinese and Indians) and eventually a series of riots broke out following the 1969 election, causing many deaths among the Chinese. The parliament was then suspended and emergency rule was enacted for the next two years. Malaysia's political environment has since been dominated by the United Malays National Organization (UMNO). In comparison with others, Malaysia's socio-economic development, expressly since the early-1970s, has been heavily affected by "the institutionalization of multi-ethnic politics" (Pillay 2000: 204), among the Malays, Chinese and Indians.

While maintaining essentially laissez-faire economic policies in the 1960s, the state initially sought economic diversification, including "mild import substituting industrialization" (Jomo et al. 1997: 17-18). After the 1969 riots that underlined the urgent need for economic reform, the Malaysian state announced the New Economic Policy (NEP) in 1970. Its two main goals were to reduce poverty among all Malaysians, and to bring Malays more into economic life thereby eliminating inter-ethnic economic imbalance. In practical terms, the Malaysian state consciously sought labour-intensive industrialization along the interventionist industrial development model, by emulating what had existed in earlier periods in Japan, South Korea and Taiwan.

As noted earlier, the Vietnam War spurred Singapore's rapid growth. This in turn provided Malaysia with a large number of employment opportunities in "hard-labour-intensive" sectors (Stubbs 2004: 145). In the early 1970s, Malaysia – like Singapore, though belatedly – embarked on an export promotion drive of labour-intensive manufactured products (such as textiles and electronics) through the introduction of export-processing zones (EPZs). The strategy was to induce FDI, largely in electronics, with various preferential arrangements for foreign firms. In the wake of the second oil

²⁰⁶ After the first election in 1955, the Alliance Party negotiated for independence in 1957 and won the next three elections, held in 1959, 1964 and 1969.

shock (1979/80), the Malaysian state – under the leadership of Prime Minister Mahathir Mohamad (1981-2003) with the “Look East” policy – became even more active in terms of emulating some of the core economic policies of Japan and South Korea. As Furuoka (2005) notes, the question as to what elements exactly constituted the “Look East” policy was not conclusively agreed on. But it certainly contained the hallmark of East Asian industrial policies, often with sizeable public funds, to promote “heavy” manufacturing sectors, such as automobiles, iron & steel, industrial machinery and cement. One observer points out that the simultaneous pursuit of the NEP (ethnic policy) and the Heavy Industry Programme (a big push) was possible in Malaysia thanks to the discovery and exploitation of new fields containing oil and natural gas as well as the general commodity boom during the 1970s (Stubbs, 2004, 173). However, with the collapse of the commodity boom in the first half of the 1980s, the Heavy Industry Programme, along with the rest of the economy, ran into trouble (ibid).

In the mid-1980s, Malaysia began a new, low-cost manufacturing export strategy, which – together with the Promotion of Investment Act (1986) and deregulation of foreign equity ownership guidelines – chronologically coincided with the search for low-cost production/assembly platforms for export-oriented manufacturing firms from Japan and the 1st-tier NIEs. The resulting inward FDI, much from Japan in particular, created an economic boom that continued until the outbreak of the Asian Financial Crisis in 1997. The Malaysian state’s choice of foreign capital over domestic capital for stimulating the industrial drive may be seen as a way of limiting further capital accumulation among wealthier ethnic Chinese, as they would have been the likely beneficiaries of the state’s mobilization of domestic capital for industrialization purposes (Henderson & Phillips 2007: 83).

In short, over time, the emphasis within Malaysia’s development policy has shifted back and forth from inter-ethnic equity to growth and development, as well as control and liberalization to reflect economic conditions. Critical viewers argue that in Malaysia ethnic considerations have not only compromised the efficacy of its development policy (e.g. Jomo et al. 1997; Rasiah 2011; Tan 2014), but also exacerbated ethnic polarization and frustrated social integration (e.g. Segawa 2013). Since the mid-1990s the large inflows of low-skilled “guest workers” have insulated Malaysia’s manufacturing from the competitive effects of low costs found in its neighbours. Furthermore, the depressed wage levels have also helped many firms, foreign and domestic, to maintain their traditional use of Malaysia as a regional hub for low-cost, labour-intensive assembling of imported intermediate goods (Henderson & Phillips 2007: 92). Observers with a positive assessment (e.g. Setapa & Abe 1999) stress that the Malaysian state has successfully maintained and attained the conflicting goals: distribution, assimilation and growth.

Mahathir is also known for his proposal – which surfaced in the early 1990s – of recreating the East Asian Economic Caucus (EAEC), a regional organization of which the membership would roughly

coincide with that (i.e., the EA9) of the FG paradigm.²⁰⁷ While Mahathir expected that Japan would support this new grouping and assume its leadership, the latter exhibited hesitation towards the proposal for an East Asian grouping as it had traditionally been supportive of Asian-Pacific cooperative frameworks. Japan was reluctant to institutionalize the FG paradigm as an exclusive regional grouping (for further discussion, see Furukawa 2007).

8.4.2 Thailand

Since the mid-19th century, Thailand (Siam prior to 1939) has managed to retain its statehood. By the early 20th century, Siam had defined its national boundaries with its neighbours, developed a conscripted army to ensure its internal security; created a centrally controlled police force and a centralized judiciary; and reached out to the West to acquire new knowledge and technology (Stubbs 2005: 49). The development of the Siamese economy during the late 19th /early 20th century period brought in increasing Chinese immigrants, who came to dominate shipping, banking and insurance businesses, and increasingly imported products from abroad to satisfy the growing urban markets (Ibid: 50). As with the Malayan economy, international developments, especially the opening of the Suez Canal and the introduction of the steamship, also helped the Siamese economy with increasing demand for its export commodities, predominantly rice, together with three others, tin, teak and natural rubber.

Spurred on by the worldwide depression that also hit the Siamese economy during the early 1930s, the coup leaders struck in 1932. The period from 1932 to the signing of a formal alliance with the Japanese in 1941 was politically turbulent. Policies were geared toward curtailing both colonial and Chinese immigrants' influence in the economy as well as providing for a strong role of the state in economic development. At the same time, the state took over and increased investment in public utilities and railways and the manufacturing of consumer products. By the time of the arrival of the Japanese military in 1941, the military-bureaucracy alliance, albeit with some infighting, was firmly in control of Thailand and interventionist economic nationalists were highly influential in managing its economy.

²⁰⁷ This is an approximation at best. The EAEC group then consisted of the full six members of ASEAN at that time and three major economies in East Asia. The six ASEAN members were Brunei, Indonesia, Malaysia, the Philippines, Singapore and Thailand. The three largest East Asian economies then were: Japan, South Korea and China. It did not include Taiwan and Hong Kong as formal members. Later, the EAEC came to be accepted only as an informal, sub-regional group within the APEC (Asia-Pacific Economic Cooperation) forum. But the gradual loss of APEC as a viable forum has reduced the appeal of the EAEC as well. In the late-1990s, ASEAN expanded into a ten-member forum with four additional members: Cambodia (1999), Lao (1997), Myanmar (1997), and Vietnam (1995). In the new millennium, the EAEC has been replaced practically by the APT (ASEAN Plus Three) framework, consisting of the present 10 ASEAN members and the aforementioned three major economies in the region.

Thailand faced the post-WWII period with serious difficulties because of its wartime alliance with Japan. The country has seen a succession of military-led regimes before civilian-led state emerged in the 1990s. After the Korean War, Thailand appealed to the US to consider its strategic position as a frontline bastion against communist encroachment, which prompted the latter to make Bangkok the headquarters for the US-sponsored Southeast Asian Treaty Organization (SEATO) (1954-1973) (Stubbs 2018: 96). Subsequently, the US increased both its military and economic aid to Thailand, which induced a marked increase in the size and effectiveness of Thailand's two dominant political institutions, the military and the bureaucracy.

The constitutional monarchy of Thailand has effectively provided continuity and sense of purpose in public services. There has been little significant public antagonism to the economically powerful ethnic Chinese since the 1950s, and successive regimes have protected their business interests. It seems that among the 2nd-tier NIEs, the Thai state has been closest to the states of Japan and South Korea in linking effective protection to export promotion while relying primarily on the private sector through the operation of the Board of Investment (Jomo et al. 1997: 17).

Thailand has long relied on international trade as an engine of development, which has made policymakers carry on the tradition of occupying themselves with macroeconomic management, particularly maintaining economic stability, as their major economic objective. This means that Thailand's industrial policies have been treated as secondary to the macroeconomic stability goal unlike many others in East Asia (Jomo et al. 1997: 58-59). Like the rest of the 2nd-tier NIEs, Thailand enjoyed the export of primary commodities (most importantly, rice), which, as mentioned earlier, delayed the serious industrialization drive. It was the mounting balance-of-payments problem resulting from the slump in agricultural exports from the early 1980s that convinced Thai policymakers of the merit of vigorously promote manufactured exports. The Board of Investment supported heavily protected manufacturing, for instance, textiles, contingent upon export performance.

With the Gulf of Tonkin incident in 1964 and President Johnson's decision to deploy the bombing on North Vietnam, Thailand became a crucially located ally, and arguably the greatest beneficiary among the East Asian allies of the US. The military aid allowed the Thai military to expand, the Thai police to upgrade, and roads built to gain access to remote areas threatened by communist activities. But the greatest impact on the Thai economy came with the US spending on its various bases. While the War may not have had a major impact on Thai exports, it was important in terms of bringing in new FDI, certainly from the US. Japanese firms also began to follow the lead of the US, in various manufacturing sectors, including automobiles (Stubbs 2005: 142).

In the early 1980s, the restructuring of the Thai economy centred on a firmer commitment to switching of emphasis from the export of resource-based products to that of manufactured products. In 1984, Thailand let the baht –which had been tied to the US dollar since the late 1970s – depreciate by 15%, and allowed it to float and further depreciate by 20% by the end of 1987 (Stubbs 2005: 176). In the meantime, the Thai state reduced tariffs on imported goods used in the manufacture of exports and removed key export taxes. The flood of Japanese FDI after the Plaza Accord (1985) was followed by investments from other parts of East Asia, as well as from the US and Western Europe. This set the stage for a period of remarkable growth. Thailand’s main exports included textiles, clothing, toys in the late 1980s and computer components, integrated circuits, electric appliances, and automotive and auto parts in the 1990s and onward (cited in Stubbs 2005: 177). The strong economic growth lasted until the mid-1990s, as a prelude to the Asian Financial Crisis (1997-1998).

8.4.3 Indonesia

Japanese wartime occupation, which was supportive of Indonesia’s anti-Dutch struggle (Jomo et al. 1997: 150), practically destroyed the old order in the Dutch East Indies. The local nationalist movement under the leadership of “left-leaning” Sukarno, declared independence right after Japan’s defeat in 1945, but the Dutch refused to grant independence to Indonesia until 1949. As there was then no large capital inflows that might have facilitated the emergence of a strong central state, the early post-independence period was marked by considerable fiscal instability (Stubbs, 2004: 147). Economic policy was also subject to the nascent multi-party parliamentary democracy, where aspiring business interests, especially those belonging to ethnic Chinese, cultivated personal relations with powerful public officials and politicians.

In 1951 Indonesia launched the Benteng (Fortress) programme to “indigenize” its economy by promoting non-Chinese Indonesian private firms. However, in view of the limited success of the programme, the radical call for state-owned and cooperative enterprises enjoyed receptive audience (Jomo et al. 1997: 122-123). The ascendance of radical nationalist leaders in Indonesia in the 1950s shifted the country to the left, providing support for the Indonesian Communist Party (PKI), embarking on a series of foreign policies under the rubric of anti-imperialism with aid from the Soviet Union and China (Vatikiotis 1995: 217). Meanwhile, unlike many regional economies, the boom resulting from the Korean War failed to provide any major impact on the Indonesian economy (Stubbs 2005: 147).

Over more than a decade since the mid-1950s, Indonesia suffered from a series of costly political issues: regional rebellions (1957-1958), the West Irian (Papua) campaign (1961-1962), the confrontation with Malaysia (1963-1966), an attempted coup and a counter-coup (1965) with subsequent massive killings of communist sympathizers (1966), and the eventual replacement of Sukarno by General Suharto in 1968. One expert on the Indonesian economy characterizes its

performance in 1965 as a “basket case”, with a negative growth rate, hyperinflation approaching 1,000%, in isolation from the world community (Hill 1995: 776). Included in costly activities was the establishment of many SOEs in textiles, cement, and automotive assembly. The state also nationalized utilities, such as railways, ports, telecommunication, as well as mines. These serious political issues, together with the declining prices of primary commodities, also reduced export earnings and aggravated the overall situation.

Economic performance improved after 1967, as the “New Order” regime under Suharto was well served by the “Berkeley-mafia”, insulated technocratic elites who emphasized, most of all, the objective of achieving a “balanced budget”, to end hyperinflation (down to single-digit levels in the 1980s) (Campos & Root 1996: 123-124). The state also unified multiple exchange rates, abolished exchange controls and opened the inward capital account to attract flight capital back as well as to bring in FDI (Boedioni & Sarwono 1999: 187). To capture rents more effectively from greater natural resource exploitation as well as the protected national economy, military leaders allowed politically marginalized and hence vulnerable ethnic Chinese to run very profitable private firms to their advantage (Jomo et al. 1997: 17; for an excellent discussion on the alliance between ethnic Chinese and the military in Indonesia, see Campos & Root 1996: 127-133).

Increased resource (oil) rents from the mid-1970s financed public development spending on infrastructure projects, such as irrigation, transportation (local roads), health and education. However, balance-of-payments pressures obliged a devaluation of the rupiah in 1978. Unexpectedly, the second oil shock (1979/80) transformed the situation again and boosted revenues. However, the collapse of oil price in the early 1980s obliged the Indonesian state to postpone many of its investment projects (Hill 1995: 779). The state also undertook reform measures in macroeconomic management, especially in tax policies, but continued its strategic industrial policy (selective economic liberalizations and state intervention). The period of “policy discordance” in the early 1980s (Hill 1995: 779) was gradually replaced by a convergence of macroeconomic (austerity measures with another currency evaluation) and microeconomic (sectoral) policies (more performance-based protection and promotion towards manufactured exports by the private sector). In addition, Indonesia devalued its currency in 1983 and 1986. The 1980s was a challenging decade for Indonesia whose policymakers responded with frequent policy changes to unexpected events, most importantly in oil prices. One expert on the Indonesian economy claimed the decade of the 1980s seriously challenged its “state-led industrialization financed by oil” (Hill 1995: 778).

While many observers regarded Indonesia as the epitome of Asian crony capitalism, others positioned Indonesia in a comparative perspective. While Indonesia’s performance, particularly manufacturing, has not matched well with the great performance of the 1st-tier NIEs, the two other 2nd-tier NIEs (Malaysia and Thailand) and China (after 1978), it is certainly one of the successful late industrializers

(Hill 1995: 778). After all, Indonesia channeled its windfall oil revenues far more developmentally into productive activities than other leading oil producers (notably, OPEC members), such as Nigeria and Venezuela (Root 2000: 229).

8.5 China

For many centuries, China was the hegemonic empire of the East Asian “tribute system” where its surrounding tributary vassal states (such as Korea, Vietnam and Japan) traditionally emulated Chinese socio-cultural practices and to varying degrees accepted its civilizational centrality in the region (Kang, 2015). (As a result, Chinese descendants have established influential overseas Chinese ethnic networks in many parts in East Asia.) From the mid-19th century (starting with the Opium War) to the end of its own imperial rule, the Qing dynasty (1644-1912) encountered Western imperial encroachment. Unlike Japan, however, China was unsuccessful with the unified campaign of nation-building. One critical event that induced a series of negative after-effects on national unity of the Qing was its defeat in the Sino-Japanese War (1894-1895). The indemnities of the war were five times greater than the combined indemnities paid after the Opium War, which multiplied its foreign debt sevenfold (Golub 2016: 44-45). The chaotic domestic situation remained even after the establishment of the Republic in the mainland (1912-1949), due to internal strives involving strong warlords, warfare with the Japanese imperialists (1937-1945) and the civil war (1945-1949) between the Nationalist Party (Kuamintang: KMT) and the Chinese Communist Party (CCP) in the mainland.²⁰⁸

Under the control of the CCP (1949-present), China established a strategic alliance with the Soviet Union, but it soon witnessed a schism develop in the 1960s, and shifted its development strategy towards self-reliance. After 1949 China attempted to replicate the Soviet path of radical rural collectivization together with tight state control of industrial activities through state-owned enterprises (SOEs) in the cities (Hung 2015: 44). This was partly due to the fact that China was excluded by trade embargos, first by the US in 1949, and then by other UN members from 1950. Thus, China’s initial plan of external economic relations was to “lean to one side”, i.e., to invite FDI from, and to trade with, the Eastern Bloc members (Schenk 2011: 37). From the mid-1950s, however, the political/ideological differences with the Soviet Union slowly surfaced, and the border clashes towards

²⁰⁸ The transition from the Qing dynasty to the Republic hardly produced a credible political system, as strong provincial warlords resisted the unification process. In order to prepare a military offensive against the warlords and unify the mainland, Republican revolutionaries, who had established KMT, agreed to form a coalition with the newly established the CCP. KMT formed the National Revolutionary Army and succeeded in the Northern Expedition (1927-1928) to unify much of the mainland. Before long, however, the KMT-CCP coalition broke down. In 1937, a second round of the united front was formed to confront the full-scale Japanese invasion. Over time, the Republic gradually lost power as the CCP successfully exploited peasant nationalism and egalitarianism.

the end of the 1960s created a decisive schism between them. Subsequently, China began the policy of “self-reliance” (Schenk 2011: 86).

After facing the devastating consequences of the Great Leap Forward (1958-1961) and in light of its increasing isolation resulting from the East-West detent, China launched rapprochement with the US in 1971. China’s new conciliatory position, in the midst of the Cultural Revolution (1967-1976), met a receptive attitude in Washington, D.C. A series of diplomatic exchanges culminated in the Shanghai Declaration in 1973, which opened the way for China to normalize trade relations with the US as well as with the latter’s East Asian ally, Japan. The new rapprochement also paved way for the historic commencement of the Reform/Open-Door policy circa 1979/1980. Thus, for China, the Cold War period, at least the hostile period vis-à-vis the US, ended much earlier (by ten years, perhaps) than elsewhere.

It is generally understood that the Post-Mao reforms began in 1978 – slightly before the Open-Door policy – with the nation-wide expansion of what is called the “household production responsibility system”, i.e., the effective de-collectivization of land tilling along nuclear family lines.²⁰⁹ China also began to grant more autonomy to state-owned enterprises (SOEs)²¹⁰ and permit the existence of non-state enterprises (Lin et al. 1996). These reforms engendered the gradual dismantling process of the instruments of state planning, and their replacement with market mechanism (Breslin 1996: 689). Soon thereafter, the Chinese central authorities took the initiative of setting up the so-called Township and Village Enterprises (TVEs),²¹¹ which contributed to narrowing the urban-rural income disparity to the lowest point in the mid-1980s by absorbing excess rural labour in the areas along the coastal regions/areas (Lee 2014: 111). This was a task which the larger urban SOEs never achieved.

²⁰⁹ While land was still collectively owned under this system, the right to use specific land belonged to the farmer who was officially assigned to it. Over time, the distinction between “use rights” and “ownership rights” became blurred, and the collective nature of agricultural production turned out to be ambiguous in practice (Cai 2008: 157).

²¹⁰ According to Lin et al. (1996: 146-159), the new autonomy granted to SOEs by a series of regulations in the early 1980s included these firms’ specific rights: i) to sell their own products; ii) to set their prices; iii) to select inputs for their production; iv) to use their own funds; v) to allot salaries and bonuses; vi) to enter into a joint-venture arrangement; and vii) to choose a technological innovation.

²¹¹ The rise of TVEs – which produced virtually a wide range of products including consumer goods as well as capital goods – in the 1980s was remarkable, but many of them were privatized in the 1990s (Rodrik 2013: 151). Numerous small TVEs also went bankrupt in the 1990s following the collapse of the SOEs which they had depended on for subcontracting business (Lee 2014: 107-115).

China's Open-Door Policy started in 1979 when Hong Kong businesses were allowed to sign "export-processing" contracts with Chinese firms in the newly established Special Economic Zones (SEZs) in the Pearl River Delta of Guangdong province. Chinese policy here was to solicit foreign technology to improve industrial performance, which soon led to the introduction of a limited range of liberal reforms in the four SEZs along the country's coastal regions: Shenzhen, Zhuhai, Shantou in Guangdong province (all in 1979) and Xiamen of Fujian province (in 1980) (Bramall, 2009: 331-335, 366-368). The status and establishment of these SEZs were subsequently formalized in 1980 (Tuan & Ng 1995: 388). China's central authorities chose these provinces as the home of these SEZs (especially Shenzhen) with the hope that they would be able to tap the capital of overseas Chinese, most of all those residing in Hong Kong (Burkett & Hart-Landsberg 2000: 241; Knox et al. 2014: 306; see also Osborne 1986; Tuan & Ng 1995). In any case, much of the investment was in joint ventures between foreign firms and local enterprises operated by provincial authorities and cooperatives (Fan et al. 2014: 7-8; Hung 2015: 48; Knox et al. 2014: 306; Yueh 2010: 64; Zweig 2014: 276).

In the 1980s, these foreign firms were numerous but mostly small family-run firms, investing less than US\$ 500,000 in joint ventures with local governments (Zweig 2014: 276). Many Chinese SOEs also began to participate in joint ventures in these SEZs with these foreign firms and diversified into new fields. In the early 1980s, China's exports were dominated by primary products and oil, while the manufacturing was increasingly towards international markets. From 1985, exports of textiles and other light manufactures comprised a rising share of exports, so that manufactured products amounted to more than 75% of total exports by 1991 (Schenk 2011: 88). In 1988, Hainan Island, off Guangdong, was granted a provincial status, and was announced as China's fifth and largest SEZ in terms of geographical size (Bramall 2009: 367).

The SEZs were initially supported by the Chinese authorities on a trial-and-error, experimental basis with nonconventional, market-oriented, and outward-looking measures for promoting industrialization with labour-intensive production. These zones, while having got off to a slow start, turned out to be successful, setting in motion the gradual process of climbing up the ladder of technical development. Built on the confidence and experience gained with the SEZs, the Chinese authorities later took steps to further open up the economy (for further discussion, see Osborne 1986; Zeng 2011). The designation of Pudong district of Shanghai in 1990 as a new development zone was noteworthy for modernizing what remained the centre of Chinese industrial production in the regions both surrounding Shanghai and along the Yangtze River (Bramall 2009: 367-368; Yueh 2010: 65). Governed by regulations similar to those in SEZs, numerous additional economic and technical development zones of various sizes were soon established in these open areas. Furthermore, many inland regions were permitted to set up certain areas to attract FDI (see Zeng 2011). However, pent-up demand for capital goods and an overvalued currency prompted a surge of imports into China, causing a trade deficit until 1990.

The momentum of reforms was disrupted in the first half of 1989 by a massive student demonstration in Tiananmen Square.²¹² While the shock was felt throughout East Asia, virtually every country in the region (with the notable exception of Japan) took the position of considering Tiananmen as China's internal matter and chose not to join vocal international critics. The regional situation prompted China to begin sustained efforts to improve diplomatic relations with its neighbours, most notably with ASEAN members.²¹³ For a few years, the Chinese leadership was seriously divided, and some feared that the reform process would be derailed, possibly permanently. In this regards, Deng Xiaoping's "Southern Expedition" (1992-1993) was an important event, during which he made an exhortative speech in Shenzhen, the most successful SEZ, reaffirming the crucial importance of the market reforms and urging the reforms process to be intensified (Jacques 2012: 177). Deng's viewpoint was endorsed immediately by Chinese central authorities. The victory of Chinese reformers was reinforced when China saw more inward FDI in 1993 alone than in the preceding 14 years of reform put together (Beeson 2006: 466).

Consequently, in the early 1990s China entered a period of sustained development with further policy shifts. It made the national currency convertible for current account transactions, strengthened the central bank, and widened the commercialization of the banking system (MacCawley 2017: 167). By the mid-1990s, production and trade networks among China, Hong Kong, and Taiwan had developed regional weight. The pace of regional integration in East Asia, measured in terms of increased regional trade accelerated, though it was temporarily disrupted by the Asian Financial Crisis (1997-1998). Purportedly, during and after the crisis, confidence levels in East Asia towards China were heightened in light of China's decision not to devalue its currency. Such competitive devaluation would have been interpreted by its neighbours as aggressive policies to divert further FDI to China from them. During the decade, the overall trade exports from East Asia to the rest of the world had grown strongly, with the annual average at about 5%, which was accompanied by a shift in the relative position of Japan

²¹² Toward the end of the year, we witnessed socialist regimes in Eastern Europe being overthrown, which was followed by a further shock of the disintegration of the Soviet Union in 1991.

²¹³ Whereas some ASEAN members normalized relations with China earlier, in the 1970s, for instance, Malaysia (1974), Thailand (1975) and the Philippines (1975), others waited until much later, after the Tiananmen incident: Indonesia (September 1990), Singapore (October 1990) and Brunei (September 1991). In the early 1990s, China also normalized relations with Vietnam (1991) and South Korea (1992). Meanwhile, its official participation in the ASEAN Foreign Ministers Meeting in 1991 marked China's first formal contact with ASEAN, which was followed by the first meeting of the ASEAN Regional Forum (ARF) in 1994. Womack (2003/4: 536) speculates that if China had followed its initial post-Tiananmen inclination of allying with communist states, or if Southeast Asia had angled for more Western support in condemning China, the relationship between China and Southeast Asia could have taken a different course.

and China. There was a huge drop in Japan's share of these exports, from 45% to 30%, while China's counterpart rose from 6% to 21%.²¹⁴

In the 1990s as a whole, firms from Japan and the 1st-tier NIEs other than Hong Kong also began to transplant their relatively labour-intensive activities to China, which reportedly not only offered projects for gains from trade in terms of efficiency, but provided employment opportunities to the local population (Schenk 2011: 88). Labour-intensive production activities in China's SEZs have attracted large numbers of migrant workers to the coastal areas from the surrounding and far-away rural areas. China signed a bilateral agreement of further reforms with the US in 1999, which paved the way for its entry into the World Trade Organization (WTO) in 2001. Obviously, China's decision to join the WTO reflected its desire, among others, to stabilize access to key markets in the West, namely the US and Europe.

Around the turn of the new millennium, the notion of East Asian as the most dynamic economic region was revised based on the rise of China, as seen in its 2000 proposal for the China-ASEAN Free Trade Agreement (CAFTA) (concluded in 2004), including the early liberalization of certain agricultural products, thereby demonstrating that it may be more willing than Japan to open its markets and bear the domestic costs of leading the region. China's increased importance was clearly recognized as an attractive destination for FDI. Meanwhile, Japan has never been the most preponderant investor in China, with its share within overall FDI flows to the country being rapidly diminishing.

In the early 2000s, observers began to point out that China witnessed the symptom of labour shortages in urban industrial areas, and that the new demographic condition had motivated firms in the coastal areas to relocate some factories to inland regions and to neighbouring economies especially Vietnam and Cambodia. A newly emerged debate in the 2000s was whether the FG paradigm had been taking place within China (among domestic regions with different levels of development). While many researchers are still debating as to how critical this labour shortage has been in China, the country has significantly affected the structural upgrading of East Asia (and beyond), by pushing comparatively disadvantaged segments of its industrial sectors abroad. More specifically, the Chinese authorities have been ready to take action to cope with the erosion in cost competitiveness for labour-intensive production. Again, it may be argued that this path – seemingly sitting well with the FG paradigm – resembles those that more advanced East Asian economies have gone through earlier.

²¹⁴ Note, however, that the trade data of China overstates its real achievements in manufacturing development because the data reflects the effects of the intra-regional shift of the final assembling stage from Taiwan and Hong Kong to China. The trade data also reflect the relatively declining dependence on Hong Kong as its entrepôt.

In sum, China's recent industrialization, which is relevant to our discussion, was initiated by Chinese decision-makers who thought that these SEZs – supported by liberal policies together with financing by the central, provincial and municipal authorities for infrastructure – should be seen as a controlled, and gradual experiment of economic liberalization. Indeed, China's industrialization has reflected in its outputs. One periodization scheme divides the modern industrialization era into four sub-periods: 1) 1978-1985 (a resource-based economy with production and export of resource-based products, such as coal, oil and gasoline); 2) 1986-1995 (a rapid growth in labour-intensive exports); 3) 1996-2000 (electrical machinery and transportation equipment); and 4) 2001- present (high-tech products, such as life-science equipment, electronics and IT products) (Fan et al. 2014: 6).

8.6 Empirical Profile of the East Asian Nine

8.6.1 Overall profile

As Table 8.1 shows, the nine East Asian economies under discussion are diverse in their background, in terms of geographical and demographic scale, economic size, macroeconomic governance, sectoral composition of value-added, general characteristics of political regime, and main religions.

Table 8.1
East Asian Nine:
General Profiles

	GDP (US\$ billion) 2014	Population (million) 2013	Area (1000 sq km)	Macro-economic governance	Triadic ratio	Dominant sectors	Political regime	Main religions
Japan	4770	127.3	378	A2	1.2 : 27.5 : 71.3	B2	C2	R1,R2
S. Korea	1449	50.2	99	A2	2.3 : 38.6 : 59.1	B2	C1	R2,R3
Taiwan	506	23.4	36	A2	1.7 : 30.0 : 68.3	B2	C1	R2,R5
Singapore	307	5.4	1	A2	0.0 : 25.1 : 74.9	B2	C1	R2, R4, R5
Hong Kong	293	7.2	1	A1	0.1 : 7.0 : 93.0	B3	C4	R2, R3, R5
Thailand	381	66.8	513	A3	10.6 : 40.1 : 49.3	B2	C2	R2
Malaysia	337	29.9	333	A3	9.4 : 41.0 : 49.6	B2	C2	R4
Indonesia	866	248.8	1904	A3	14.4 : 45.7 : 39.9	B2	C1	R4
China	10360	1360.7	9597	A4	10.0 : 43.9 : 46.1	B1	C3	R5,R6

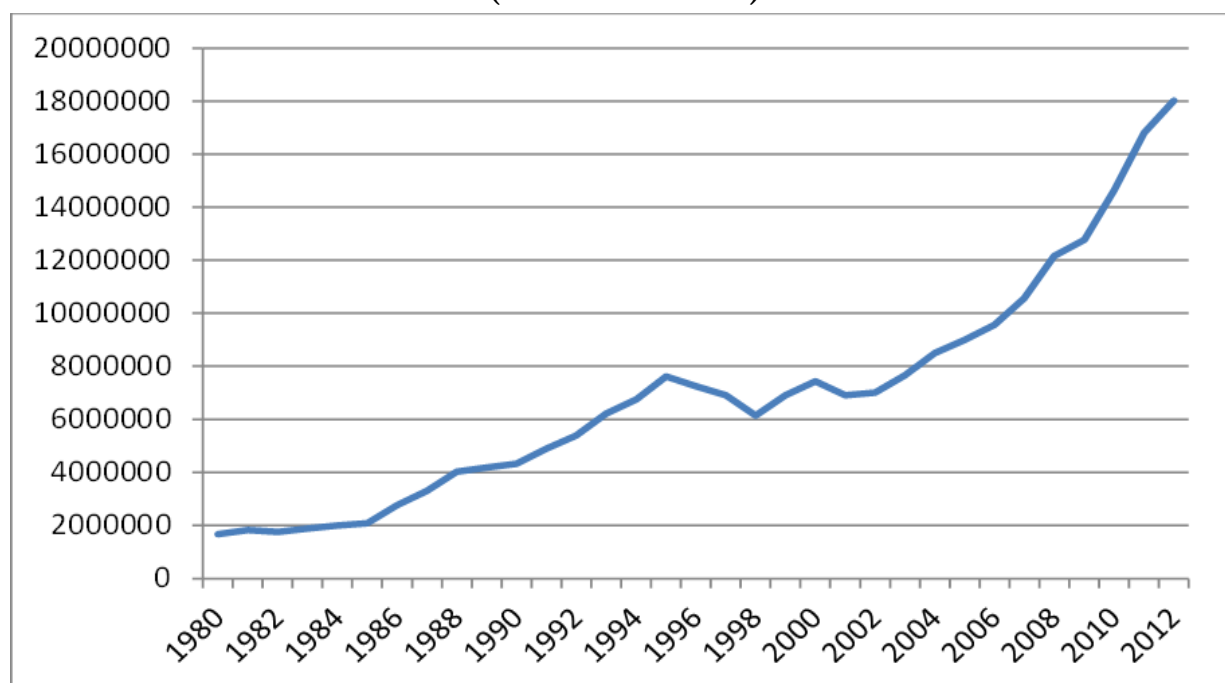
Sources: ADB (2014), Dent (2008).

Notes: Macroeconomic Governance (Dent 2008): A1: Liberal market economy, A2: Advanced developmental statism, A3: Underdeveloped developmental statism, A4: Planned/socialist market economy. Triadic Ratio (ADB 2014): Agriculture, Industry and Service value added (% of GDP) in accordance with the most recent data available. Dominant Sector (Dent 2008): B1: Manufacturing, B2: Service/Manufacturing, B3: Service. Political Regime (Dent 2008): C 1: Presidential republic, C2: Constitutional monarchy, C3: Socialist republic, C4: Special administrative region. Main Religion (Dent 2008): R1: Shintoism, R2: Buddhism, R3: Christianity, R4: Islam, R5: Taoism, R6: Atheism

8.6.2 Overall Growth of Recent Performance

These economies under discussion have shown impressive growth as a group (see Figure 8.1), although there was a clear disruption to their collective growth path for a few years after the outbreak of the Asian Financial Crisis (1997-1998). Some members of the group – most of all, the 2nd-tier NIEs, as well as South Korea in the 1st-tier NIEs – suffered massively from economic contraction, and their individual recovery took some years. Nevertheless, the group as a whole managed to resume a rapid growth path by the early 2000s. Much of their rapid growth in the pre-crisis period was attributable to the performance of the then predominant economy, Japan. The post-crisis growth of the group has been attributable to the growth of China (see Wang & Hu 2000).

Figure 8.1
Aggregated GDP of the East Asian Nine
(Nominal \$ Million)

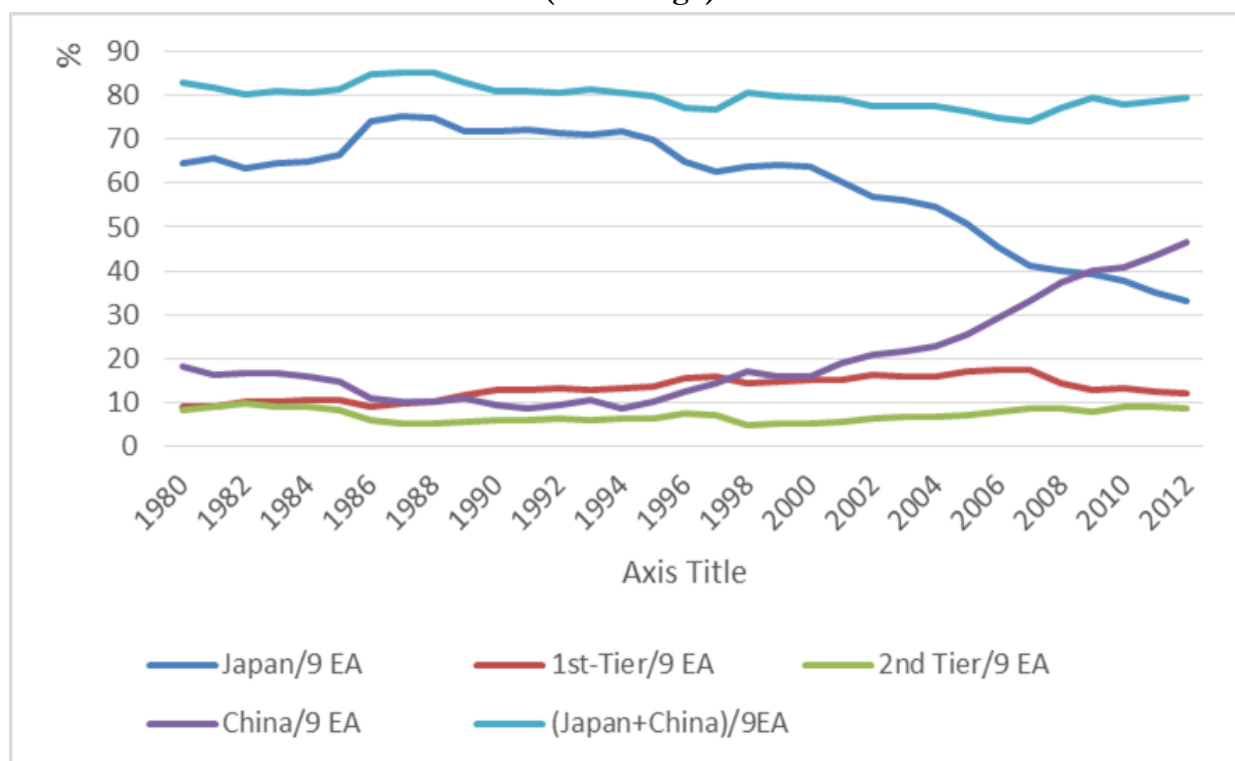


Source: World Bank database.

8.6.3 Relative Weight of Economic Performance

One interesting finding derived from the observation above is the change in relative weight of members (see Figure 8.2). The share of Japan in GDP of the group amounted to more than 60% in 1980, and it reached its peak of more than 70% in the late 1980s, then it slowly declined in the 1990s, though it managed to remain above 60%. Then in the early 2000s, the economy's share began a rapid decline, and it ended up hovering a bit above 30% as of 2012. In 1980, the share of China's GDP in the group was 18%, but thereafter it faced a steady downward trend, to below 9% in the first half of the 1990s, due to the rapid growth of the rest of the group. As stated earlier, China continued to grow after the 1997/8 crisis, while many contracted. As a result, the share of China's GDP began to rise very rapidly, from 10% in 1995 to 20% in the early 2000s, and 40% in the early 2010s. Over the 1980-2008 period, the share of the 1st-tier NIEs' GDP floated mostly in the 8-18% range of the total with a mild upward trend, but there has been a clear down-ward trend after 2008. The share of the 2nd-tier NIEs' GDP always remained below 10% of the total

Figure 8.2
Relative Weights of GDP
(Percentage)



Source: Authors' calculation based on the World Bank database.

Let us note that the weight of the combined GDPs of Japan and China has been relatively stable, roughly around 80% of the total. The decline of Japan in relative terms has been more or less matched by the rise of China, while the relative weight of 1st-tier and 2nd-tier NIEs has been relatively stable.

8.6.4 Per Capita GDP

In the past few decades, East Asian economies have rapidly caught up with its spearheaded leader, Japan (see Table A2). In 1980 Japan's per capita GDP (nominal) was \$9,308, while the corresponding figures for the 1st- and 2nd-tier NIEs were considerably lower: South Korea: \$1,778 (or 19% of Japan's counterpart), Taiwan: \$2,385 (26%), Singapore: \$5,004 (54%), Hong Kong: \$5,700 (61%), Thailand: \$683 (7%), Malaysia: \$1,803 (19%), and Indonesia: \$536 (6%). China's per capita GDP in 1980 was then merely \$193 (2%). Over the 1980-2013 period, the per capita GDP of the 1st-tier NIEs caught up, either fully or by more than half, with that of Japan. In 2013, the East Asian economies' per capita GDP as the percentage of that of Japan are as follows: South Korea, 67%; Taiwan, 58%; Singapore, 143%; Hong Kong, 99%; Thailand, 15%; Malaysia, 27%; Indonesia, 9% and China, 18%. In terms of per capita GDP, China had surpassed Indonesia by 2000, and Thailand by 2013.

Table 8.2

		Nine East Asian Economies' Per Capita GDP (nominal)							
		(Relative size against Japan)							
		1980	1985	1990	1995	2000	2005	2010	2013
Japan	US\$	9308	11466	25124	42522	37292	35781	43118	38492
	(%)	100	100	100	100	100	100	100	100
S. Korea	US\$	1778	2542	6642	12404	11948	18657	22151	25977
	(%)	19	22	26	29	32	52	51	67
Taiwan	US\$	2385	3290	8124	12918	14704	16051	18503	20952
	(%)	26	29	32	30	39	45	43	54
Singapore	US\$	5004	6782	12766	24937	23793	29870	46570	55182
	(%)	54	59	51	59	64	83	108	143
Hong Kong	US\$	5700	6543	13486	23497	25757	26650	32550	38124
	(%)	61	57	54	55	69	74	75	99
Thailand	US\$	683	748	1508	2849	1969	2690	4803	5779
	(%)	7	7	6	7	5	8	11	15
Malaysia	US\$	1803	2015	2417	4286	4005	5554	8754	10514
	(%)	19	18	10	10	11	16	20	27
Indonesia	US\$	536	538	641	1041	790	1273	2947	3475
	(%)	6	5	3	2	2	4	7	9
China	US\$	193	292	314	604	949	1731	4433	6807
	(%)	2	3	1	1	3	5	10	18

Source: the World Bank, except Taiwan (National Statistics, the Government of Taiwan)

The data discussed above are in nominal value, which means that the catching-up process in terms of purchasing power parity (PPP) would be even more pronounced. For instance, while China's nominal per capita GDP is only 18% of Japan's counterpart in 2013, the per capita income in PPP, i.e., the per capita GDP in terms of local purchasing power, should be considerably higher. Second, the data also has been affected by changes in the local currencies' foreign exchange rate (vis-à-vis the US dollar). Changes in national currencies could distort the picture of the state of affairs in the national economy, as they could divert the growth pattern expressed in the national currencies and that in US dollars. Third, the data does not indicate the welfare level of typical households in each country. This is because the welfare level has much to do with not only the actual income levels of households (affected by the situation of income distribution) as well as the provision of various public services (affected by the public policy of government).

The nine East Asian economies under this study show that "their weight" in the world economy has grown over the last several decades. This could be easily appreciated by their rising share as a group in global total of GDP, export (particularly manufactured exports) and FDI (inflows).

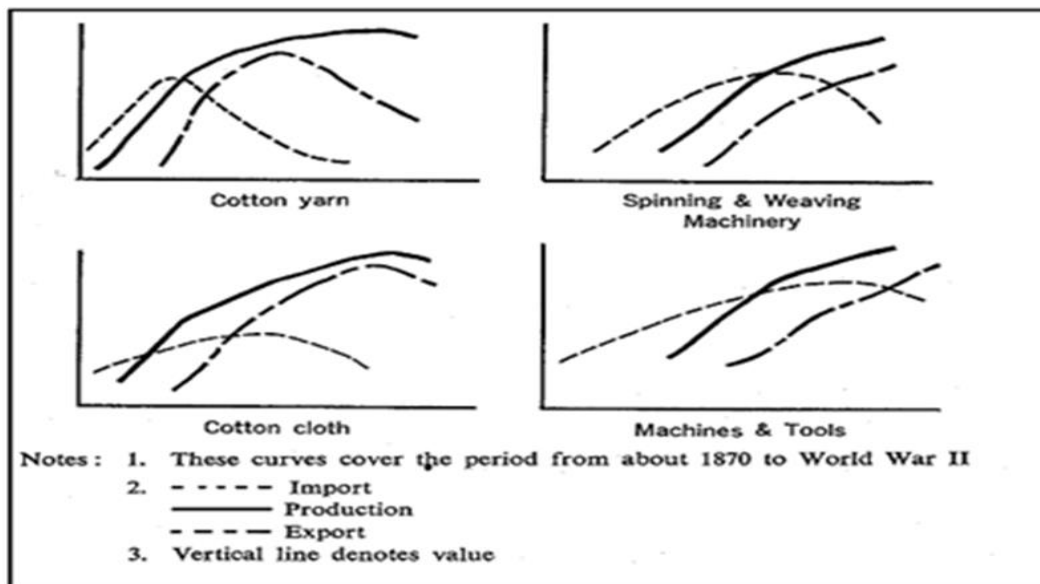
Chapter 9 (Supplement to Chapter 2)

Modernization of the Japanese cotton industry: A brief description of the Meiji period (1868-1912)

9.1 Introduction

In the 1920s and 1930s Kaname Akamatsu, a young academician, looked into Japan's trade data for better understanding the ongoing industrialization in the Nagoya region, the central region on the Pacific coast between Tokyo and Osaka, which was then well known for its textile industry (wool and cotton). His empirical work was presented as visual presentations of graphs of product-specific trade (import and export) and local production. These graphs (see Figures 2.1 and 2.3 in Chapter 2) were rather messy, to engender an imagery of flying geese. Much later, Akamatsu (1962) made a four-graph presentation of "stylized" import-production-export (M-P-X) sequences over the period of the 1870s to World War II (WWII), for i) cotton yarn, ii) cotton cloth (fabric), iii) spinning & weaving machinery, and iv) machines & tools (see Figure B1-1). In all cases, there occurred similar M-P-X sequences, where import, import-substituting production and export rose and later fell.

Figure 9-1
Akamatsu's M-P-X Sequences:
Various Configurations



Source: Akamatsu (1962)

This set of graphic presentations shows that Japan entered the production and export phases earlier for labour-intensive ones (cotton yarn and cotton cloth) than for more capital-intensive goods

(spinning & weaving machinery, and machines & tools). We therefore infer that the share of fabric using imported yarn as well as imported spinning weaving machines rose and later fell, and similarly the share of cotton yarn using imported spinning machines also rose and later fell. There were linkages between cotton yarn, cotton fabric, and cotton spinning and weaving machines, showing that as import-substituting production of particular consumer goods rises, the capital goods needed for producing them are also going through the process of import substitution. In this way, Akamatsu formulated the generalized linkages between consumer goods and capital goods. As was discussed in Chapter 2, the inter-sectoral linkages between consumer goods production/export and imported capital goods was later more explicitly demonstrated by Akamatsu's student, (see Figure 2.16).

In the following pages, we look into the diffusion phases in the historical evolution of Japan's cotton industry (particularly spinning and weaving) since the second-half of the 19th century.

9.2 Initial Rise of Imports of Raw Cotton, and Cotton Yarn and Fabric

Japan has a long history of the cotton production (spinning, weaving, dyeing, etc.). The traditional method in the pre-Meiji period of using tools and rural household labour was not particularly productive; however, the seclusion of the country made it possible for the industry (and, for that matter, the country as a whole) to survive. The traditional production was often organized as a "putting-out system", where merchants had contracts with individual households in farming communities to produce specified products. These merchants typically provided them with all materials and sometimes tools as well, and later paid a commission for the received finished products. Production took place in each farmer's house using household labour (usually that of the wife) (Ohno 2006: 74).

Its opening to international trade in 1859 prompted Japan to import huge amounts of cotton yarn and woven fabrics for its domestic market from the UK, the country that dominated the world market at that time. This was clearly in contrast with raw silk, silk cocoon and tea which represented Japan's most important export-earning sources. The Meiji government initially encouraged the home cultivation of cotton, but it soon proved to be of low quality, not suitable for spinning fine yarn. Even after starting to make use of better-quality raw material from India and China, Japanese cotton spinners, with the traditional method of using wooden looms and household labour, were unable to compete in price or quality with imported yarn (Francks 1999: 46). Thus, raw cotton, and cotton yarn and fabrics came to represent collectively increasingly large import items; by 1870, they alone occupied more than one-third of Japan's total imports (Fetcher 1996: 53; Francks 1999: 47; Yamazawa 1990: 71). By 1900, however, Japan began to export cotton yarn and fabrics. Before long, Japan became a major exporter of cotton clothes.

9.3 Import Substitution of Cotton Yarn

In the late 1870s, its foreign exchange reserve constraints began to oblige the Japanese government to encourage the import-substituting production of cotton yarn with imported modern textile technology. In 1883, the first private firm, the Osaka Spinning Company, equipped with a comparatively large capacity of 10,500 spindles activated by steam-driven technology (rather than water-driven), began its operation, using low-cost Chinese raw cotton instead of domestic cotton (Howe 1996: 183-185; Izumi 1979: 398; Ohno 2006: 76; Otsuka & Ranis 1988: 23). In the mid-1880s the government sold all of its three model factories of cotton spinning to the private sector in order to ease its budget burden. According to Ohno (2006: 75-76), these model factories were not commercially successful for the following reasons: i) lack of capital, ii) small capacity of only 2,000 spindles, iii) use of water power which was constrained by location and operation, and iv) lack of expertise.

By 1886, 15 of the existing 22 spinning firms had started with some form of direct aid from the government (Fletcher 1996: 55). The commencement of mechanization in the modern sector in Japan's cotton yarn production did not drive out immediately the traditional sector with old and domestic technology and production methods. In fact, the rise of domestic demand for cotton products afforded domestic production (the modern and traditional sectors) to survive (Ohno 2006: 74). However, because of their relatively small size, these new firms remained uncompetitive vis-à-vis imported cotton yarn; their machine-spun yarn occupied a small part of total yarn consumption, accounting for only about 6% of total consumption and 25% of domestic production in the 1882-1884 period. Initially, the product (cotton yarn) of these firms was sold to domestic traditional weavers, and later it was also exported. (As discussed later, towards the end of the 1990s, large spinning firms also began to use internally produced yarn of their own for weaving fabrics.)

Thus, for a while new firms and traditional small ones co-existed, each group being engaged in producing differentiated products (Ohno 2006: 56-57). In the second half of the 1880s, large spinning firms were established, and the number of these modern firms with new machinery grew rapidly in the 1890s. As a result, cotton spinning became the largest mechanized manufacturing activity in Japan (Fletcher 1998: 45; Francks 1999: 48; Izumi 1979: 398). By 1896, the Osaka Spinning Company, the largest spinning firm, had raised the number of its spindles to 61,320, whereas the average spindleage of the other 15 large firms had reached 13,000 (Howe 1996: 185). Towards the end of the 1880s, the spinning firms were operating with a total of over 7,000 workers residing in dormitories, many of whom – over 80% – were young women recruited from rural areas. They worked in two shifts for almost 24 hours a day – thanks to the “revolutionary use of electric light” (Howe 1996: 184) – with two holidays a month. For further details of the working conditions in the Japanese cotton-spinning firms, see Otsuka & Ranis (1988) and Saxonhouse (1976).

The dismantling of its cotton yarn export tax (1894) and its raw cotton import tariff (1896) greatly affected Japan's cotton industry. The amount of yarn exports rose from 12,400 pounds in 1890 to 421,300 pounds in 1893. The removal of the yarn export tax caused a nearly 1,000% (10-fold) rise in export in 1894, and the removal of the raw cotton import tariff in 1896 caused yet another tremendous leap of export, surpassing 136,000,00 pounds in 1899 (Fletcher 1996: 72). Clearly, the ending of the import tariff deprived Japan of the opportunity of protecting domestic cotton cultivation, and negatively affected the vertically integrated production of raw cotton, yarn and fabrics based on the indigenous technology declined (Yamazawa 1990: 74). In 1897 Japan's cotton yarn exports – 94% of which were absorbed by China for hand-loom weaving – caught up with imports for the first time (Howe 1996: 186, 414; Francks 1999: 46; Fletcher 1996:72; Lockwood 1954: 31; Yoshihara 1979: 7). Toward the end of the 1890s, a few modern spinning firms were able to produce high-count yarn from American raw cotton, replacing American and European cotton yarn imports, whereas many others continued to produce low-count yarn. This was an early case of product differentiation. Demand for plain white cloth fell while more differentiated, high-value products, such as creased, patterned and coloured materials found a larger customer base.

As mentioned earlier, from around the end of the 1890s, the major cotton-spinning firms also began to develop their own weaving operations for their yarn. Consequently, the portion of the output of Japan's spindles that was further processed by the domestic weaving operation rapidly grew whereas the remaining that was exported as yarn gradually declined (Lockwood 1954: 31). By the time of WWI (1914-1915), Japan already supplied a quarter of the world exports of cotton yarn, sharing the large Chinese market with India. China still imported two-thirds of its yarn requirement, though its own spinning sector was becoming mechanized with nearly a million spindles, a quarter of them owned by Japanese firms (Lockwood 1954: 31). Perhaps, this was the earliest case of Japan's business foreign ventures in the fashion advocated by the FG paradigm.

From the relatively early days, the Japan Spinners' Association (JSA) was actively arranging production curtailment and export promotion. The above-mentioned abolition of the cotton export tax (1894) and the raw cotton import tariff (1896) was reportedly due to the effective lobbying by the JSA (see Fletcher 1996). During the 1890 recession, the JSA's members, suffering from the surplus capacity for the first time, stopped spinning operation for eight full days in order to prevent market prices of yarn from falling further. This production curtailment was repeated ten times before 1937 to secure an orderly expansion of total production (Yamazawa 1990: 77; see also Fletcher 1998). There had been no factory laws until 1911 when the first factory law was adopted, after 30 years of discussion during which the JSA and other employer groups effectively opposed any action. The enforcement of the law had to wait until 1916, and even then it was implemented only partially. Meanwhile, any organization of workers to bargain collectively or strike was effectively forbidden under the Police Regulations of 1900 (Lockwood 1954: 30).

Japan's cotton spinning firms suffered during WWII, as it constrained supplies of raw cotton to them, and as a consequence, their capacity declined substantially. It is pointed out that the contraction of the number of spindles from the peak of more than 12 million spindles in 1937 to some 2 million spindles – i.e., a decline of 82% – was primarily due to the scrapping of equipment to meet wartime needs for metal (Stewart, 1971: 9). Reportedly, over the 1941-1946 period, 7,754,000 spindles were scrapped, 519,000 were transferred overseas, 825,000 were war-damaged, and 816,000 were placed in storage (Ibid).

9.4 Import Substitution of Cotton Fabric

As stated earlier, towards the late 19th century, large spinning firms began the machine-based, integrated production of cotton fabrics using their own cotton yarn, in order to compete with imported fabric. However, the large-scale use of modern machines for cotton fabric production had to wait until 1905 when the increase of wages as well as the greater availability of electric power made it feasible for small-scale hand-weavers to switch to power-looms (Yoshihara 1979: 8). At any rate, while the hand-weavers remained strong against power-looms, the modern integrated production sector – catering not only to the domestic market but also China and other Asian markets – continued to grow into the 1900s, thereby completing the import substitution of cotton fabrics. In the 1900s, modern weaving machines began to be introduced even in the traditional sector. But they were not exactly the same as the Western origin; production scale was smaller and modifications were often made, including the extensive use of wooden pieces in place of steel parts (Ohno 2006: 75). The colonial control of Taiwan and Korea provided the Japanese cotton industry with sizeable, captured markets for its fabrics.

World War I (WWI) (1914-1919), which forced the UK – the then most dominant textile exporter of the world – to withdraw from Asia, decisively favoured the development of the Japanese cotton industry and facilitated its maturation process. Its cotton fabric exports greatly expanded, securing access to many markets, such as Southeast Asia and India, which had not been unavailable prior to the war. Thus, the export boom helped the traditional weaving regions in Japan undertake offshore production, particularly in China to take advantage of its low-wage local labour. Overseas markets also helped the diversification of cotton products. The halt of imported European dyestuffs and machinery also necessitated Japan's domestic production of synthetic dyes and machinery. The UK's attempt to regain the lost markets in Asia after the war did not bring forth much success, as Japan had effectively consolidated its position in China, thereby practically preventing the UK's re-entry into Asia's largest market. The UK's re-entry was somewhat more successful in Southeast Asia and India, but even there Japanese cotton products penetrated increasingly in the late 1920s and the 1930s (Yoshihara 1979: 56).

The inter-war period, especially the 1920s and the early 1930s, provided Japan with “the most glorious age in the history of the cotton textile industry” (Yoshihara 1979: 11), as it decisively demoted Lancashire from its position as the world centre of textile production (Franck 1999: 49; Yoshihara 1979: 11). The rapid rise of Japanese exports, however, invited Western reactions in the form of trade barriers in the 1930s (see Stewart 1949, for details). Due to these obstacles, Japanese exports of cotton fabric levelled off during the 1934-1937 period. In 1938, the country’s cotton textile production declined sharply immediately after it adopted the Law Related to Temporary Measures for Export and Imports Control which allowed the import of raw cotton only for export. With the outbreak of WWII (1941-45), production declined further as importing cotton became difficult.

In Japan, the economic indicators after WWII returned to the prewar level relatively rapidly, mostly by the early 1950s, with the single notable exception of trade which could not reach the prewar level until the late 1950s. Cotton textiles, a major export item in the prewar period, faced trade barriers erected by its neighbouring countries. Perhaps most significantly, China, the single most important market for Japan in the prewar period, practically banned its trade relations with the country.

9.5 Import Substitution of Textile Machinery and Dyeing

While any detailed discussion is beyond the scope of this chapter, it can be stated that the development of import substituting production of the cotton industry (spinning and weaving) was associated with a similar growth pattern in two manufacturing sectors, namely textile machinery and dyeing. From the late 19th century, the expansion in cotton spinning and weaving called for increased investment in textile machinery and synthetic dyeing; however, attempts of local production were by and large not successful (Yamazawa 1990: 82). Nevertheless, the domestic production of textile machinery as well as dyeing stuff did occur after a considerable time lag, thanks to the accumulated production technology know-how derived from traditional spinning and weaving machinery. The Japanese government generally preferred the import tariff as a major instrument, where tariff rates (on imports and exports) were differentiated according to stages of process, thereby promoting the trade pattern of importing raw materials and exporting processed products. More direct import restrictions were seldom implemented until 1937 with minor exceptions, including those on synthetic dyestuffs (Yamazawa 1975: 58).

By 1897, Sakichi Toyota had built the Toyota weaving loom (made of wood), and import substituting production continued. By 1899, there were 100 machines that had been produced compared with 3,385 units that had been imported. However, due to the large gap between modern and traditional spinning technologies, domestic production of modern spinning machinery did not come about until much later. By 1925, nevertheless, the level of imports of textile machinery had dwindled down to less

than that of domestic production, and by 1933 even less than the level of exports (Yamazawa 1990: 82-83).

As stated earlier, the import substitution of dyeing stuffs was time-consuming, as the production of synthetic dyestuffs was an entirely new undertaking. Prior to WWI, all dyestuffs had to be imported, but in 1912, the government-run industrial laboratory succeeded in synthesizing alizarin (Yamazawa 1990: 83). By 1914, commercial production of dyeing stuffs began in a factory attached to the privately owned mine Mitsui Kozan. In 1915, a bill was passed to promote the production of dyeing stuffs and medical goods. As a result, a dyeing stuff manufacturing firm was set up, and by 1918 domestic production had caught up with import volume.

9.6 Japan's Outward FDI in the Cotton Industry

In the 1890s Japan began to export increasing amounts of cotton yarn to its neighbouring markets, especially China. After its victory in the Sino-Japanese War (1894-5), Japan's firms began to plan for textile investment in China, particularly Shanghai to create secure outlets for Japanese yarn exports. The Japanese feared that non-Japanese investors would use their Chinese weaving mills as outlets for their own yarn and thereby cut out Japanese yarn (Howe 1999: 415). Whereas WWI dramatically accelerated Japan's outward FDI, Chinese-owned firms were also catching up. The rise of wages in Japan and foreign-exchange confusion in the inter-war period further promoted the transfer of productive facilities for spinning and weaving. Japanese firms were then keen to protect their position in the Chinese market and to compete in the new East Asian export markets. Japan's Foreign Ministry was encouraging the textile firms to invest in China, since it foresaw the inevitability of Chinese tariff autonomy and its effects on Japanese trade (Howe 1999: 424). The Chinese boycott against Japanese imports since the mid-1920s and the Chinese animosity during the precarious Sino-Japanese relations in the 1930s raised the Japanese concerns over protectionist measures in China (Howe 1999: 415-6).

9.7 Chapter Summary

Japan's cotton industry in the Meiji period was resilient. The opening of trade with the West in the mid-19th century caused an increase of imports of consumer products and machinery as well as some raw materials. Subsequently, the growth of domestic weaving production was accompanied by mounting imports of cotton yarn in the early 1880s. The tariff of 5% on imported cotton yarn continued throughout until the end of the 1920s. While Japanese cotton weavers and hosiers, typically small and medium-sized firms, pleaded the abolition of cotton yarn duty, cotton spinners, several big firms, successfully maintaining it until 1930 when it was finally lowered to 3.3%. The most important milestone in Japan's trade policy that affected its cotton industry was the abolition of export duty on cotton yarn (1894) as well as an import tariff on raw cotton (1896). The abolition of the export duty

provided massive incentives to push the domestic production and export of cotton yarn and fabrics. The abolition of the import duty seemingly reflected the government policy to further emphasize the domestic production and export by easing the import of raw cotton of fine quality. Meanwhile, domestic cultivation of raw cotton, which the government had previously promoted, declined rapidly after 1896.

The modern spinning firms, mostly in urban areas (such as Osaka), were set up with new technology, and they rapidly replaced imported yarn, thereby expanding their shares in the domestic market. The rapid rise of domestic yarn benefited not only traditional weavers located mainly in rural districts but more importantly also modern weavers in urban areas. They were also keen to export their yarn. Before long, the large spinning firms began to add weaving to their spinning operation, and produced cotton fabric for the domestic and overseas markets. This resulted in the gradual reduction of trade (import and export) of cotton yarn. Japanese outward FDI in China's cotton industry (spinning and weaving) began in the early late 1890s and continued to grow rapidly until WWII. Such investment affected Japan's cotton trade in cotton products (yarn and fabric) during the following decades.

The early development of Japan's modern cotton industry had much to do with its mechanization (with the imports of textile machinery), although traditional production was also resilient for a while. Product differentiations (for domestic vs overseas markets) could provide a niche market for traditional producers. The import substituting production of textile machines, however, gradually marginalized traditional production.

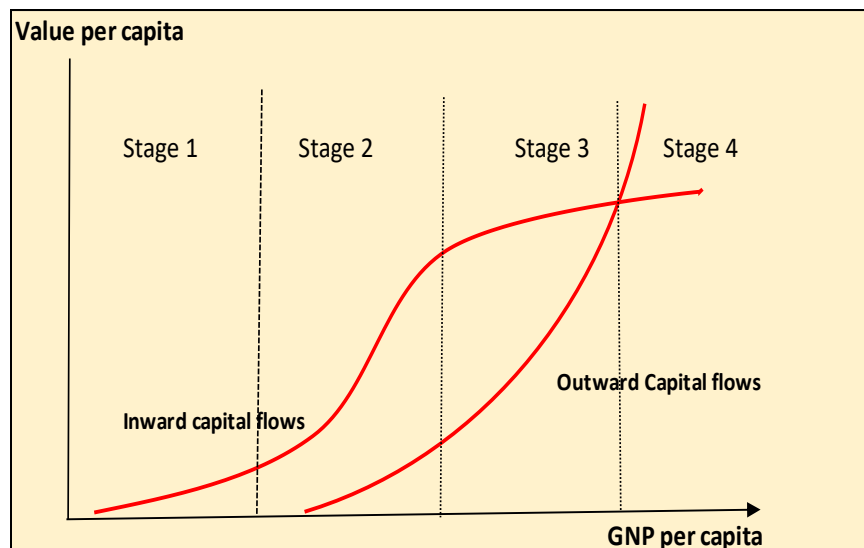
Chapter 10
(Supplement to Chapter 3)

Investment Development Path:
A brief note on its conceptual development

10.1 Introduction

In the early 1980s, Dunning (1981) initially proposed the concept of “investment development path” (IDP), which states that a country’s international investment position – including FDI and portfolio flows – is related to its stage of development. Dunning (1981), one of the principal pioneers of this field, compared the annual average of investment flows (per capita inward and outward flows) – for the 1967-1971 period and income levels (per capita GNP in 1971) for various countries. He then presented a stylized pattern of inward and outward FDI at different levels of development, as well as a generalized 4-stage transition of “the net outward investment position” (NOIP) (See Figure 10.1).

Figure 10.1
Relations between FDI Flows and Income levels (per capita):
Four stages of Investment Development Paths (IDPs)



Source: The author’s reconstruction based on Dunning (1981: 37).

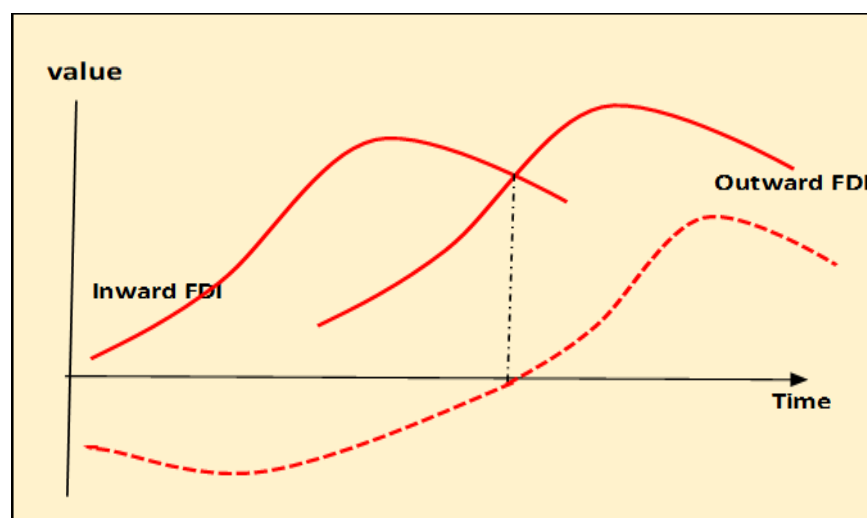
The stylized patterns of inward and outward IDPs of late industrializers are arbitrarily drawn for illustrative purposes. The point is that while inward IDP emerges earlier than outward IDP, but the former will be eventually caught up by the latter as the national economy grows (and goes through the development stages. The exact shapes of IDPs (inward and outward) depend on not only economic growth (in terms of GNP per capita) but also a host of other variables (political, legal, institutional,

etc.) of each national economy. The country's IDPs also depend on the performance of other economies.

Figure 10.1 indicates that the net outward investment path (NOIP) of the country as a net FDI recipient – measured by a difference between outward and inward FDI – develops slowly at Stage 1, and more dynamically at Stage 2. The NOIP may become less clear at Stage 3 as the country, while being a net recipient, becomes a greater capital provider. And the country is a net provider of FDI at Stage 4. Thus, the NOIP position of the country tends to travel along a U- or J-shaped projector (see **Figure 10.2** in the next section).

10.2 Net Outward Investment Position

Figure 10.2
Investment Development Path (IDP):
Net Outward Investment Position (NOIP)



Source: Author's construction using, with some modification, Dunning & Narula (1996: 2).

The UNCTAD secretariat undertook research on the IDP framework, and its analysis found a general correlation for typical national economies between the net outward investment position (NOIP) and the stages of development (measured as GDP per capita) on the other. More specifically, UNCTAD (2006) undertook a cross-sectional analysis on the relationship between the level of development and the NOIP (i.e., outward FDI stock – inward FDI stock) as of 2004 for 135 countries, and found that they would form such a contour which broadly resembles the previously mentioned IDP (see Figure 10.3). UNCTAD (2006: 144) states that these points that divide the stages of development are

approximately US\$ 2,500 (between Stages 1 and 2), US\$10, 000 (between Stages 2 and 3), US\$25,000 (between Stages 3 and 4), and US\$36,000 (between Stages 4 and 5).

Stage 1: Very little inward FDI and no outward FDI, and thus very little (negative) NOI per capita;

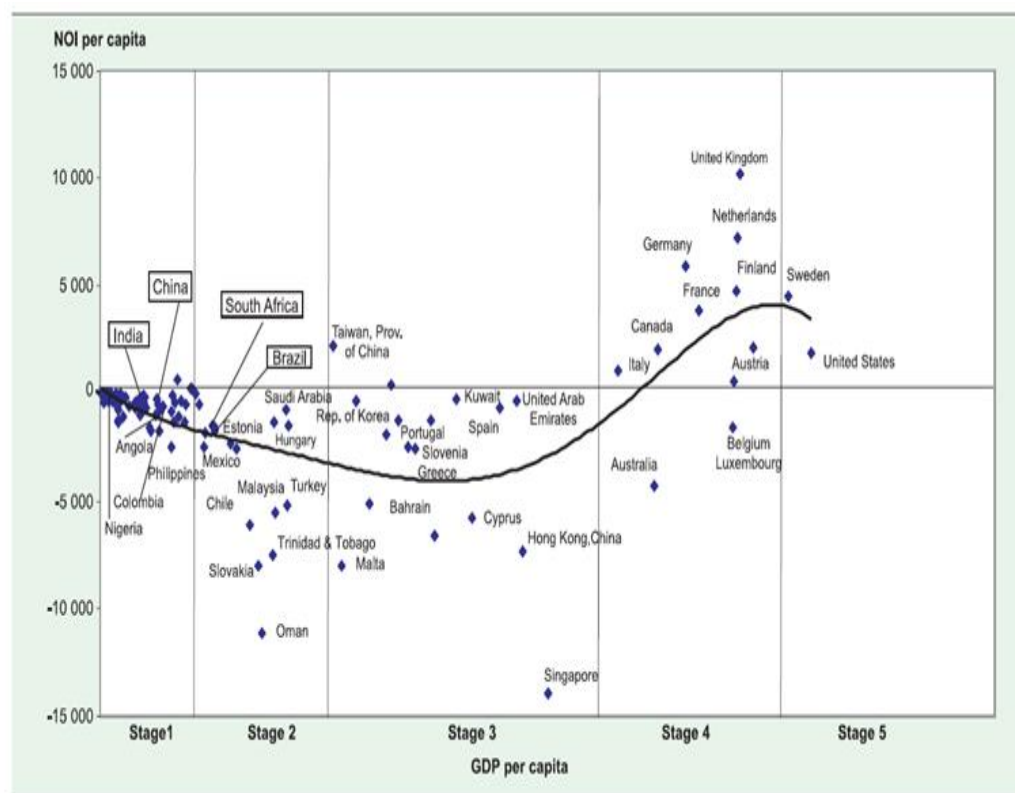
Stage 2: Steady rise of inward FDI and small outward FDI, and thus falling NOI per capita;

Stage 3: Steady rise of inward and outward FDI, with NOI per capita making a mild U-shape contour at a mid-point of the stage;

Stage 4: Outward FDI tends to exceed inward FDI, and thus further rise of NOI per capita;

Stage 5: Slowing inward and outward FDI, but with positive NOI per capita.

Figure 10.3
NOI per capita vs GDP per capita
An illustration with 2004 data



Source: UNCTAD (2006: 144, Figure IV.1)

10.3 Relevance to the FG Paradigm

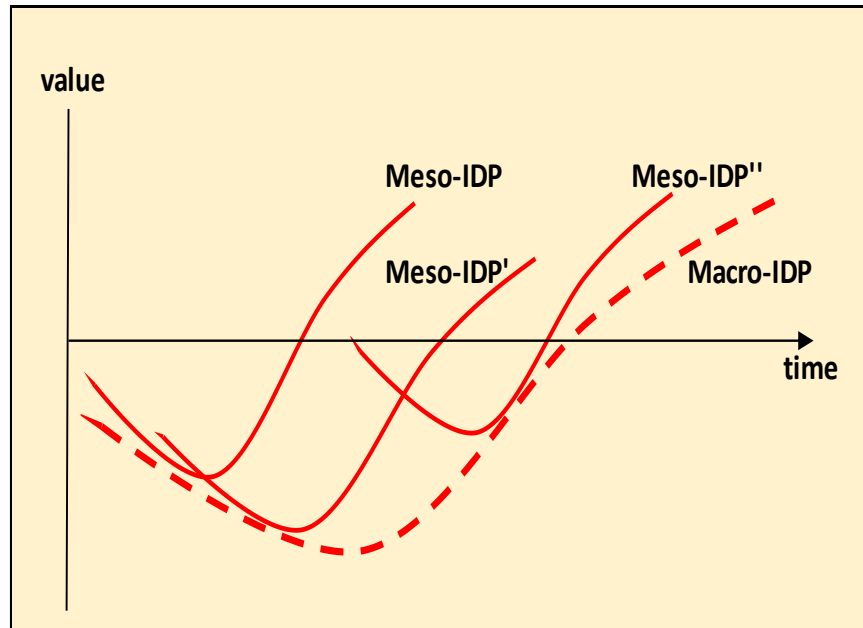
This stylized framework appears broadly consistent with the modern FG paradigm as it underlines the importance of FDI as the channel of cross-border technology transfer. Let us recall that the integrative/snowball model emphasizes the essential linkage between the FDI recipient and source countries for collective but sequential development. In any case, the idea of status transition from a net recipient to the net provider of FDI over the development progress is intuitively appealing to the FG theorists.

It is reasoned that at the very early stages of development, late industrializers have few factors (apart from natural resources) to attract FDI (and accompanying technology), and they possess limited capacity to undertake outward FDI. As they develop, however, they begin to attract inward FDI and raise competitiveness, and in due course they will also begin to exploit their newly developed competitiveness by outward FDI. In general, outward FDI lags inward FDI, which transforms the status of the late industrializers from negative to positive “net FDI” providers, where their capital account balance changes from negative (inward FDI > outward FDI) to positive (inward FDI < outward FDI).

The IDP at the macro-level is intuitively appealing; however, it does not illustrate how industrial upgrading of the national economy occurs. Ozawa (1996; 2006) thus comes up with the idea of “meso-IDP”, a sector-specific IDP, as opposed to Dunning’s “macro-IDP” for late industrializers, pointing out that a series of meso-IDPs can explain the case of positive sector-specific NOIPs even when their macro-IDP is still in the below parity. Considering Dunning’s macro-IPC as a long-term “envelope curve”, Ozawa decomposes it into a series of short-term meso-IDPs as shown in Figure 10.5.²¹⁵ According to Ozawa, the shifts among meso-IDPs implies that successful late industrializers are undertaking industrial upgrading, say from low-value-added, low-technology sectors to higher value-added, higher technology ones over times.

²¹⁵ This reminds us of the introductory microeconomics theory depicting a long-term average cost curve of production as a contour connecting a series of short-term average cost curves.

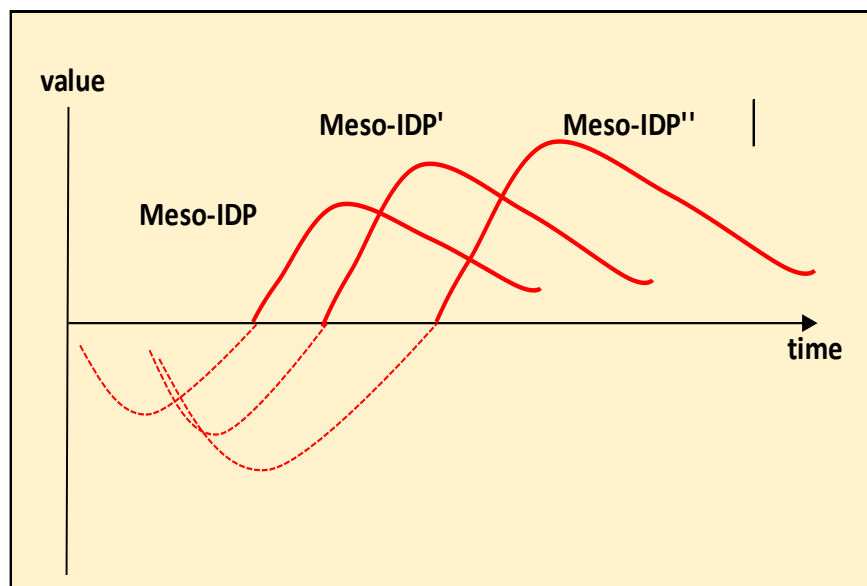
Figure 10.5
Macro-IDP (long term) as an envelope curve of meso-IDPs (short-term)



Source: Ozawa (1996: 150, Figure 5.2).

The successive appearances of meso-term IDPs in Figure 3.12 reflect a series of sector-specific catch-up processes, resulting from the local accumulation of industrial knowledge. Each sequence among meso-IDs becomes larger in scale because higher value-added manufacturing is more knowledge-intensive as well as capital-intensive, and as a result, both inward and outward FDI tend to grow in value (Ozawa: 2005: 114). Each meso-IDP is constructed with the assumption that both foreign firms and the local economy can interact freely without serious impediments – whatever they may be – to FDI flows. Let us recall, however, that some East Asian economies, notably Japan and South Korea, were never major FDI recipients at the early stages of development, due to severe restrictions. If some late industrializers may prefer to keep inward FDI to a minimum (and let technology absorption be effectively undertaken by alternative means, such as technology trade or licensing) but promote outward FDI. Such an asymmetric FDI policy can distort in the prototype shape of Meso-IDPs. With this in mind, Ozawa (1996) constructs a series of “distorted” meso-IDPs each of which exhibits a positive portion of NOIP (see Figure 10.6).

Figure 10.6
Distorted Meso-IDPs (due to inhibition of inward FDI)



Source: Ozawa (1996: 150).

Chapter 11 (Supplement for Chapter 3)

Regional Production Networks for the Japanese Automotive Industry: A brief note on Thailand

11.1 Introduction

According to the modern FG paradigm, late industrializers in East Asia – such as the 2nd-tier NIEs (Malaysia, Thailand and Indonesia) and China – have emulated the development of the region’s early industrializers, namely Japan and the 1st-tier NIEs (such as South Korea, Taiwan, Singapore and Hong Kong). Purportedly, the 2nd-tier NIEs and China came to experience their industrial take-off only in the 1980s, when foreign firms (particularly Japanese manufacturers) began to establish subsidiaries facilitating the local import-substitution drive. However, the automotive industry has shown a somewhat nuanced story. First of all, the automotive industry is seen as one of the major areas where Thailand has achieved great success whereas Malaysia and Indonesia still struggle with their national car projects. Furthermore, the Thai automotive industry has challenged the ranking of automobile production and export in East Asia, where the country’s history with this industry could go back as far as the 1960s.

Thailand is the 9th largest automaker in the world, and the 4th largest one in East Asia after Japan, South Korea, and China, with 18 automotive assemblers, all of which are whole or partly foreign owned, predominantly by Japanese firms (ADB 2015: 10). The automotive industry has grown to be Thailand’s second largest export sector, following the electrical/electronics industry. Automotive firms in Thailand uses many imported auto-parts, which differs itself from the country’s electrical/electronics firms that are more producers of intermediate products and less assemblers (ADB 2015:20).

The industry has been concentrated, initially in Central Thailand, i.e., the Bangkok Metropolitan Area and Samut Prakan province, later the East seaboard provinces of Chonburi and Rayong, and elsewhere farther away. It was for these large geographical zones (known as “industrial estates”) that the Thai government has implemented various fiscal measures to promote an industrial cluster principally for auto components production in the early 1960s.²¹⁶ By refraining from advocating a campaign with the

²¹⁶ According to Lecler (2002), the 1970s and 1980s represent the Bangkok/Samut Prakan growth period, whereas the first half of the 1990s was for the Chouburi province period and the second half of the 1990s for the Chonburi province period. The growth of the latter two provinces was linked to the East Seaboard Development Project (Lecler 2002: 806-7). Natsuda & Thoburn (2011: 421-430) chronologically characterize Thailand’s development policy toward the automobile industry as follows: i) initial import substitution (1960-

explicit goal of building the “national car” (as in Malaysia) and nationalizing local parts producers (as in Indonesia), Thailand has been able to attract increasing amounts of FDI in the industry based on offering supplier networks capability and associated infrastructure provisions. In fact, Thailand has no national car firm, even though it has 18 automotive assemblers, all of which are foreign-owned (ADB 2015: 20).

This chapter provides a brief note on the Thai automotive industry, with additional attention on Japan’s case in offshoring manufacturing activities.

11.2 Thai Automobile Industry

Just as seen in all of the 2nd-tier NIEs, the Thai automotive industry was one of the earliest beneficiaries – from the early 1960s – of the sector-specific protectionist trade policy (high tariff rates) as well as industrial policy. These actions were part of a broader import substitution envisaged by many of the developing countries at that time (Busser 2008: 32). The Thai Board of Investment (BOI) actively enticed FDI inflows for joint ventures with major foreign automobile manufactures. As a result, despite the sector’s apparent success, Thailand has not developed a genuine national automobile brands as such. In any case, foreign assemblers (predominantly Japanese) began their production initially for the domestic market and later for third-party markets. The Japanese manufactures account for about half of the approximately 1.5 million vehicles produced annually, and half of that production is exported (ADB 2015: 20).

11.2.1 Initial stage: promoting local assembly

The Industrial Investment Promotion Act of 1961 was the first policy initiative of the Thai government to promote the local assembly of automobiles, with imported “completely knocked down” (CKD) kits of auto parts. In 1962, the government announced a 50% tariff reduction on CKD kits, and set up tariffs for passenger cars at 30%, pick-ups at 20%, and truck at 10%. In the second half of the 1960s, the Thai government began to underline the strategy of import substitution of auto parts, in order to reduce the balance-of-payments problems. Thus, the government raised tariffs on “completely built-up” (CBU) vehicles.

11.2.2 Import substitution with local content requirement

The Thai Ministry of Industry – in cooperation with the Thai Automobile Industry Association (TAIA) – established the National Automobile Development Committee in 1969, and set up the rules

1970), ii) localization policy with local content regulation (1971-1977), iii) strengthening localization capacity (1978-1990), and iv) liberalization and exporting (1991-1999), and v) WTO-compliant policy-making (2000 - present).

of local content requirement (LCR) of the minimum of 25% in the assembled automobiles as of 1974. In 1978 the government banned CBU imports and increased tariffs on CKD kits to 80% (Warr & Kohpaiboon 2018: 433). In 1982, the LCR requirement of all vehicles was set at 45% (ibid). Up to the mid-1980s, policies to protect local suppliers by obliging assemblers to use domestically manufactured auto-parts were considerably strengthened (Suehiro 2008: 149). In 1986, the LCR for all passenger cars was raised to 54% (Warr & Kohpaiboon ibid). By the end of the 1980s, tariff rates set on CBU vehicles and CKD kits were 150% and 80%, respectively (Warr & Kohpaiboon 2018: 432).

In 1991, the government under the reform-oriented Prime Minister (Anand Panyarachun, 1991-1992) tariff rates on all types of CBU vehicles and CKD kits were reduced, with the former down to 33% of their previous levels, and the latter down to less than 20%,²¹⁷ and all quantitative restrictions on vehicles imports were converted to tariffs (tariffication). In 1993, the government announced its commitment to remove restrictions on foreign ownership of domestic automotive manufacturing by 1997. At the time of the Asian financial crisis (1997-1998), Thailand was far less heavily protected than through the 1960s to the 1980s. The country's auto-parts exports remained by far larger than CBU vehicle exports for a fairly long period, until the late 1990s, but the latter has since taken over gradually (ADB 2015: 22; Techakanont 2011: 193).

11.2.3 Asian Financial Crisis (1997-1998) and the shift towards export-orientation

The Asian Financial Crisis severely affected the Thai automobile market, where domestic sales fell from nearly 600,000 units in 1996 to 144,000 units in 1998 (Donor & Wad 2014: 675). The depressed domestic demand – together with investment prior to the crisis – led to the serious sectoral problem of overcapacity/excess production, which obliged automakers to increase their export promotion. The Thai government enforced the above-mentioned commitment (1993) to abolish restrictions on foreign ownership of automotive manufacturing within the country. In 1999, the government also announced its decision to eliminate LCRs for domestically located final assemblers in 2000. In addition, in 1999 tariffs on CKD vehicles were raised from 20% to 35% in order to cushion against the impact on local parts producers. Foreign firms expanded a range of operations in the supply chains, including raw materials handling, casting and molding, pressed parts, and other components (Mori 2002). Thailand has subsequently emerged as a regional hub for large global automobile firms, and local subsidiaries use auto-parts imported from outside as well as those manufactured within the country.

²¹⁷ The government reduced the tariff rates as follows: CBU vehicles over 2.3 litres from 300% to 100%; and those under 2.3 litres from 180% to 60%; and CKD kits for cars, pick-ups and vans from 112% to 20% (Warr & Kohpaiboon 2018: 433).

In 2000, the Thai government actually eliminated its LCRs on automotive products, and thus less restrictions on how firms may source materials and parts internationally. The government thus shifted to trade and tax policies as the key instruments for facilitating local production and export expansion (Doner & Wad 2014: 674). This has made it easier for the country's automotive industry to get involved as a hub in the production networks (both car assembly and parts manufacturing) in Southeast Asia. This was further facilitated by the publicly funded programmes to expand the provision of infrastructure and investment incentives for the automotive production areas (Techakanont 2011). The production networks in the Thai automotive industry are fairly domestic; however, only a few indigenous suppliers (mostly for bulky auto-body related stamping parts and lower-tier unsophisticated components) are involved in these networks because of the lack of technological capacity (Kohpaiboon 2008: 28).

The structure of Thailand's automobile industry consists of three layers. The large-scale automobile assemblers are located at the top layer, and they are supported by a limited number of Tier 1 high-quality auto parts suppliers. According to the ADB (2015: 20-21), these suppliers are predominantly foreign controlled/directed (54%), and the rest are Thai-majority joint ventures (23%) and fully owned Thai firms (23%). Product development tends to be a top-down system where suppliers seek to satisfy the request for the assembler or a higher-tier supplier, resulting in relatively little joint development.

The Thai automobile industry has upgraded from exporting auto parts to exporting finished products. In the 1990s, Thailand was exporting parts and components, occupying a relatively lower position on the rungs of the automotive value chains. In the 2000s, the share of parts and components decreased and that of completely built-up automobile units increased. Meanwhile, the imports of motor vehicle parts and components similarly increased (ADB 2015: 21-22).

10.3 Japanese automakers in Thailand

In Thailand, Japanese automakers have dominated the foreign presence since the early 1960s. Toyota took the very first step in 1957 among Japanese automakers and opened its Bangkok sales office. But it was Nissan in 1962 that carried out the first FDI project of establishing an assembly plant, which was initially fully-Thai owned and operated under Japanese technical assistance in Samut Prakan.²¹⁸ Nissan's assembly plant was quickly followed by Toyota's similar venture in 1964. As mentioned earlier, these assembly plants relied on CKD kits of auto-parts from Japan. Honda Motors also established its first corporate presence for sales operation in 1964, a motorcycle production plant in

²¹⁸ The Plant was managed by Siam Motors Co., but in the early 1980s Nissan took a 25% participation in capital (Lecler 2003: 808).

1967, and automobile production in 1984. Meanwhile Isuzu also began its operation in 1961. Other Japanese carmakers, such as Mitsubishi, Mazda and Hino, had also built operations by the mid-1970s.

The Thai automotive industry benefited from the large FDI flows from Japan after the Plaza Accord (1985) when Japanese auto-parts suppliers established local subsidiaries to manufacture new and sophisticated products (Natsuda & Thoburn 2011: 419). Due to the increased global competition faced by major carmakers, they sought out emerging market economies to set up their production base in each region. In Southeast Asia, Thailand with the largest domestic markets for vehicles offered a favourable (liberal and stable) policy environment in comparison with its neighbours. There are now over 20 foreign automakers operating in this area that also host over 1,700 auto-parts producers, including over 100 Japanese suppliers (ibid.). Japanese FDI jumped again after the Asian Financial Crisis (1997-1998), where a massive depreciation of the local currency reduced the local asset prices. In the automotive industry, one-ton pick-up trucks came to occupy a lion's share of the country's car exports in the late 1990s, but small and medium-sized passenger vehicles have since steadily taken over.

But the local contents of the assembled vehicles have been not necessarily increasing, meaning that Thailand, particularly in the 2000s, has been importing more auto-parts and assembling them into built-up automobiles for export (ADB: 2015: 22). What has been remarkable in this process is Japanese automotive firms' initiatives for creating regional production networks. According to the ADB, Japanese automakers account for about half of the approximately 1.5 million vehicles produced annually in Thailand (ADB 2015: 20).

Japanese auto-making firms used to have control over activities in production networks, especially within their core supplier networks, i.e., vertically integrated *keiretsu*. These automakers were then followed by many of their suppliers in setting up plants in close proximity. Although much of the automakers' purchasing is sourced within Thailand, the bulk of it (in particular, high-value-added parts) still comes either from their home plants in Japan, or from Japanese supplier-firms clustered around the carmakers' main assembly operations. Japanese firms have been accounting for 80-90% of production, domestic sales, and export activities in Thailand; and Toyota's corresponding figures have been 38% of production, 41% of domestic sales and 37% of exports (Natsuda & Thoburn 2013: 417). In contrast, American and European firms in Thailand (e.g. General Motors and BMW) tend to source more widely from regional suppliers in East Asia.

Since the early 2000s, Japanese automakers have developed more regionally dispersed and integrative production networks in the region, as a result of the increasing participation of China (and to a lesser extent, India) in the automakers' regional division of labour (Dent 2008: 55). The recent establishment of plants (for both producing parts and components, and assembling) together with their Asian-based

production facilities have significantly expanded the companies' production networks in the region. For instance, in 2002, Toyota launched its IMV (Innovative International Multi-purpose Vehicle) project in which a range of pickup trucks and multi-purpose vehicles would be produced by a global manufacturing and supply system. Thailand was chosen as the location for the largest of Toyota's four IMV project assembly plants, others being Indonesia, Argentina and South Africa. In 2003, Thailand became the host of one of two Toyota Technical Centres (TTCs) that operate in continental Asia, the other being at Tianjin, China. The TTCs conduct R&D on product design, testing and evaluation, and also distribute technology-related information through the carmaker's international production networks.

Japanese auto-making firms are also extending the value-adding nature of their FDI to Thailand. For instance, Honda opened its Asian Parts Centre, a state-of-art facility located on the outskirts of Bangkok to serve the management role of the company's global parts supply networks. Honda also announced in 2006 its decision to transfer most of its regional production planning and purchasing operations for automobiles from Japan to Thailand. By this time, Thailand had become Honda's hub centre for most of its key operations (including R&D, and new production engineering), playing a lead role in improving Honda's quality, cost and delivery processes (Dent 2008: 58).

10.4 Chapter Summary

The chapter briefly reviewed the Thai automobile industry that has grown to be the 9th largest global producer. Indeed, Thailand epitomizes a classic case of successful sector-specific development experience for late industrializers. Thailand is now also one of the major hubs – as auto-part producers as well as assembler of complete automobiles – for production networks of automobile manufacturing in Southeast Asia. As the FG paradigm indicates that late industrialization entails the international trickle-down of manufacturing activities in the form of offshore production, Japanese automakers have been contributing to local development. It is interesting to note that as far as the automobile industry is concerned, Japanese firm's offshoring activities in Thailand began much earlier than the FG activity. However, the question as to whether Thai automobile industry has developed to be a self-sustained industry is open to debate. This is because the local firms have continued to rely considerably on foreign auto-parts and technology. While the local contents have been steadily increased in the recent past, the Thai automobile industry still relies on imports of auto-parts from overseas suppliers (particularly in Japan) as well as their local subsidiaries in the country.

Chapter 12 (Supplement for Chapter 5)

Empirical Research on the FG Paradigm: A Literature Survey and New Findings

12.1 Introduction

This Appendix presents a survey of the literature containing quantitative analyses on the FG paradigm in East Asia. Since the FG paradigm has evolved into a large eclectic model, most analyses on the paradigm have proved to be “partial” tests focusing in some specific aspects. All analyses specify the scope of their targets, indicating which manufacturing sector (sectors), which economy (a group of economies) for which period are under consideration.

Let us recall that the paradigm as an eclectic model depicts broadly two sets of dynamic changes of industrial upgrading - one domestic and the other international. These sets are interplaying in the overall process of industrial upgrading. The domestic industrial upgrading means the upward movement along the industrial ladder, where each country involved has been shifting manufacturing activities (production and export) from simple products (resource-based, labour-intensive ones) to sophisticated products (capital-intensive, knowledge-intensive ones). They are three sets of simultaneous sequences – in the process of industrial development: 1) the fundamental product specific M-P-X-(M') sequence, 2) the intra-sector/industry sequence of product upgrading, and 3) the inter-industry sequence. The international upgrading implies that these three sets of sequences are taking place sequentially in a context of a group of economies in such a way where each of manufacturing activities losing competitiveness has been shifting from early industrializers to late industrializers. All of these sequences are in operation at the same time.

The differences among these sequences have much to do with the chosen levels of analysis and the time span required for the analysis. It is understood that the first sequence, the fundamental M-P-X sequence for a specific product group, occurs along the second and third sequences at the higher levels of aggregation and longer time spans. The intra-industry sequence and the inter-industry sequence tend to involve a larger number of different products, sectors/industries and producers, and over a longer period of observation. Accordingly, empirical tests could also be geared to which set of sequences are actually taking place. Here we can present four sets of hypotheses each dealing with specific sequence.

12.2 Hypotheses

Empirical tests for the FG paradigm obviously requires researchers to set up some sort of hypothesis against which data are to be gathered and analyzed. In the case of the FG paradigm, the hypotheses must be presented in a testable fashion for specific “sequences”. They would ideally be based on detailed input-out tables for manufacturing activities for each of the economies under discussion so as to measure the value-added activities for various sectors. However, such tables are simply not obtainable for all of the economies (East Asian Nine) under study for an extended period of time. Thus, we must compromise by using these economies’ trade data (import and export).

12.2.1 Hypothesis I: Fundamental Product Specific M-P-X-(M’) Sequence

For this sequence, the hypotheses must address the questions as to whether the M-P-X-(M’) sequence is taking place, and for which products (or product groups) and in which economies this sequence is occurring. As stated earlier, this type of inquiry requires a detailed data set for a specific product or product group for specific countries. One important observation is that given East Asian economies are intensively engaged in export-oriented activities and their FDI regime has been liberalized, local production of some consumer products is external market-oriented (for final consumption or for further processing) rather than domestic market-oriented. In that event, the typical M-P-X sequence may collapse into the truncated P-X sequence or the P-cum-X operation.

12.2.2 Hypothesis II: Intra-sector/industry Sequence of Product Upgrading

For the second sequence, the hypotheses must address whether the locally produced manufactures within each product group or sector are improving in quality. Empirical tests here would rely on the product analysis of composition of each product category of export. For instance, using SITC data for export of “road vehicles”, tests could be conducted to check whether or how rapidly the product compositions shift over time from, say, motorcycles, to 2-door compact vehicles (including small trucks), and to 4-door sedan passenger cars.

12.2.3 Hypothesis III: Inter-industry Sequence

Similarly, for the third sequence, the hypotheses must address the question as to whether the industrial upgrading in terms of production and export is taking place in the national economy. This sequence is particularly important for Hypothesis IV (see below); otherwise, the inter-economy industrial hierarchy would be maintained and subsequently region-wide industrialization would slow down or be halted. Let us recall that the FG paradigm entails that dynamism with the late developers emulating the earlier ones through catching-up efforts (homogenization), with the early developers meanwhile venturing into new industrial frontiers (heterogenization).

12.2.4 Hypothesis IV: Inter-economy Sequence

The hypothesis must address whether the sequential order among regional economies is maintained in the region-wide industrial upgrading. Thus whether the late developers are catching up with the earlier ones is only an incomplete exercise. The inquiry must also show whether the earlier developers are meanwhile advancing further so the industrial hierarchy among countries would **not** be flattened. This is because the sustained differences in productive capacity among countries (in spite of late developers' efforts to catch up), which allows those that are in the process of catching-up to use advanced foreign technology, are the most important sources of dynamism of the FG paradigm. Perhaps, like water that does not flow if the landscape is too flat, new manufacturing technology may not migrate among countries if these countries are very close in industrial development.

Suppose, for the sake of simplicity, that two countries – an early developer (A) and a later developer (B) – constitute the FG paradigm over the period 2000-2015. It can be shown that over this period the patterns of manufacturing production (i.e., the sectoral composition) of country B has been increasingly resembling those of country A as observed in 2000. But this is not enough. It must also be shown that the patterns of manufacturing production of country A has meanwhile been becoming less and less resembling that of its own as observed in 2000. For the FG paradigm to be a sustained model for a long period, the contemporaneous comparisons (say, 2000 vs 2000, 2005 vs 2005, 2010 vs 2010) of the patterns of production between the two countries should depict some degrees of difference.

It should be noted that the hypothesis reflects the idea of modern FG thinkers rather than that of Akamatsu. The latter was open to the possibility of reshuffling the international ranking order, admitting that not all countries are progressing at the same pace and that the leader-follower configuration may change as a result. But this would not challenge the working of the FG paradigm as long as a new country ladder emerges. Thus if we stick with Akamatsu's idea (instead of modern theorists), then the contemporaneous comparisons could show convergence as a transitory phase of the follower's surpassing the leader, and new divergence may be expected to emerge where the country-ladder is reversed.

12.2.5 Overview of Analytical Research on Hypotheses I, II, and III

Since the 1970s, we have witnessed the mushrooming growth of empirical research to show the shifts of revealed comparative advantage (RCA), many of which have focused OECD countries. But in the 1980s, research began to expand the country coverage, including not only Japan but some other East Asian economies, initially the 1st-tier NIEs (South Korea, Taiwan, Singapore and Honk Kong), and later others. Many empirical researchers have undertaken research that is related to Hypotheses I, II and III, on a specific country or a group of countries in East Asia without explicitly referring to the FG paradigm as such. General findings commonly confirm that during the recent past East Asian economies – though the specific growth periods somewhat differ among them – have witnessed a

rapid rise of import-substituting production of various manufacturing sectors, with a more or less corresponding shrinkage of the primary sector (particularly agriculture) in terms of output or employment.

As for industrial upgrading, it is pointed out that the evolution of the export structure of the 1st-tier NIEs has showed a more clear pattern of sectorally sequenced upgrading (as indicated in hypothesis III), rather than the evolution of the export structure of the structure of the 2nd-tier NIEs. In fact, the 2nd-tier NIEs have exhibited a less systematic pattern of upgrading as greater differences among each other than the 1st-tier NIEs.

12.3 Formal Tests of the FG Paradigm

The formal tests of the FG paradigm as such - which is understood as tests against hypotheses III and IV, only surfaced in the early 1990s, and the number of empirically works has since remained relatively small. It may not be surprising, given that the FG paradigm came to be known to the West only in the second half of the 1980s.

12.3.1 Survey findings (based on Trade Data)

Empirical researchers, who have undertaken the task of testing the FG paradigm, are largely supportive, to varying degrees, of the working of the paradigm in East Asia. Many of them were Asian researchers, for instance, Rana (1990), Fukasaku (1992), Kosai & Tran (1994), Berri & Ozawa (1997), Das (1998), Kwan (2002), Widodo (2008), Ha (2005), and Furatsuka (2005). Typical findings of these researchers are as follows: the trickle-down of industrial development has been taking place in East Asia. Dominant producers/exporters of textiles in Japan, for instance, were outsourcing their activities in the 1st-tier NIEs, say in the 1970s, then in the 2nd-tier NIEs (Malaysia, Thailand and Indonesia), say in the 1980s, and later others. However, some researchers point out that whereas the industrial trickle-down phenomenon from Japan to the 1st tier NIEs has been rather smooth, the similar phenomenon has not been clearly seen from the 1st tier NIEs to the 2nd tier NIEs (Tung 2003; Ginsburg & Simonazzi 2005).

One of the major manufacturing sectors that have recently drawn much of researchers' attention as a contentious area is electronics. Here critical researchers argues that while at relatively high levels of aggregation (for instance, at the SITC 2-digit level) the electronics sector shows the general trend of relatively smooth downward migration along the country ladder, this cannot be seen at less aggregated levels (for instance, at the 3-digit level) (Tung 2003). As discussed below, the export performance of electronics products by some late developers, say, China, could be indeed misleading, since the performance overstates the real value-added activities.

12.3.2 Analytical Questions for Hypothesis IV

Testing the FG paradigm has been based on various analytical methods rather than one particular standard. Yet, one dominant approach is the combined use of the computation of RCA indices for each exporter and of Spearman's Rank Correlation Coefficients (SRCCs) of the indices between an early developer and a late developer (see Rana 1990). For measuring sector specific export competitiveness of a country, many researchers use the RCA indices, the Balassa's "export-based formula" of $(X_{ij}/X_i)/(X_{iw}/X_w)$, where X is export, i designates a product group, j a country, and w is a reference country (typically, the world). The value ranges from 0 to infinity, and it is understood that any product group with its computed RCA index being greater than 1 has comparative advantage (vis-à-vis the reference country, or the world). One researcher comes up with a new formula of revealed symmetric comparative advantage (RSCA): $[(X_{ij}/X_i)-1]/[(X_{iw}/X_w)+1]$ which supposedly ranges from -1 to 1 rather than 0 to infinity (Widodo 2008).

Alternatively, others use a formula of $(X_{ij}-M_{ij})/(X_{ij}+M_{ij})$ where X and M are respectively export and import, and the remaining letters, i and j designate the same items as Balassa's RCA. The value ranges of this index ranges from -1 (no export) to 1 (no import). It is understood that in an ideal situation this index starts at -1, then gradually climbs up to 1, then declines again down to -1. Unlike Balassa's formula, however, it is hard to pinpoint when a country comes to possess comparative advantage for a particular product group. It is doubtful that a country that has a net-exporter status ($X-M>0$) for a particular product group has comparative advantage for the group.

Yet, another formula is (P_{ij}/C_{ij}) , where P is domestic production and C is consumption of product i in country j. It is noted that consumption consists of production plus import minus export (Yamazawa 1990). The idea is that any output plus import beyond consumption is excess production that ought to be exported. The value of this index ranges from 0 (no production) to infinity (no consumption). The existence of excess output – when (P/C) is greater than 1 – could result not only from the improvement of productive capacity (as FG theorists hope), but also from the reduction of domestic consumption. At any rate, it is again difficult to pinpoint when a country begins to possess comparative advantage for a given product group. After all, comparative advantage requires a reference country (or the world) as a potential export competitor, but the latter two formulae do not include such an international benchmark.

Some researchers (for example, Chow 1990) look into the market shares of the US, the single most important overseas market for Asian exports. Its detailed information on imported manufactures may also qualify the US market as a reliable source for calculating for the competitiveness of its trade partners (exporters). Thus a typical formula used for this purpose relies on import data of US: $(M_{ij}/M_j)/(M_i/M_{total})$ where M stands for imports, and i and j designate a product group and an exporter, respectively. For the FG paradigm to be detected in the US market shares, late developers'

market shares must gradually take over that of earlier developers. In addition, if we should follow the modern FG paradigm, we could expect that earlier developers increase their market shares for more advanced products. As mentioned above, however, Akamatsu would say that this would not necessarily be the case. (See the following paragraph which includes technical problems in using US market shares.)

We can point out some technical problems in using the trade-based data as an indicator of productive competitiveness. First of all, all of the above-discussed indicators of production competitiveness are heavily influenced by the level of aggregation for product groups. This is because two particular products could be mutually complementary (when belonging to different product groups) or substituting (when belonging to a single product group), depending on the level of product aggregation. Another problem is that RCA indices may be influenced by importers' trade policies, where trade barriers may distort the sector-specific competitiveness of exporters. Sometimes, exporters may be arm-twisted to implement voluntary export restraints (VERs) in order to reduce political tension with importers. Furthermore, the trade data of two major Asian entrepôts, namely Hong Kong and Singapore, are extremely problematic as they cannot provide a genuine indicator of their industrial competitiveness. This is because their export data (for that matter, import data as well) have been adulterated by the extensive practice of re-exporting on behalf of their respective neighbors, namely ASEAN countries for Singapore, and China for Hong Kong.

The modern FG paradigm also indicates that FDI flows (most importantly from Japan, but also from the 1st-tier NIEs as well) is an important channel to recycle the earlier developers' "sunset" industrial sectors elsewhere in East Asia. However, the FDI data, even those from Japan, cannot be broken down at sectorally disaggregated levels (or, at detailed product group levels). An FDI project may cover more than one particular sector, and involve the production of a variety of product groups. Furthermore, foreign ventures, as we are aware, are not always entails cross-border investment capital. Rigorous empirical research on FDI, as a result, has been far behind in progress, in comparison with the research on trade.

12.3.3 List of Representative Empirical Research

We present in the following pages a table that contains "representative" empirical tests of the FG paradigm dealing with hypothesis IV. Interestingly, all of these tests, except Chow's (1990), indicate the working of the FG paradigm – though varying qualifications – in East Asia. Certainly, we suspect the publication bias that researchers who found no validity of the FG parading in East Asia may not have bothered to publish such "no" findings.

Table 12.1
Empirical Tests of the Flying Geese Paradigm

Study	Countries	Period	Analytical Focus & Tools	Data Source	Relevant Findings	Comments
Chow (1990)	Japan, 1st-tier NIEs	1966-1986	Trade (import): RCA, SRCC	Trade: SITC 3-digit level	Doubts the FG paradigm: The manufactured exports to the US from the 1st-tier NIEs are not replacing those from Japan.	Chow focuses on the shifts in the US market share, using the RCA formula of the ratio of the share of a particular product in total imports in the US from a particular East Asian country to the share of the product in the total imports of the US from the world - rather than overall export performance with RCA - as the indicator to measure its manufacturing competitiveness.
Rana (1990)	Japan, 1st-tier NIEs, ASEAN-4, etc. (not China)	1965-1986 (2 sub-periods: 1965-73, 1973-86)	Trade (export): RCA (Revealed Comparative advantage), SRCC (Spearman's Rank Correlation Coefficient)	Trade: SITC 2-digit level	Supports the FG paradigm: The analysis - with SRCC of changes in RCA vectors for many country pairs (e.g. Japan vs 1st-tier NIEs; 1st-tier vs 2nd-tier NIEs, etc.) - shows that vectors are negatively correlated at a statically significant levels. Thus it is shown that economic prosperity (as indicated by changes in RCA vectors) has trickled down among them leading to greater interdependence and integration. This trend has been more pronounced in the 2nd sub-period than in the 1st sub-period.	Rana's work, arguably the earliest rigorous empirical to test the validity of the paradigm, uses a standard export-based RCA formula of $(X_{ij}/X_i)/(X_{iw}/X_w)$. This is the ratio in a given commodity (i) to total export of a particular country (j) in question divided by the corresponding ratio for the world (w). Rama set up a standard (dominant) analytical process, consisting of RCA & SRCC.]

Fukasaku (1992)	US, Japan, 1st-tier and 2nd-tier NIEs, etc. (not China)	1979-1988	Trade (export): RCA, SRCC	Trade: SITC 3-digit level	Supports the FG paradigm. The increase in Japan's RCA index is associated with the decrease in the US's RCA index; and a similar pattern of changes in the RCA index is found between Japan and some 1st-tier NIEs, as well as between Japan and some 2nd-tier NIEs, and between the 1st-tier and 2nd-tier NIEs.	Fukasaku's work, another classical work very similar to Rana, contributed to establishing a standardized (dominant) process for testing the paradigm.
Kosai & Tran (1994)	Japan, S. Korea, Thailand, Malaysia, Indonesia	Trade: 1970-1990; Production: 1960-1990	Trade (export): Manufacturing /Export ratio; Production: Manufacturing/Export ratio	Trade: Various public information sources (no technical explanation)	Supports the FG paradigm: S Korea has been catching up with Japan since the 1960s, starting with labour-intensive industrial sectors, and then moving into capital-intensive sectors. Since the 1980s, ASEAN members have also attempted to catch up with the 1st-tier NIEs in labour-intensive industrial sectors.	Kosai & Tran emphasized the importance of Japan's outward FDI as an important channel of industry transfer to its neighbours. Unlike trade data, FDI data lack sectoral details, which reduces the technical rigor of empirical testing. They historically plotted the Manufacturing/GDP and Manufacturing/Export ratios of Asian economies, to show their catching-up process vis-a-vis Japan.
Berri & Ozawa (1997)	Japan, Hong Kong, Taiwan, S. Korea, ASEAN, China	1960-1990	Trade (import): Share in US import market, no use of RCA or SRCC	Trade (import): SITC 2 & 3 levels combined for selected traded products	Indirectly supports the FG paradigm: In the US market, Japan graduated from the labour-intensive exports and moved up to higher phases of industrialization, and other Asian economies, first the NIEs and then ASEAN and China captured those low-end US import markets. This phenomenon, "comparative advantage recycling", is consistent with the paradigm.	Just as Chow's work, Berri & Ozawa focus their analysis on the changes in Asian economies' shares within the US market as the indicator of their competitiveness.
Carolan, Singh & Talati (1998)	US, Japan, 1st-tier & 2nd-tier NIEs	1962-1992 (1962, 1967, 1972, 1977, 1982, 1987, 1992)	Trade: US's bilateral trade balance vis-a-vis each of 8 East Asian economies	Trade: SITC 4-digit level	Supports the FG paradigm: The US bilateral trade patterns of the 8 Asian economies showed a general sequential shift of specialization from Japan, to the 1st-tier NIEs, & then to the 2nd-tier NIEs.	Carolan et al. use the formula of NB (normalized balance) for US's bilateral trade account with Asian economies on the sectoral basis for 1962 and 1992, and regressed NB for 1992 on NB for 1962 to analyze major changes in sectoral competitiveness of these economies.

Das (1998)	Japan, 1st-tier NIEs, ASEAN-4, China	1980, 1993	Trade (export): RCA	Trade: No SITC information for 6-category product classification: 1) mineral-, 2) agriculture-, 3) technology-, 4) labour-, 5) human-resource-, 6) capital-intensive products	Supports the FG paradigm: The RCA indices of these countries in 1980 and 1983 for these products under study generally indicate orderly, sequential shifts in industrial (sectoral) upgrading as postulated by the paradigm.	Das uses the standard RCA indices for Asian economies, and shows general trends of their catching-up process, i.e., the sectoral shifts of export performance along the paradigm. He does not use SRCC.]
Hiley (1999)	Japan, 1st tier NIEs, ASEAN-4, others (not China)	1970-1996 (1970/2, 1973/5, 1976/8, 1979/81, 1982/4, 1985/7, 1988/90, 1991/3, 1994/6)	Trade (export): RCA	Trade: SITC 2 and 3 levels combined for three product categories : 1) natural resource intensive, 2) unskilled labour intensive, and 3) high value added; FDI: Annual FDI flow from Japan to ASEAN	Supports the FG paradigm: Changing trends of RAC indexes of these the countries showed that the FG paradigm generally held for them. The fluctuation RCA indices for Hong Kong and Singapore for natural-resource-intensive products were due to entrepot activities (thus, heavily influenced by their respective neighbours, namely, China and ASEAN countries). Hiley also shows graphically the similarity between the rise of Japanese FDI flows to ASEAN countries and the rise of RCA of these countries for textile, chemical and electronics.	While Hiley is supportive of the paradigm, he questions its future outlook in light of the East Asian financial crisis (1997-1998). This is because currency instability causes unexpected shifts in the relative positions of individual countries, and creates considerable uncertainty regarding the competitiveness of various industrial sectors across East Asia, thereby undermining FDI. In retrospect, he was too pessimistic about agility of East Asian economies.
Edignton & Hayter (2000)	FDI home country: Japan; FDI host Countries: 1st- and 2nd-tier NIEs, China, others	1985-1995	FDI: Japanese overall outflow and operation in electronics (number of factories in host countries)	FDI: The Ministry of Finance (Japan)	Supports the FG Paradigm: Japanese electronics FDI flows as well as the number of factories in host countries in East Asia were generally consistent with the paradigm, in terms of timing and locational choice. FDI has tended to flow to 1st-tier NIEs first, then to ASEAN-4 and others later.	While the modern FG paradigm regards FDI as an importance stimulus for the industrial upgrading of host countries, the lack of accurate and detailed data makes it less meaningful to undertake rigorous quantitative analyses. At any rate, the sectoral shifts Japanese FDI in Asia over 2 periods, 1851-85 and 1986-95 show that FDI are associated with local industrial upgrading.

Dowling & Cheang (2000)	Japan, 1st-tier NIEs, ASEAN-4	1970-1995 (1970, 1985, 1995)	Trade (export): RCA, SRCC; FDI : Sector-specific FDI inflows	Trade : ISIC code; FDI : ISIC code	Supports the FG paradigm: Economic development trickles down from over the 1970-1995 period, where the 1st-tier NIEs experienced more structural change in the first sub-period, and the ASEAN-4 in the sub-period. It is showed that comparative advantage shifted from the 1st-tier NIEs to ASEAN-4 in the second sub-period. Data also show that the manufacturing sectors enjoying increasing comparative advantage also enjoy the largest share of FDI.	Dowling & Ching follow Rana's analytical method for trade with the use of RCA and SRCC. Unlike Rana, however, they also consider FDI flows from Japan as an important factor affecting comparative advantage of its neighbours. The sectors that have enjoyed increasing comparative advantage also enjoy a large share of FDI.
Kwan (2002)	Japan, 1st -tier NIEs, ASEAN-4 & China	1990-2000 (1990, 1995, 2000)	Product sophistication index (PSI), the country sophistication index (CSI)	PSI, CSI: Export data for Product groups (unspecified sources), per-capita GDP. RCA: IT product groups	Supports the FG paradigm: The emergence of China had not disrupted the ongoing FG paradigm. Japan is still far ahead of its neighbours in the export performance, although most product groups in IT exports declined in Japan during the 2000s. Given that in a new catching-up economy human capital is the single most important asset, Kwan finds it unrealistic to expect for China to leapfrog. This is because the country is unlikely to greatly improve the overall educational level in a short period. Instead, economic development can only be a step-by-step process.	Kwan compares and contrasts Japan and China in their production/export patterns, with the use of two new concepts: PSI & CSI. The process is totally new, and hardly any researcher has followed his method. It is shown that the overlapping part of production/export between them is still small, though it is growing, and that these countries will remain complementary exporters for a while.

<p>Tung (2003)</p>	<p>Japan, 1st-tier NIEs, ASEAN-5, China</p>	<p>1970-1998 (2 sub-periods: 1970-84, 1985-98)</p>	<p>Trade (export & import): RCA (export), NTI (net trade index), $(X-M)/(X+M)$, for each of product group, the same as Hiratsuka's (2005) ICC as well as Kagame's (2008) NER</p>	<p>Trade (: SITC (3-digit level) for 5 sub-sectors of electronics: 1) consumer electronics, 2) IT products, 3) telecommunications products, 4) parts and components, 5) semiconductors</p>	<p>Supports the FG paradigm for electronics with serious reservations. The Paradigm may appear to be valid for electronics in general, but it becomes less clear at disaggregated levels, i.e., for individual sub-sectors, particularly telecommunications, parts & components, and semiconductor. The author thinks that the following factors, namely, the development of international production fragmentation, differentiated products, and climbing up (upgrading) of late-comers within specific sub-sectors, render the paradigm no longer valid or useful, at least for electronics.</p>	<p>Tung uses RCA (as well as NTI as an alternative) to detect the major historical trends of sector specific competitiveness of Asian economies. The result in alternative methods of measuring competitiveness exhibits relatively minor differences.</p>
<p>Ginzburg & Simonazzi (2005)</p>	<p>US, Japan, 1st-tier & ASEAN, China</p>	<p>1978-2001 (Japan: 1976-2001; China: 1988-2001)</p>	<p>Trade: RCA (export) (with the modified denominator)</p>	<p>Trade: Same as Tung (2003) for the product group "all electronics products" and its sub-sectors but with some modifications</p>	<p>Support the FG paradigm for electronics: With a quantitative method similar to Tung (2003), Ginzburg and Simonazzi present their views that are more supportive than Tung (2003) towards the FG paradigm.</p>	<p>This study differs from Tung's counterpart in the following aspects. It uses a revised RCA that relates each product's share in each country's total trade to the share of the product in the total trade of East Asia (rather than that of the world). The product compositions for electronics sub-groups are modified. The study also includes the US. The study is based on a period that is slightly different from one in Tung.</p>

Ha (2005)	Part 1: Japan, 1st-tier NIEs, ASEAN-4, Vietnam	RCA: 1970-1990; SRCC (for selected pairs of countries): 1970, 1975, 1980, 1985, 1990, 1995, 1999. Additional data for Vietnam	Trade (export): RCA, SRCC	Trade: SITC (2-digit level) manufactures divided into 5 categories: 1) petroleum, 2) natural-intensive, 3) labour-intensive, 4) capital-intensive, 5) technology-intensive	Supports the FG paradigm: East Asian development shows relatively smooth, sequential shifts (a rise and fall) of sectoral RCAs from Japan to 1st-tier NIEs, then ASEAN. Ha anticipates that Vietnam will join the sequential development in the region as postulated by the paradigm.	Ha uses the standard empirical testing process pioneered by Rama (1990) and Fukasaku (1992), and compares RCA indices between S Korea and Thailand, between Taiwan and Thailand, as well as between Japan and Vietnam, and between Thailand and Vietnam. In all cases, catching-up are taking place.
Hiratsuka (2005)	US, Japan, 1st-tier NIEs, ASEAN-4, China	1990-2001 (3-year moving average)	Trade (export & import): ICC (International competitive coefficient), $(X-M)/(X+M)$, for each of product group, the same as Kumagai's (2008) net export index	Trade: No SITC information for 40 product groups	Supports the FG paradigm in many product groups. Shifts in competitiveness confirm the prediction of the paradigm in which Japan has been followed first by the 1st-tier tier NIEs, and then by ASEAN-4 and China.	Hiratsuka uses ICC to calculate competitiveness, rather than RCA, for the 40 product groups, then plots the value of the calculated ICC indices to show historical changes for each country's competitiveness for each of the groups along a "stylized" ICC contour that travels from -1 (no export) to 1 (no import) down to -1 (no export).
Mathews (2005)	Japan, 1st-tier NIEs (as a group), ASEAN (as a group), China	1976-2002	Trade (export): RCA (without technical details)	Trade: Same as Tung (2003), for "all electronic products" and its sub-sector: "consumer electronics"	Supports the FG paradigm for "all electronics" and its subsector, "consumer electronics", more positive than Tung (2003).	Mathews echoes Tung (2003) in terms of methodologies and findings.

Cutler & Ozawa (2007)	Japan, 1st-tier NIEs, ASEAN, China	1976-2002	Trade (import): Cointegration of market shares for selected pairs of East Asian countries	Trade: SITC -78 (TV sets)	Supports the FG paradigm: Changes in the US market shares among Asian producers/exporters of TV sets show a general, orderly shift of competitiveness from Japan to the 1st-tier NIEs, and then to ASEAN and China.	Cutler & Ozawa use the technique of cointegration in 3 pairs, i.e., between Japan and the 1st-tier NIEs, between China and the 1st-tier NIEs, and between ASEAN and the 1st-tier NIEs, and show the inverse relation in market shares in each of the compared pairs.
Chiang (2008)	US, Taiwan, S Korea, China	IT goods: 1979-2004); IT services: 1991-2005	Trade: Production/domestic demand ratio	Trade: No specific SITC information for IT goods and IT Services	Supports the FG paradigm for IT goods & services: For IT goods, Japan, Taiwan, South Korea and China have already started the import substitution stage some time ago, and now at the export stage, while the US is at the reverse-import stage. For IT services, the US still plays a leadership role while East Asians are at the stage of import substitution, catching up with the leader.	[Comments: Chiang is the only researcher in this table that looks into competitiveness in service trade of East Asian economies. He proposes three possible reasons for a slow rise of IT services competitiveness in East Asia. 1) The use of IT services was still limited to government organizations and monetary facilities. 2) IT goods prices decreased due to economies of scale, which induced domestic demand to increase, but IT services are still scarce and expensive, and thus the expansion of domestic demand is constrained. 3) Domestic demand tends to be underestimated in these economies due to the practice of pirated computer software.]

Kumagai (2008)	Japan, Korea, Taiwan, ASEAN-5	S Domestic structural changes (Japan, S Korea and Thailand): 1963-2005; Resemblance of exports structure (Japan, S Korea, Taiwan, ASEAN-5): 1985, 1990, 1995, 2000.	Trade: NER (net export ratio): $(x-m)/(x+m)$ for each specific industrial sector, which is THE SAME AS Tung's (2003) NTI and Hiratsuka's (2005) NER.	Trade: Part I: Four industrial sectors: 1) clothing (SITC 841); 2) textile, yarn and thread (651); 3) passenger cars (7321), 4) iron & steel (674); Part II: 24-sector Asian International IO Table	Seems to support the FG paradigm (with the possible exception of electronics): Changes of the "net export ratio" (NER), an indicator for domestic structural changes (for the period of 1965-2005), exhibit Japan, S Korea and Thailand sharing the general trend of shifting production (thus export) from light industry to heavy industry. The NER in Japan's neighbours increasingly resemble that of Japan, but there were different ranking orders of these countries in terms of resemblance, particularly, when machinery (mainly consisting of electronics) is included.	Like Tung and Hiratsuka, Kumagai uses the formula of $(X-M)/(X+M)$ as an alternative to RCA. He does not look into SRCC.
Widodo (2008)	Japan, Korea, Singapore, Thailand, Malaysia, Philippines, Indonesia, China	S 1985-2005 (1985, 2005)	Trade (export): RSCA (revealed symmetric comparative advantage, a modified RCA index); TBI (trade balance index), which is the same as Tung's (2003) NTI, Hiratsuka's (2005) ICC, Kumagai's (2008) NER.	Trade: SITC 3-digit level for a 6 product classification: 1) primary products, 2) natural-resource-intensive products, 3) unskilled-labour-intensive products, 4) technology-intensive products, 5) others.	Supports the FG paradigm. For most of the countries included changes in RSCAS for three specific product groups (unskilled-labour-intensive products, human-capital intensive products, and technology-intensive products) between 1985 and 2005 were consistent with the paradigm. However, the improvement of RSCA for product group did not always mean the improvement of the balance of payment for the group of goods.	Widodo uses the RSCA index, a modified RCA, $[(X_{ij}/X_i)-1]/[(X_{iw}/X_w)+1]$ to transform the range of the RCA indices from -1 to 1, rather than 0 to infinity. The TBI index also ranges from -1 to 1. Widodo plots the coordinates of these indices of a graph, and shows the trends of changes in terms of sector-specific competitiveness (RSCA) and sector-specific trade balance (TBI).

<p>Nakagane (2013)</p>	<p>Japan, China (with many others for supplementary data)</p>	<p>1990-2010 (1990, 1995, 2000, 2005, 2010)</p>	<p>Trade: RCA, ICE (international competitiveness index), ESI (export similarity index) for manufactures (between China vs OECD) : FDI: Japanese FDI</p>	<p>Trade: RIETI-TIDD 2011 data for 7 product classifications: 1) chemicals, 2) iron & steel, and nonferrous metals, 3) general machinery, 4) electrical machinery, 5) household electronic appliances, 6) Precision machinery, 7) transport equipment</p>	<p>Supports the FG paradigm, though with some reservations: Various trade data processed via RCA, ICE and ESI show that the FG paradigm pattern generally remains, but have been gradually eroding, due to the catching-up process of China.</p>	<p>Nakagane uses various methods to analyze China's recent export performance, namely RCA, ICE and ESI. The analysis of ESI between China and OECD shows that China's export pattern has increasingly resembled OECD's counterpart, surpassing many developing countries.</p>
-------------------------------	---	---	--	--	---	---

Notes: RCA: Revealed Comparative Advantage; SITC: Standard International Trade Classification; SCRR: Spearman's Rank Correlation Coefficient.

BIBLIOGRAPHY

- Abe, S. and P. Hoontrakul (2014), 'Natural Disasters and Fragile Supply Chains: The Great East Japan Earthquake and the Thai floods in 2011', in Hoontrakul, P., C. Balding and R. Marwah (eds) *The Global Rise of Asian Transformation: Trends and development in economic growth dynamics*, pp. 217-255. New York: Palgrave Macmillan.
- Abramovitz, M. (1986) 'Catching Up, Forging ahead, and Falling Behind', *Journal of Economic History*, 156(2): 385-406.
- Acharya, A. (2014) 'International Relations theory and the "Rise of Asia"', in Pekkanen, S. M., J. Ravenhill and R. Foot (eds) *Oxford Handbook of the International Relations of Asia*, pp. 120-137. Oxford: Oxford University Press.
- Acharya, A. (2010) 'Asia is Not One', *The Journal of Asian Studies*, 69(4), 1001- 1013.
- Acharya, A. and R. Stubbs (1999) 'The Asia Pacific Region in the Post-Cold War Era: Economic growth, political change, and regional order', in Fawcett, L and Y. Sayigh, *The Third World beyond the Cold War: Continuity and change*, pp. 118-133. Oxford: Oxford University Press.
- Adams, F.G. (1998) 'East Asian Development Ladder: Virtuous circles and linkages in East Asian economic development', in Adams, F. G. and S. Ichimura (eds) *East Asian Development: Will the East Asian growth miracle survive?*, pp. 3-18. Westport, CO: Praeger Publishers.
- Adams, F.G. and S. Ichimura (eds) (1998) *East Asian Development: Will the East Asian growth miracle survive?* Westport, CO: Praeger Publishers.
- Adams, F.G. and W.E. James (eds) (1999) *Public Policies in East Asian Development: Facing new challenges*. Westport, CO: Praeger Publishers.
- Ahearne, A.G., J.G. Fernald, P. Loungani and J.W. Schindler (2006) 'Flying Geese or Sitting Ducks: China's impact on the trading fortunes of other Asian countries', *International Finance Working Paper 887*. Board of Governors of the Federal Reserve System.
- Ahearne, A.G., J.G. Fernald, P. Loungani and J.W. Schindler (2003) 'China and emerging Asia: Comrades or competitors?', *Seoul Journal of Economics*, 16(2) 183-213.
- Ahlstrom, D., M.N. Young, E.S. Chan and G.D. Bruton (2004) 'Facing Constraints to growth? Overseas Chinese entrepreneurs and traditional business practices in East Asia', *Asia Pacific Journal of Management*, 21(3): 263-285.
- Ahn, C.Y. (2001) 'A Search for Robust East Asian Development Models after the Financial Crisis: Mutual learning from East Asian experience', *Journal of Asian Economics*, 12(3) 419-443.
- Akamatsu, K. (1965) *Keizaiseisakuron* [Theories of Economic Policy] (2nd edition). Tokyo: Seirinshoinshinsha.
- Akamatsu K. (1962) 'A historical pattern of economic growth in developing countries', *Journal of Developing Economies*, 1(1): 3-25.
- Akamatsu, K. (1961) 'A theory of unbalanced growth in the world economy', *Weltwirtschaftliches Archiv*, 82(1): 196-217.
- Akamatsu, K. (1958) *Bouekiron* [Theories of Trade]. Tokyo: Chyuo-keizai-sha.
- Akamatsu, K. (1956) 'Wagakuni Sangyohatten no Gankoukeitai – Kikai to kougu seizou sangyou ni tsuite [The Flying Geese Pattern of Industrial Development of Our Country – The Case of the Machine- and Tool-Making Industries]'. *Hitotsubashi Ronso* 36(5): 514–526.
- Akamatsu, K. (1954) *Keizaiseisakuron* [Theories of Economic Policy]. Tokyo: Seirinshoinshinsha.

- Akamatsu, K. (1935) 'Wagakokuyoumouseihin no boueki yuusei [Trade fluctuations of our country's wooden manufactured goods]', *Shougyou Keizai Ronso*, 13 (jou): 129-212.
- Akamatsu, K. (1927) 'Kokkasoui to Kojinsoui tonou sougougenri [The Synthetic Principles of National Initiatives and Individual Initiatives]', *Hitotsubashi Ronso*, 7(3): 223-241.
- Akamatsu, K. and Y. Yoshida (eds) (1967) *Gendaiseikaikeizai to Kokusaikeizairon* [Contemporary World Economy and International economic Theories]. Tokyo: Nipponhyouronsha.
- Akyüz, Y. (2011) 'The Global Economic Crisis and Trade and Growth Prospects in East Asia', *ADB Economics Working Paper Series No.242*. Asian Development Bank.
- Akyüz, Y. (1998) 'The East Asian Financial Crisis: Back to the future', in Jomo, K.S. (ed.) *Tigers in Trouble: Financial governance, liberalisation and crises in East Asia*, pp. 33-43. Hong Kong: Hong Kong University Press.
- Akyüz, Y., H.-J. Chang and R. Kozul-Wright (1998) 'New Perspectives on East Asian Development', *Journal of Development Studies*, 34(6): 4-36.
- Akyüz, Y., R. Kozul-Wright and J. Mayer (2004) 'Trade and Industrial Upgrading in Developing countries', in Milberg, W. (ed) *Labor and the Globalization of Production: Causes and consequences of industrial upgrading*, pp.21-57. New York: Palgrave Macmillan Ltd.
- Akyüz, Y. (ed) (2003) *Developing Countries and World Trade: Performance and prospects*. Geneva: UNCTAD; Penang, Malaysia: Third World Network; London and New York: Zed Books.
- Alavi, H., R. Van doorn and V. Nehru (2012) 'Building a Neighbourhood – One policy at a time: The case for deeper economic integration in East Asia,' in Shiraishi, T. and J. Okamoto (eds) *Engaging East Asian Integration: States, markets and the movement of people*, pp. 46-93. Singapore: Institute of Southeast Asian Studies.
- Allen, W.R. (1987) 'Mercantilism', in Eastwell, J., M. Milgate, and P. Newman (eds) *The New Palgrave: a Dictionary of Economics*. Vol. 3, pp.445-449. London and Basingstoke: the Macmillan Press limited.
- Amako, S., S. Matsuoka and K. Horiuchi (eds) (2013) *Regional Integration in East Asia: Theoretical and Historical Perspectives*. Tokyo, New York and Paris: United Nations University Press.
- Amighini, A. (2005) 'China in the international fragmentation of production: Evidence from the ICT industry', *The European Journal of Comparative Economics*, 2(2): 203-219.
- Amsden, A. (2007) *Escape from Empire: The developing world's journey through heaven and hell*. Oxford: Oxford University Press.
- Amsden, A. (2001) *The Rise of the Rest: Challenges to the west from late-industrializing economies*. Oxford: Oxford University Press.
- Amsden, A. (1995) 'Like the Rest: South-east Asia's 'late' Industrialization', *Journal of International Development*, 7(5): 791-799.
- Amsden, A. (1990) 'Third World Industrialization: "Global Fordism" or a New Model?', *New Left Review*, 182(5): 5-32.
- Amsden, A. (1989) *Asia's Next Giant: South Korea and Late Industrialization*. Oxford: Oxford University Press.
- Amsden, A. (1979) 'Taiwan's economic history: A case of etatisme and a challenge to dependency theory', *Modern China*, 5(3): 341-379.
- Amsden, A.H. and K. Suzumura (2001) 'An Interview with Miyoehei Shinohara: Nonconformism in Japanese economic thought', *Journal of the Japanese and International Economies*, 15(3): 341-360.

- Amyx, J.A. (2004) 'Political Dynamics of Regional Financial Cooperation in East Asia: A Comparative Perspective', *Japanese Economy*, 32(2): 98-112.
- Anderson, K. (2014) 'China's Evolving Trade Composition', in Fan, S., R. Kanbur, S. Wei, and Z. Zhang (eds) *The Oxford Companion to the Economics of China*, pp. 150-155. Oxford: Oxford University Press.
- Ang, Y.Y. (2018) 'Domestic Flying Geese: Industrial transfer and delayed policy diffusion in China', *The China Quarterly* 234: 420-443.
- Ang, Y.Y. (2017) 'Industrial Transfer and the Remaking of the People's Republic of China's Competitive Advantage', *ADB Working Paper No.762*.
- Ang, Y.Y. (2016) *How China Escaped the Poverty Trap*. Ithaca & London: Cornell University Press.
- Aoki, M., H.K. Kim and M. Okuno-Fujiwara (eds) (1998) *The Role of Government in East Asian Economic Development: Comparative institutional analysis*. Oxford: Oxford University Press.
- Aoyama, R. (2018) 'China's Foreign Policy as a Rising Power' in Leng, T. and Aoyama, R. (eds) *Decoding the Rise of China: Taiwanese and Japanese Perspectives*, pp. 10-38. Singapore: Palgrave Macmillan.
- Aoyama, R. (2016), "'One Belt, One Road': China's new global strategy", *Journal of Contemporary East Asia Studies*, 5(2):3-22.
- Applebaum, R.P. and J. Henderson (eds) (1992) *States and Development in the Asian Pacific Rim*. Newbury Park, CA: SAGE Publications, Inc.
- Applebaum, R.P. and D.A. Smith (2001) 'Governance and Flexibility: The East Asian garment industry', in Deyo, F.C., R.F. Doner and E. Hershberg (eds) *Economic Governance and the Challenge of Flexibility in East Asia*, pp. 79-105. Lanham, MD: Rowman & Littlefield Publishers, Inc.
- Arase, D. (1995) *Buying Power: The political economy of Japan's foreign aid*. Boulder, CO: Lynne Rienner Publishers.
- Arase, D. (1994) 'Public-private sector interest coordination in Japan's ODA', *Pacific Affairs*, 67(2): 171-199.
- Arestis P. and M. Sawyer (eds) (1994) *The Elgar Companion to Radical Political Economy*, Hants, UK: Edward Elgar Publishing Limited.
- Arndt, S. W. (2009) 'Fragmentation', in Reinert, K.A., R.S. Rajan, A.J. Glass and L.S. Davis (eds) *Encyclopedia of the World Economy*, pp. 498-502. Princeton and Oxford: Princeton University Press.
- Arndt, H.W. and R. Garnaut (1979) 'ASEAN and the Industrialization of East Asia', *Journal of Common Market Studies*, 17(3): 191-212.
- Arrighi, G. (2009) 'China's Market Economy in the Long Run', in Hung, H.F. (ed.) *China and the Transformation of Global Capitalism*, pp. 22-49. Baltimore: the Johns Hopkins University Press.
- Arrighi, G. (2007) *Adam Smith in Beijing: lineages of the twenty-first century*. London and New York: Verso.
- Arrighi, G. (1996) 'The Rise of East Asia: World systemic and regional aspects', *International Journal of Sociology and Social Policy*, 16(7/8): 6-44.
- Arrighi, G., B.J. Silver and B.D. Brewer (2003) 'Industrial Convergence, Globalization, and the Persistence of North-South divide', *Comparative International Development*, 38(1): 3-31.
- Arsel, M. and A. Dasgupta (2015) 'Critique, Recovery and Recovery in Development Studies', *Development and Change*, 46(4): 644-665.

- Asami, T. (2001) *After the Chiang Mai Initiative. Institute for International Monetary Affairs, News Letter, No.5.*
- Asian Development Bank (ADB) (2016) *Asian Economic Integration Report 2016, Highlights.* Manila: Asian Development Bank
- Asian Development Bank (ADB) (2015) *Thailand: Industrialization and Economic Catch-up, Highlights.* ADB Country Diagnostic Studies, Manila: Asian Development Bank
- Aseniero, G. (1996) 'Asia in the World-system', *Social Justice*, 23(1/2): 228-249.
- Athukorala, P.C. and J. Menon (2015) 'Global production sharing, trade patterns and determinants of trade flows: the role of East Asia', in Morrissey, O., R.A. Lopez and K. Sharma (eds) *Handbook on Trade and Development*, pp. 373-397. Cheltenham, UK and Northampton, USA: Edward Elgar Publishing Limited.
- Athukorala, P.C. and N. Yamashita (2006) 'Production fragmentation and trade integration: East Asia in a global context', *The North American Journal of Economics and Finance*, 17(3): 233-256.
- Austria, M.S. (2003) 'East Asian regional cooperation: Approaches and Processes'. Discussion Paper Series No. 2003-02. Philippines Institute for Development Studies.
- Avenell, S. (2014a) 'Japanese debates on Asia and Asianism: a conceptual framework', *History Compass*, 12(8): 619-631.
- Avenell, S. (2014b) 'What is Asia for us and can we be Asians? the New Asianism in contemporary Japan', *Modern Asian Studies*, 48(6), 1594.
- Awanohara, S. (1989) *Japan and East Asia: Towards a new division of labor, a view from Japan.* Occasional Paper 1. International Relations Program, East-West Center, Honolulu, Hawaii.
- Ba, A.D. (2006) 'Who's socializing whom? Complex engagement in Sino-ASEAN relations', *The Pacific Review*, 19(2): 157-179.
- Ba, A.D. (2003) 'China and ASEAN: Renavigating relations for a 21st-century Asia', *Asian Survey*, 43(4): 622-647.
- Baker, B. and A. Goto (1998) 'Technological system, innovation and transfer', in Thompson, G. (ed.) *Economic Dynamics in the Asia-Pacific: The growth of industrialization and competitiveness*, pp. 250-273. London and New York: Routledge.
- Balassa, B. (1980) *The New Industrializing Countries after the Oil Crisis.* World Bank Staff Working Paper No.437, Washington, D.C.: World Bank
- Balassa, B. (1979) 'The changing pattern of comparative advantage in manufactured goods', *The Review of Economics and Statistics*, 61(2): 259-266.
- Balassa, B. (1977) "'Revealed" comparative advantage revisited: An analysis of relative export shares of the industrial countries', 1953–1971. *The Manchester School*, 45(4): 327-344.
- Balassa, B. (1965) 'Trade liberalisation and "revealed" comparative advantage', *The Manchester School*, 33(2): 99-123.
- Balassa, B. (ed) (1981) *The Newly Industrializing Countries in the World Economy.* New York: Pergamon Press.
- Balassa, B. and M. Noland (1989) 'The changing comparative advantage of Japan and the United States', *Journal of the Japanese and International Economies*, 3(2): 174-188.
- Banga, R. (2013) *Measuring Value in Global Value Chains.* Regional Value Chain Background Paper No. RVC-8. UNCTAD.

- Barnes, T.J., J. Peck and E. Sheppard (eds) (2012) *The Wiley-Blackwell Companion to Economic Geography*. Chichester, West Sussex: Wiley-Blackwell.
- Batra, A. and Z. Khan (2009) *Revealed comparative advantage: an analysis for India and China*. Working Paper No.168. Indian Council for Research on International Economic Relations.
- Beausang, F. (2012) *Globalization and the BRICs: Why the BRICs will not rule the world for long*. New York: Palgrave Macmillan.
- Beeson, M. (2018) 'Geoeconomics with Chinese characteristics: the BRI and China's evolving grand strategy', *Economic and Political Studies*, 6(3): 240-256.
- Beeson, M. (2013) 'Can China Lead?', *Third World Quarterly*, 34(2): 233-250.
- Beeson, M. (2011) 'Crisis Dynamics and Regionalism: East Asia in comparative perspective', *The Pacific Review*, 24(3): 357-574.
- Beeson, M. (2010) 'Asymmetrical Regionalism: China, Southeast Asia and Uneven Development', *East Asia*, 27(4): 327-342.
- Beeson, M. (2009a) 'Developmental State in East Asia: A comparison of the Japanese and Chinese experience', *Asian Perspective*, 33(2): 5-39.
- Beeson, M. (2009b) 'Geopolitics and the Making of Regions: The fall and rise of East Asia', *Political Studies*, 57(3): 498-516.
- Beeson, M. (2009c) 'Hegemonic transition in East Asia? The dynamics of Chinese and American power', *Review of International Studies*, 35(01): 95-112.
- Beeson, M. (2007) *Regionalism and Globalization in East Asia: Politics, security and economic development*. Hampshire and New York: Palgrave Macmillan.
- Beeson, M. (2006) 'Politics and Markets in East Asia: Is the developmental state compatible with globalization?', in Stubbs, R. and R. D. Underhill (eds) *Political Economy and the Changing Global Order* (3rd edition), pp. 443- 453. Oxford: Oxford University Press.
- Beeson, M. and F. Li (2012) 'Charmed or Alarmed? Reading China's regional relations', *Journal of Contemporary China*, 21(73): 35-51.
- Beeson, M. and I. Islam (2005). 'Neo-liberalism and East Asia: Resisting the Washington Consensus', *The Journal of Development Studies*, 41(2): 197-219.
- Beeson, M. and R. Stubbs (2012a) 'Conclusion: The future of Asian regionalism', in Beeson, M. and R. Stubbs (eds) *Routledge Handbook of Asian Regionalism*, pp. 420-426. London and New York: Routledge.
- Beeson, M. and R. Stubbs (2012b) 'Introduction', in Beeson, M. and R. Stubbs (eds) *Routledge Handbook of Asian Regionalism*, pp. 1-7. London and New York: Routledge.
- Beeson, M. and R. Stubbs (eds) (2012) *Routledge Handbook of Asian Regionalism*. London and New York: Routledge.
- Bello, W. (2019) *Paper Dragons: China and the next crash*. London: Zed Books Ltd.
- Bello, W. (2009) 'States and Markets, States versus Markets: The Developmental State Debate as the Distinctive East Asian Contribution to International Political Economy', in Blyth, M. (ed.) *Routledge Handbook of International Political Economy (IPE): IPE as global convention*, pp. 180-200. New York: Routledge.
- Bello, W. (1998) 'East Asia: On the eve of the great transformation?', *Review of International Political Economy*, 5(3): 424-444.

- Bello, W. (1993) 'Trouble in Paradise: The Tension of Economic Integration in the Asia-Pacific', *World Political Journal*, 10(2): 33-39.
- Bello, W. and S. Rosenfeld (1990) *Dragons in Distress: Asia's miracle economies in crisis*. London: Penguin Books Limited.
- Bender, S. and K.W. Li (2002) 'The changing trade and revealed comparative advantages of Asian and Latin American manufacture exports'. *Yale Economic Growth Center Discussion Paper*, 843.
- Berger, P.L. (1988) 'An East Asian Development Model?', in Berger, P.L. and H.H.M. Hsiao (eds) *In Search of an Easy Asian Development Model*, pp. 3-11. New Brunswick and London: Transaction Books.
- Berger, P.L. and H.H.M. Hsiao (eds) (1988) *In Search of an Easy Asian Development Model*. New Brunswick and London: Transaction Books.
- Bernard, M. (1996) 'States, social forces, and regions in historical time: Toward a critical political economy of Eastern Asia', *Third World Quarterly*, 17(4): 649-666.
- Bernard, M. and J. Ravenhill (1995) 'Beyond product cycles and flying geese. Regionalization, hierarchy, and the industrialization of East Asia', *World Politics*, 47(2): 171-209.
- Bernstein, H. (1971) 'Modernization Theory and the Sociological Study of Development', *The Journal of Development Studies*, 7(2): 141-160.
- Berri, D. and T. Ozawa (1997) 'Pax Americana and Asian exports: revealed trends of comparative advantage recycling', *The International Trade Journal*, 11(1): 39-67.
- Betts, R.K. (1995) 'Wealth, Power, and Conflict: East Asia after the Cold War', in Ross, R.S. (ed.) *East Asia in Transition: Toward a new regional order*, pp. 21-55. Singapore: Institute of Southeast Asian Studies.
- Beynon, R. (ed) (2001) *Routledge Companion in Global Economics*. London and New York: Routledge.
- Bhagwati, J.N. (1978) *The Anatomy and Consequences of Exchange Control Regimes*. Cambridge MA: Ballinger for the National Bureau of Economic Research.
- Bhattacharya, A. (2016) 'Conceptualizing the Silk Road Initiative in China's Periphery Policy', *East Asia*, 33: 309-328.
- Bhattachali, D.M. and M. Kawai (2002) 'Implications of China's Accession to the World Trade Organization', in Hilpert, H.G. and R. Haak (eds) *Japan and China: Cooperation, competition and conflict*, pp. 72-102. New York: Palgrave.
- Bientinesi, F. and R. Patalano (eds) (2017) *Economists and War: A heterodox perspective*. New York: Routledge.
- Billet, B.L. (1993) *Modernization Theory and Economic Development: Discontent in the developing world*. Westport, CO: Praeger Publishers.
- Blecher, M. (2010) *China against the Tides: Restructuring through revolution, radicalism and reform* (3rd edition). New York and London: Bloomsbury Publishing.
- Blomqvist, H.C. (1996) 'The "flying geese" model of regional development: a constructive interpretation', *Journal of the Asia Pacific Economy*, 1 (2): 215-231.
- Blyth, M. (ed.) (2009) *Routledge Handbook of International Political Economy (IPE): IPE as global convention*. New York: Routledge.
- Boediono and H.A. Sarwawon (1999) 'Macroeconomic policy: A foundation for Indonesia's sustainable economic development', in Adams, F.G. and W.E. James (eds) *Public Policies in East Asian Development: Facing new challenges*, pp. 185-202. Westport, CO: Praeger Publishers.

- Bolesta, A. (2015) *China and Post-Socialist Development*. Bristol and Chicago: Policy Press.
- Boltho, A. and M. Weber (2009) 'Did China follow the East Asian development model?', *The European Journal of Comparative Economics*, 6(2): 267-286.
- Booth, A. (1999) 'Initial conditions and miraculous growth: why is South East Asia different from Taiwan and South Korea?', *World Development*, 27(2): 301-321.
- Bora, B. (1996) 'Foreign Direct Investment', in Bora, B and C. Findlay (eds) *Regional Integration and the Asian-Pacific*, pp. 78-98. Oxford: Oxford University Press.
- Bora, B. and C. Findlay (eds) (1996) *Regional Integration and the Asian-Pacific*. Oxford: Oxford University press.
- Bradley, C.P. (1965) 'Leftist Fissures in Singapore Politics', *The Western Political Quarterly*, 18 (2): 292-308.
- Brandt, L. (2014) 'Industrial Upgrading and Productivity Growth in China', in Fan, S., R. Kanbur, S. Wei, and Z. Zhang (eds) *The Oxford Companion to the Economics of China*, pp. 256-261. Oxford: Oxford University Press.
- Brandt, L., D. Ma and T.G. Rawski. (2011) 'Industrialization in China', in O'Rourke, K.H. and Williamson, J.G. (eds) *The Spread of Modern Industry to the Periphery since 1871*, pp. 197-228. Oxford: Oxford University Press.
- Brautigam, D. (2014) 'China's Aid Policy', in Fan, S., R. Kanbur, S. Wei and Z. Zhang (eds) *The Oxford Companion to the Economics of China*, pp. 132-136. Oxford: Oxford University Press.
- Brautigam, D. and X. Tang (2014) "'Going Global in Groups": Structural transformation and China's special economic zones overseas', *World Development*, 63(11): 78-91.
- Brautigam, D., X. Tang and Y. Xia (2018) 'What Kinds of Chinese "Geese" Are Flying to Africa? Evidence from Chinese Manufacturing Firms', *Journal of African Economies*, 27(suppl. 1): i29-i51.
- Breslin, S. (2013) 'China and the Global Order: Signalling threat or friendship?', *Review of International Affairs*, 89(3): 615-134.
- Breslin, S. (2010a) 'China's Emerging Global Role: Dissatisfied Responsible great power', *Politics*, 36(S1): 52-62.
- Breslin, S. (2010b) 'Comparative theory, China, and the future of East Asian regionalism(s)', *Review of International Studies*, 36(3): 709-729.
- Breslin, S. (2007) *China and the Global Political Economy*. Basingstoke: Palgrave Macmillan.
- Breslin, S. (2006) 'China and the Political Economy of Global Engagement', in Stubbs, R. and R. D. Underhill (eds) *Political Economy and the Changing Global Order* (3rd edition) pp. 465- 477. Oxford: Oxford University Press.
- Breslin, S.G. (1999) 'China: the challenge of reform, region-building and globalization,' in Grugel, J. and W. Hout (eds) *Regionalism Across the North-South Divide: State strategies and globalization*, pp. 95-112. London and New York: Routledge.
- Breslin, S.G. (1996) 'China: Developmental state or dysfunctional development?', *Third World Quarterly*, 17(4): 689-706.
- Brohman, J. (1996) 'Postwar Development in the Asian NICs: Does the neoliberal model fit Reality?', *Economic Geography*, 72(2): 107-130.
- Brooks, D.H. and C. Hua (2008) '*Asian trade and global linkages*', ADBI Working Paper 122. Asian Development Bank Institute.

- Brooks, W.L. and R.M. Orr, Jr. (1985) 'Japan's Foreign Economic Assistance,' *Asian Survey*, 25(3): 322-340
- Browett, J. (1980) 'Development, the diffusionist paradigm and geography,' *Progress in Geography*, 4(1): 57-79.
- Brown, K. (2017) *China's World: What does China want?* London and New York: I.B. Tauris.
- Buckley, P.I., L.J. Clegg, A.R. Cross, X. Liu, H. Voss and P. Zheng (2007) 'The Determinants of Chinese Outward Foreign Direct Investment,' *Journal of International Business Studies*, 38: 499-518.
- Bullock, R.W. (2000) 'Market Opening in Japan: Deregulation, reregulation, and cross-sectoral variation,' in Curtis G.L. (ed) *New perspectives on U.S.-Japan Relations*, pp. 39-81. Tokyo: Japan Centre for International Exchange.
- Burfisher, M.E., S. Robinson and K. Thierfelder (2003) *Regionalism: old and new, theory and practice*. International Food Policy Research Institute.
- Burkett, P. and M. Hart-Landsberg (2003) 'A critique of "catch-up" theories of development,' *Journal of Contemporary Asia*, 33(2): 147-171.
- Burkett, P. and M. Hart-Landsberg (2000a) 'Alternative perspectives on Late industrialization in East Asia: A critical survey,' *Review of Radical Political Economics*, 32(2): 222-264.
- Burkett, P. and M. Hart-Landsberg (2000b) *Development, Crisis, and Class Struggle: Learning from Japan and East Asia*. New York: St. Martin's Press.
- Burkett, P. and M. Hart-Landsberg (1998) 'East Asia and the Crisis of Development Theory,' *Journal of Contemporary Asia*, 28(4): 435-456.
- Burnell, P.J. (1986) *Economic Nationalism in the Third World*. London: Wheatsheaf.
- Busser, R. (2008) "'Detriot of the East"? Industrial Upgrading, Japanese Car Producers and the Development of the Automobile Industry in Thailand,' *Asia Pacific Business Review*, 14(1): 29-45.
- Cai, F. (2008) 'Approaching a triumphal span: How far is China towards its Lewisian turning point?', Research Paper No. 2008/09. UNU-WIDER, United Nations University (UNU).
- Cai, K.G. (2018) 'The One Belt One Road and the Asian Infrastructure Investment Bank: Beijing's new strategy of geoeconomics and geopolitics,' *Journal of Contemporary China*, 27(114): 831-847.
- Cai, K.G. (2011) *The Political Economy of East Asia*. New York: Palgrave Macmillan.
- Cai, K.G. (2008) *The Political Economy of East Asia: Regional and national dimensions*. New York: Palgrave Macmillan.
- Calcagno, A. (2015) 'Rethinking Development Strategies after the Global Financial Crisis', in Calcagno, A., S. Dullien, A. Marquez-Velazquez, N. Maystre and J. Piewe (eds) *Rethinking Development Strategies After the Financial Crisis – Vol. I: Making the Case for policy space*, pp.9-25. New York and Geneva: United Nations.
- Calcagno, A., S. Dullien, A. Marquez-Velazquez, N. Maystre and J. Piewe (eds) (2015a) *Rethinking Development Strategies After the Financial Crisis – Vol. I: Making the Case for policy space*. New York and Geneva: United Nations.
- Calcagno, A., S. Dullien, A. Marquez-Velazquez, N. Maystre and J. Piewe (eds) (2015b) *Rethinking Development Strategies After the Financial Crisis – Vol. II: Country Studies and international comparison*. New York and Geneva: United Nations.
- Calder, K.E. (2006) 'China and Japan's simmering Rivalry', *Foreign Affairs*, 85(2): 129-139.

- Campos, J.E. and H.L. Root (2001) *The Key to the Asian Miracle: Making shared growth credible*. Washington, D.C.: The Brookings Institution.
- Cao, S. (2007) 'East Asian Economic integration: Problems for Late-entry countries', in Gill, I., Y. Hunag and H. Kharas (eds) *East Asian Visions: Perspectives on economic development*, pp. 128-141. Washington, D. C.: World Bank and Singapore: Institute of Policy Studies.
- Carney, M. (2005) 'Globalization and the renewal of Asian business networks', *Asia Pacific Journal of Management*, 22(4): 337-354.
- Carola, T., N. Singh and C. Galati (1998) 'The composition of US–East Asia trade and changing comparative advantage', *Journal of Development Economics*, 57(2): 361-389.
- Casarini, N. (2016) 'When All Roads Lead to Beijing: Assessing China's new Silk Road and its implication for Europe', *The International Spectator*, 51(4): 95-108.
- Castells, M. (1992) 'Four Asian Tigers with a Dragon Head: A comparative analysis of the state, economy, and society in the Asian Pacific rim', in Applebaum, R.P. and J. Henderson (eds) *States and Development in the Asian Pacific rim*, pp.33-70. Newbury Park, CA: SAGE Publications, Inc.
- Cha, V.D. (2010) 'Powerplay: Origins of the US alliance system in Asia', *International Security*, 34(3): 158-196.
- Cha, V.D. (1998) 'Defining Security in East Asia: History, hotspots, and horizon-gazing', in Kim, E.M. (ed.) *The Four Tigers: Economic development and the global political economy*, pp. 33-59. San Diego, CA: Academic Press.
- Chakwin, N. and N. Hamid (1997) 'Economic Environment in Asia for Investment', in Oman, C. P., D. H. Brooks, and C. Foy, (eds) *Investing in Asia*, pp. 207-235. Paris: OECD.
- Chan, S. (2010) 'Beyond Special and Differential Treatment: Regional integration as a means to growth in East Asia', A thesis submitted in conformity with the requirements for the degree of Masters of Laws (LL.M), Faculty of Law, University of Toronto.
- Chan, S. (ed.) (1995) *Foreign Direct investment in a Changing Global Political Economy*. New York. St. Martin's Press, Inc.
- Chang, H.-J. (2012) 'Kicking Away the Ladder: Neoliberalism and the "Real" History of Capitalism', in Chang, K-S, B. Fine and L. Weiss (eds) *Developmental Politics in Transition: The neoliberal era and beyond*, pp. 43-50. New York: Palgrave Macmillan.
- Chang, K.-S. (2012) 'Predicaments of neoliberalism in the Post-Developmental Liberal Context', in Chang, K-S, B. Fine and L. Weiss (eds) *Developmental Politics in Transition: The neoliberal era and beyond*, pp. 70-91. New York: Palgrave Macmillan.
- Chang, H.-J. (2006a) 'Space in historical perspective with special reference to trade and industrial policies', *Economic and Political Weekly*, 41(7): 627-633.
- Chang, H.-J. (2006b) *The East Asian Development Experience: The miracle, the crisis and the future*. London: Zed Books.
- Chang, H.-J. (2004) *Globalization, Economic Development and the Role of the States*. London and New York: Zed Books. Ltd.
- Chang, H.-J. (2002) *Kicking Away the Ladder: Development strategy in historical perspective*. London: Anthem Press.
- Chang, H.-J. (1999) 'The Economic Theory of the Developmental State', in Woo-Cumings, M. (ed.) *The Developmental State*, pp. 182-199. Ithaca and London: Cornell University Press.

- Chang, H.-J. (1994) *The Political Economy of Industrial Policy*. London: Macmillan.
- Chang, K.-S., B. Fine and L. Weiss (2012) 'Introduction: neoliberalism and Developmental Politics in Perspective', in Chang, K.-S., B. Fine and L. Weiss (eds) *Developmental Politics in Transition: The neoliberal era and beyond*, pp. 1-23. New York: Palgrave Macmillan.
- Chang, K.-S., B. Fine and L. Weiss (eds) (2012) *Developmental Politics in Transition: The neoliberal era and beyond*. New York: Palgrave Macmillan.
- Chant, S.H. and C. McIlwaine (2009) *Geographies of Development in the 21st century: An introduction to the Global South*. Cheltenham, UK and Northampton, USA: Edward Elgar Publishing Limited.
- Chen, C., L. Chang and Y. Zhang (1995) 'The Role of Foreign Direct Investment in China's post-1978 Economic Development', *World Development*, 23(4): 691-703.
- Chen, X. (1996) 'Taiwan Investment in China and Southeast Asia: "Go West, but Also Go South"', *Asian Survey* 36(9): 447-467.
- Cheng, C. (2007) 'Sino-Japanese Economic Relations: Interdependence and conflict', in Hsiung, J.C. (ed.) *China and Japan at Odds*, pp. 81-94. New York: Palgrave Macmillan.
- Cheng, L. (2001) 'Sources of Success in Uncertain Markets: The Taiwanese Footwear Industry', in Deyo, F.C., R.F. Doner and E. Hershberg (eds) *Economic Governance and the Challenge of Flexibility in East Asia*, pp. 33-53. Lanham, MD: Rowman & Littlefield Publishers, Inc.
- Cheng, Y., S.Y. Chia and C. Findlay (2000) 'Governance in the City-States: Hong Kong and Singapore', in Drysdale, P. (ed.) *Reform & Recovery in East Asia: The role of the state and economic enterprise*, pp. 229-254. London and New York: Routledge.
- Chey, H.K. (2009) 'The changing political dynamics of East Asian financial cooperation: the Chiang Mai Initiative', *Asian Survey*, 49(3): 450-467.
- Cheung, G.C.K. (2012) 'The Significance of the Overseas Chinese in East Asia', in Beeson, M. and R. Stubbs (eds) *Routledge Handbook of Asian Regionalism*, pp. 77-89. London and New York: Routledge.
- Chia, S.Y. (2010) 'Trade and investment policies and regional economic integration in East Asia', ADBI Working Paper Series, No.210. The Asian Development Bank Institute.
- Chia, T.P. (2006) 'Transplanted or Endogenized? FDI and Industrial Upgrading in Developing Countries: Case Study of Indonesia', PhD Thesis, the Institute of Development Studies, the Hague, the Netherlands.
- Chiang, H.H. (2008) 'The "Flying Geese Development" model of the IT industry in East Asia', *Journal of the Asia Pacific Economy*, 13(2): 227-242.
- Chiang, M. (2015) 'Japan's Growing Outward Direct Investment in East Asia', *Thunderbird international Business Review*, 57 (6): 431-444.
- Christensen, T.J. (2006) 'Fostering stability or creating a monster? The rise of China and US policy toward East Asia', *International Security*, 31(1): 81-126.
- Chong, Y. (2010) *East Asian Integration and Japan's Regional Policy. The Japan Forum on International Research*, Research Fellow Paper No.16.
- Chow, G.C. (2006) 'Globalization and China's Economic Development', *Pacific Economic Review*, 11(3): 271-285.
- Chow, G.C. and D.H., Perkins (eds) (2015) *Routledge Handbook of the Chinese Economy*. London and New York: Routledge.

- Chow, H.K. (2010) *Asian Tigers' Choices: An overview*. ADBI Working Paper Series. No.238. Asian Development Bank Institute.
- Chow, P.C. (1990) 'The Revealed Comparative Advantage of the East Asian NICs', *The International Trade Journal*, 5(2): 235-262.
- Chow, P.C.Y. (eds) (2007) *Trade and Industrial Development in East Asia: Catching up or falling behind*. Cheltenham, UK, and Northampton, MA: Edward Elgar Publishing Limited.
- Chu, Y. (1995) 'The East Asian NICs: A state-led path to developed world', in Stallings, B. (ed.) *Global Change, Regional Response: The new international context of development*, pp. 199-237. Cambridge: Cambridge University Press.
- Chu, Y.R. (2007) 'Historical and Contemporary Roots of Sino-Japanese Conflicts', in Hsiung, J.C. (ed.) *China and Japan at Odds*, pp. 23-42. New York: Palgrave Macmillan.
- Chung, J.H. (1988) 'South Korea-China Economic relations: The current situation and implications', *Asian Survey*, 28(10): 1031-1048.
- Cimoli, M., G. Dosi and J.E. Stiglitz (eds) (2007) *Industrial Policy and Development: The political economy of capabilities accumulation*. Oxford: Oxford University.
- Clark, C. (2007) 'The Evolving Global and Regional Economic Roles of China and Japan: Competitive and complementary forces', in Hsiung, J.C. (ed.) *China and Japan at Odds*, pp. 59-80. New York: Palgrave Macmillan.
- Clark, C. and S. Chan (1995) 'MNCs and Development: Domestic structures as an explanation for East Asian Dynamism', in Chan, S. (ed.) *Foreign Direct investment in a Changing Global Political Economy*, pp. 84-103. New York. St. Martin's Press, Inc.
- Clark, C. and K.C. Roy (1997) *Comparing Development Patterns in Asia*. Boulder and London: Lynne Rienner Publishers, Inc.
- Cleaver, T. (2013) *Understanding the World Economy* (3rd edition). London and New York: Routledge.
- Cline, W.R. (1982) 'Can the East Asian model of development be generalized?', *World Development*, 10(2): 81-90.
- Clyde, P.H. and B.F. Beers (1971) *The Far East: A history of the Western impact and the Eastern response (1830-1970)*. New York: Prentice Hall.
- Cohen, B.J. (2014) *Advanced Introduction to International Political Economy*. Cheltenham, UK and Northampton, MA, USA: Edward Elgar Publishing Limited.
- Cohen B.J. and E.M.P. Chiu (eds) (2014) *Power in a Changing World Economy: Lessons from East Asia*. London and New York: Routledge.
- Cohn, T.H. (2012) *Global Political Economy* (6th edition) London and New York: Routledge.
- Cowling, K. and P.R. Tomlinson (2011) 'The Japanese Model in Retrospective: Industrial strategies, corporate Japan and the "hollowing out" of Japanese industry', *Policy Studies*, 32(6): 569-583.
- Cox, S. (2014) 'Will China Continue to Grow?', in Fan, S., R. Kanbur, S. Wei and X. Zhang (eds) *The Oxford Companion to the Economics of China*, pp. 61-65. Oxford: Oxford University Press
- Coxhead, I. (2007) 'A New Resource Curse? Impacts of China's boom on comparative advantage and resource dependence in Southeast Asia', *World Development*, 35(7): 1099-1119.
- Cumings, B. (1999) 'Webs with No Spiders, spiders with No webs: the genealogy of the developmental state', in Woo-Cumings, M. (ed.) *The Developmental State*, pp. 61-92. Ithaca and London: Cornell University Press.

- Cumings, B. (1997) 'Japan and Northeast Asia into the Twenty-first Century', in Katzenstein, P.J. and T. Shiraishi (eds) *Network Power: Japan and Asia*, pp. 136-168. Ithaca and London: Cornell University Press.
- Cumings, B. (1984) 'The Origin and Development of the Northeast Asian Political Economy: Industrial sectors, product cycle, and political consequences', *International Organization*, 38(1): 1-40.
- Curtis, G.L. (2000) 'U.S. Policy toward Japan from Nixon to Clinton: An assessment,' in Curtis G. L. (ed) *New Perspectives on U.S.-Japan Relations*, pp. 1-38. Tokyo: Japan Centre for International Exchange.
- Cutler, H., D.J. Berri and T. Ozawa (2003) 'Market recycling in labor-intensive goods, flying-geese style: an empirical analysis of East Asian exports to the US', *Journal of Asian Economics*, 14(1): 35-50.
- Cutler, H. and T. Ozawa (2007) 'The dynamics of the "mature" product cycle and market recycling, flying geese style: an empirical examination and policy implication', *Contemporary Economic Policy*, 25(1): 67-78.
- Das, D.K. (2015) *An Enquiry into the Asian Growth Model*. New York: Palgrave Macmillan.
- Das, D.K. (2011) *The Asian economy: Spearheading the recovery from the global financial crisis*. London and New York: Routledge.
- Das, D.K. (1998) 'Changing comparative advantage and the changing composition of Asian exports', *The World Economy*, 21(1): 121-140.
- Das, D.K. (1996) *The Asia-Pacific Economy*. London: Macmillan Press Ltd.
- Das, D.K. (ed.) (1996) *Emerging Growth Pole: The Asian Pacific economy*. Singapore: Prentice Hall.
- Das, D. (2001) *Regionalism in a globalizing world: an Asia-Pacific perspective*. CSGR Working Paper No. 80/01. Centre for the Study of Globalization and Regionalization (CSGR), University of Warwick.
- D'Costa, A.P. (2012) 'Capitalism and economic nationalism: Asian state activism in the world economy,' in D'Costa, A.P. (ed.) *Globalization and Economic Nationalism in Asia*, pp. 1-32. Oxford: Oxford University Press.
- D'Costa, A.P. (ed.) (2012) *Globalization and Economic Nationalism in Asia*. Oxford: Oxford University Press.
- Defraigne, J.C. (2005) 'The prospects of Chinese firms in an opening economy: Breaking away from the "flying geese" pattern or turning into another case of East Asian ersatz capitalism?', *Belgeo - Revue Belge de Géographie*, (3): 275-306.
- De Haan, A. (2011) 'Will China change international development as we know it?', *Journal of International Development*, 23(7): 881-908.
- De Haan, A. and S. Gong (2011) 'How China managed the Impact of Financial Crisis: Globalization and public policy responses in an emerging economy', in van Bergeijk, P.A.G., A. de Haan and R. van der Hoeven (eds) *The Financial Crisis and Developing Countries: A global multidisciplinary perspective*, pp. 231-246. Cheltenham, Glos, UK: Edward Elgar Publishing Limited.
- de Miguel, E. (2013) 'Japan and Southeast Asia: From the Fukuda Doctrine to Abe's Five Principles', *UNISCI Discussion Paper* 32: 99-116.
- Deng, P. (2007) 'Investing for Strategic Resources and its Rationale: The case of outward FDI from Chinese companies', *Business Horizons*, 50(1): 71-81.

- Deng, P. (2004) 'Outward Investment by Chinese MNCs: Motivations and implications', *Business Horizons*, 47(3): 8-16.
- Deng, Y. (2018) 'Multilateral Institutional Development in Asia: Competing pathways to regional order', in Hua, S. (ed.) *Routledge Handbook of Politics in Asia*, pp. 359-372. London and New York: Routledge.
- Dent, C.M. (2014) 'Principal Developments and Future Directions in Asia's Trade', in Pekkanen, S.M., J. Ravenhill and R. Foot (eds) *Oxford Handbook of the International Relations of Asia*, pp. 263-284. Oxford: Oxford University Press.
- Dent, C.M. (2008a) *East Asian Regionalism*. London and New York: Routledge.
- Dent, C.M. (2008b) 'Regional leadership in East Asia: Japan and China as contender', in Beeson and Stubbs (eds) *Routledge Handbook of Asian Regionalism*, pp. 263-274. London and New York: Routledge.
- Dent, C.M. (ed.) (2008) *China, Japan and Regional Leadership in East Asia*. Cheltenham, UK and Northampton, USA: Edward Elgar Publishing Limited.
- Desai, V. and R.B. Potter (eds) (2014) *The Companion to Development Studies* (3rd third edn). New York: Routledge.
- Deyo, F.C. (1998) 'Industrial Flexibility, Economic Restructuring, and East Asian Labour', in Kim, E. M. (ed.) *The Four Tigers: Economic development and the global political economy*, pp. 183-207. San Diego, CA: Academic Press.
- Deyo, F.C. (1997). 'Labor and post-Fordist industrial restructuring in East and Southeast Asia', *Work and Occupations*, 24(1), 97-118.
- Deyo, F.C. (ed.) (1987) *The Political Economy of the New Asian Industrialism*. Ithaca: Cornell University Press.
- Deyo, F.C. and R. F. Doner (2001) 'Dynamic Flexibility and Structural Governance in the Thai Auto Industry: The enclave problem' in Deyo, F. C., R. F. Doner and E. Hershberg (eds) *Economic Governance and the Challenge of Flexibility in East Asia*, pp. 107-135. Lanham, MD: Rowman & Littlefield Publishers, Inc.
- Deyo, F.C., R.F. Doner and E. Hershberg (eds) (2001) *Economic Governance and the Challenge of Flexibility in East Asia*. Lanham, NY: Rowman & Littlefield Publishers, Inc.
- Dhalla, N.K. and S. Yuspeh (1976) 'Forget the Product Life Cycle Concept!', *Harvard Business Review*, 54(1): 102-112.
- Dicken, P. (2011) *Global Shift: Mapping the changing contours of the world economy* (6th edition). New York and London: The Guilford Press.
- Dicken, P. (2007) *Global Shift: Mapping the changing contours of the world economy* (5th edition). London: SAGE Publications.
- Dicken, P. (1991) 'The Changing Geography of Japanese foreign direct investment in manufacturing industry: a global perspective', in Morris, J. (ed.) *Japan and the Global Economy: Issue and trends in the 1990s*, pp. 14-44. London and New York: Routledge.
- Dickson, B.J. (2011) 'Updating the China model', *The Washington Quarterly*, 34(4): 39-58.
- Dieter, H. and R. Higgott (2003) 'Exploring alternative theories of economic regionalism: from trade to finance in Asian co-operation?', *Review of International Political Economy*, 10(3): 430-454.
- Ding, Y and X. Li (2017) 'The Past and Future of China's Role in the East Asian Economy: A trade perspective,' *Canadian Public Policy*, 43(S2): S45-S56.

- Dixon, C. (1991) *South East Asia in the World-Economy*. New York: Cambridge University Press.
- Dixon, C. (1999) 'Regional integration in South East Asia,' in Grugel, J. and W. Hout (eds) *Regionalism Across the North-South Divide: State strategies and globalization*, pp. 115-133. London and New York: Routledge.
- Dobson, W. (1997) 'East Asian integration: synergies between firm strategies and government policies', in Dobson, W. and S. Y. Chia (eds) *Multinationals and East Asian Integration*, pp. 3-27. Ottawa: International Development Research Centre.
- Dobson, W. and S.Y. Chia (eds) (1997) *Multinationals and East Asian Integration*. Ottawa: International Development Research Centre.
- Dollar, D. (1986) 'Technology Innovation, Capital Mobility, and the Product Cycle in North-South Trade', *The American Economic Review*, 76(1) 177-190.
- Doner, R. (2007) 'Japanese foreign investment and the creation of a Pacific Asian region', in Frankel, J. A. and M. Kahler (eds) *Regionalism and Rivalry: Japan and the US in Pacific Asia*, pp. 159-216. University of Chicago Press.
- Doner, R.F. (1997) 'Japan in East Asia: Institutions and Regional Leadership', in Katzenstein, P. J. and T. Shiraishi (eds) *Network Power: Japan and Asia*, pp. 197-233. Ithaca and London: Cornell University Press.
- Doner, R.F. and P. Wad (2014) 'Financial Crises and Automotive Industry Development in Southeast Asia,' *Journal of Contemporary Asia*, 44(4): 664-687.
- Dowling, M. and C.T. Cheang (2000) 'Shifting comparative advantage in Asia: new tests of 'flying geese' model', *Journal of Asian Economics*, 11(4): 443-463.
- Dramall, C. (2008) *Chinese Economic Development*. London and New York: Routledge.
- Draper, P., A. Freytag, S. Scholvin and L.T. Tran (2016) 'Is a "Factory Southern Africa" Feasible? Harnessing flying geese to the South African gateway', *CESifo Working Paper*, No. 5867.
- Dreyer, J.T. (2014a) 'China and Japan: "Hot Economics, Cold Politics"', *Orbis*, 58(3): 326-341.
- Dreyer, J.T. (2014b) 'China Up, Japan Down? Implications for the United States', *Orbis* 57(1): 83-100.
- Drifte, R. (2006) 'The Ending of Japan's ODA Loan Programme to China: All's well that ends well?', *Asia-Pacific Review*, 13(1): 94-117.
- Driffield, N. and P.C. Chiang (2009) 'The Effects of Offshoring to China: Reallocation, employment and productivity in Taiwan', *International Journal of the Economics of Business*, 16(1): 19-38.
- Drysdale, P. (ed.) (2000) *Reform & Recovery in East Asia: The role of the state and economic enterprise*. London and New York: Routledge.
- Du, J., Y. Lu and Z. Tao (2014) 'Economic Institutions and Their Impacts on Firm Strategies and Performance', in Fan, S., R. Kanbur, S. Wei and X. Zhang (eds) *The Oxford Companion to the Economics of China*, pp. 273-278. Oxford: Oxford University Press.
- Dunford, M. (2009) 'Regional Development Models', *International Encyclopedia of Human Geography*, Vol. 9, Amsterdam: Elsevier Science. 192-201.
- Dunning, J.H. (1981) 'Explaining the International Direct investment Position of Countries: Toward a dynamic or developmental approach', *Weltwirtschaftliches Archiv*, 117(1): 30-64.
- Dunning, J.H. (1977) *Trade, location of economic activity and the MNE: A search for an eclectic approach*. London: Palgrave Macmillan UK.

- Dunning, J.H. and R. Narula (1996) 'The investment development path revisited: some emerging issues', in Dunning, J. H. and R. Narula (eds) *Foreign Direct Investment and Government: Catalysts for economic restructuring*, pp. 1-41. London: Routledge.
- Eastwell, J., M. Milgate, and P. Newman (eds) (1987) *The New Palgrave: a Dictionary of Economics*. London and Basingstoke: the Macmillan Press limited.
- Economic and Social Commission for Asia and the Pacific (ESCAP) (2011) *Economic and Social Survey and the Pacific*. New York: United Nations.
- Economic and Social Commission for Asia and the Pacific (ESCAP) (2004) *Meeting the Challenges in an Era of Globalization by Strengthening Regional Development Cooperation*. New York: United Nations.
- Economic and Social Commission for Western Asia (ESCWA) (2014) *Arab Integration: A 21st century development imperative*. Beirut, Lebanon: ESCWA.
- Edgington, D.W. and R. Hayte (2001) 'Japanese direct investment and the Asian financial crisis', *Geoforum*, 32(1): 103-120.
- Edgington, D.W. and R. Hayte (2000) 'Foreign Direct Investment and the Flying Geese Model: Japanese electronics firms in Asia-Pacific', *Environment and Planning A*, 32(2): 281-304.
- Eichengreen, B., Y. Rhee, and H. Tong (2007) 'China and the Exports of Other Asian Countries', *Review of World Economics*, 143(2): 201-226.
- Ernst, D. (2001) 'Catching Up and Postcrisis Industrial Upgrading: Searching for new sources of growth in Korea's electronics industry', in Deyo, F.C., R.F. Doner and E. Hershberg (eds) *Economic Governance and the Challenge of Flexibility in East Asia*, pp. 137-164. Lanham, MY: Rowman & Littlefield Publishers, Inc.
- Erturk, K.A. (2001/2) 'Overcapacity and the East Asian Crisis', *Journal of Post Keynesian Economics*, 24(2): 253-275.
- Evans, P. (2005) 'Between Regionalism and Regionalization: Policy networks and the nascent East Asian institutional identity', in Pempel, T.J. (ed.) *Remapping East Asia: The construction of a region*, pp. 170-215. Ithaca and London: Cornell University Press.
- Evans, P. (1995) *Embedded Autonomy: States and industrial transformation*. Princeton: Princeton University Press.
- Ezaki, M. (1998) 'Globalization and Economic Development: The newly industrializing area of East Asia', in Adams, F.G. and S. Ichimura (eds) *East Asian Development: Will the East Asian growth miracle survive?*, pp. 19-37. Westport, CO: Praeger Publishers.
- Fan, S., R. Kanbur, S. Wei, and X. Zhang (2014) 'The Economics of China: Success and challenges', in Fan, S., R. Kanbur, S. Wei and X. Zhang (eds) (2014) *The Oxford Companion to the Economics of China*, pp. 1-27. Oxford: Oxford University Press.
- Fan, S., R. Kanbur, S. Wei and X. Zhang (eds) (2014) *The Oxford Companion to the Economics of China*. Oxford: Oxford University Press.
- Fawcett, L. and Y. Sayigh (eds) (1999) *The Third World beyond the Cold War: Continuity and change*. Oxford: Oxford University Press.
- Feenstra, R.C. (1998) 'Integration of Trade and Disintegration of Production in the Global Economy', *The Journal of Economic Perspectives*, 12(4): 31-50.
- Feinberg, S. (2009) 'Location Theory', in Reinert, K.A., R.S. Rajan, A.J. Glass and L.S. Davis (eds) *Encyclopedia of the World Economy*, pp. 12-15. Princeton and Oxford: Princeton University Press.

- Felipe, J. (1999) 'Total factor productivity growth in East Asia: A critical survey', *The Journal of Development Studies*, 35(4): 1-41.
- Felipe, J. (2010) *Inclusive Growth, Full Employment, and Structural Change: Implications and Policies for developing Asia* (second ed). London: Anthem Press, and Manila: Asian Development Bank.
- Felipe, J., U. Kumar, A. Abdon and M. Bacate (2012) 'Product complexity and economic development', *Structural Change and Economic Dynamics*, 23(1): 36-68.
- Felipe, J. and J.S.L. McCombie, (2003) 'Some methodological problems with the neoclassical analysis of the East Asian miracle', *Cambridge Journal of Economics*, 27(5): 695-721.
- Felker, G.B. (2003) 'Southeast Asian industrialisation and the Changing Global Production System', *Third World Quarterly*, 24(2): 255-282.
- Fields, K. (1998) 'Is Small Beautiful? The political economy of Taiwan's small-scale industry', in Kim, E. M. (ed.) *The Four Tigers: Economic development and the global political economy*, pp. 159-182. San Diego, CA: Academic Press
- Fine, B. (1999) 'The Developmental State is Dead – Long live social capital?', *Development and Change*, 30(1): 1-19.
- Fine, B. and K.-S. Chang (2012) 'Developmental Politics Beyond the Neoliberal Era', in Chang, K.-S., B. Fine and L. Weiss (eds) *Developmental Politics in Transition: The neoliberal era and beyond*, pp. 299-318. New York: Palgrave Macmillan.
- Fine, B. and E. Van Waeyenberge (2013a) 'A Paradigm Shift that Never Was: Justin Lin's New Structural Economics', *Competition and Change*, 17(4): 355-371.
- Fine, B. and E. Van Waeyenberge (2013b) A Paradigm Shift that Never will be? Justin Lin's New Structural Economics. *SOAS Department of Economics Working Paper No. 179*.
- Fischer, A.M. (2015) 'The end of peripheries? On the enduring relevance of structuralism for understanding contemporary global development', *Development and Change*, 46(4): 700-732.
- Fischer, A.M. (2011) 'Chinese Savings Gluts or Northern Financialization?', in van Bergeijk, P.A.G., A. de Haan and R. van der Hoeven (eds) *The Financial Crisis and Developing Countries: A global multidisciplinary perspective*, pp. 85-100. Cheltenham, Glos, UK: Edward Elgar Publishing Limited.
- Fischer, A.M. (2010) 'Is China turning Latin? China's balancing act between power and dependence in the lead up to global crisis', *Journal of International Development*, 22(6): 739-757.
- Fishlow, A. and C. Gwin (1994) 'Overview: Lessons from the East Asian experience', in Fishlow, A. and C. Gwin (eds) *Miracle or Design? Lessons from the East Asian experiences*, pp. 1-12. Washington, D.C.: Overseas Development Council.
- Fishlow, A. and C. Gwin (eds) (1994) *Miracle or Design? Lessons from the East Asian experiences*. Washington, D.C.: Overseas Development Council.
- Fitzgerald, R. (ed.) (1995) *The State and Economic Development: Lessons from the Far East*. London: Taylor & Francis.
- Fletcher, W.M. III (2000) 'Economic Power and Political Influence: The Japan Spinners Association and National Policy, 1900-30', *Asia Pacific Business Review*, 7(2): 39-62.
- Fletcher, W.M. III (1998) 'Co-operation and competition in the rise of the Japanese cotton spinning industry, 1890-1926', *Asia Pacific Business Review*, 5(1): 45-70.
- Fletcher, W.M. III (1996) 'The Japan spinners association: Creating industrial policy in Meiji Japan', *Journal of Japanese Studies*, 22(1): 49-75.

- Fogel, R.W. and Grotte, N (2014) 'China's Prospects for Future Growth', in Fan, S., R. Kanbur, S. Wei and X. Zhang (eds) *The Oxford Companion to the Economics of China*, pp. 61-65. Oxford: Oxford University Press.
- Francks, P. (1999) *Japanese Economic Development: Theory and practice* (2nd edition). London and New York: Routledge.
- Frank, A.G. (1966) *The Development of Underdevelopment*. Boston, MA: New England Free Press.
- Frankel, J.A. and M. Kahler (eds) (2007) *Regionalism and Rivalry: Japan and the US in Pacific Asia*. Chicago: University of Chicago Press.
- Freeman, R.B. (2015) 'A Labour Market with Chinese Characteristics', Chow, G.C. and D.H. Perkins (eds) *Routledge Handbook of the Chinese Economy*, pp. 103-120. London and New York: Routledge.
- Fritz V. and A.R. Menocal (2007) 'Developmental States in the New Millennium: Concept and challenges for a new aid agenda', *Development Policy Review* 25(5): 531-552.
- Fritz, V., and A.R. Menocal (2006) *(Re) building developmental states: from theory to practice*. London: Overseas Development Institute.
- Fujita, M. and N. Hamaguchi (2011) 'Japan and Economic Integration in East Asia: Post-disaster scenario'. RIETI Discussion Paper 11-E-079. Tokyo: Research Institute of Economy, Trade and Industry (RIETI).
- Fujita, M. and N. Hamaguchi (2008) 'Regional integration in East Asia: Perspectives of spatial and neoclassical economics', in Fujita, M., S. Kumagai and K. Nishikimi, (eds) *Economic Integration in East Asia: Perspectives from Spatial and Neoclassical Economics*, pp. 13-42. Cheltenham, UK and Northampton, USA: Edward Elgar Publishing Limited.
- Fujita, M., S. Kumagai and K. Nishikimi (eds) (2008) *Economic Integration in East Asia: Perspectives from Spatial and Neoclassical Economics*. Cheltenham, UK and Northampton, USA: Edward Elgar Publishing Limited.
- Fukasaku, K. (1992) 'Economic Regionalisation and Intra-industry Trade: Pacific-Asian Perspectives', Working Paper No.53. OECD Development Centre,
- Fuller, D.B. (2008) 'The Cross-Strait Economic Relationship's Impact on Development in Taiwan and China', *Asian Survey*, 48(2): 239-264.
- Fung, K.C. (2013) 'French, German, and Japanese FDI on Intra-East Asia Trade', *Journal of Economic Integration*, 28(2): 327-353.
- Furukawa, F. (2007) 'Malaysia-Japan relations under the Mahathir administration', *Asian Survey*, 47(3): 505-519.
- Furuoka, F. (2005) 'Japan and the Flying Geese Pattern of East Asian integration', *Journal of Contemporary Eastern Asia*, 4(1) 1-7.
- Gabushi, G (2017) "'The reports of my death have been greatly exaggerated": China and the developmental state 25 years after Governing the Market', *The Pacific Review*, 30(2) 232-250.
- Galtung, J. (1971) 'A Structural theory of Imperialism', *Journal of Peace Research*, 8(2): 81-117.
- Gamble, A. and A. Payne (eds) (1996) *Regionalism and World Order*. New York: St. Martin's Press.
- Gao, B. (2013) 'Neoliberal and Classical Developmentism: A comparative analysis of the Chinese and Japanese models of economic development', in Huang, X. (ed) *Modern Economic Development in Japan and China: Developmentalism, capitalism, and the world economic system*, pp. 68-97. New York: Palgrave Macmillan.

- Gao, G.Y., D.T. Wang, and Y. Che (2018) 'Impact of Historical Conflict on FDI Location and Performance: Japanese investment in China', *Journal of International Studies*, 49: 1069-1080.
- Gao, T. (2003) 'Ethnic Chinese Networks and International Investment: Evidence from inward FDI in China', *Journal of Asian Economics*, 14(4): 611-629.
- Garnaut, R. (1998) 'The Financial Crisis: A watershed in economic thought about East Asia', *Asian-Pacific Economic Literature*, 12 (1):1-11.
- Gangopadhyay, P. (1998) 'Patterns of Trade, Investment and Migration', in Thompson, G (ed.) *Economic Dynamics in the Asia-Pacific: The growth of industrialization and competitiveness*, pp. 20-54. London and New York: Routledge.
- García, C. and E. Palazuelos (2014) 'Development of refining and petrochemical industries in East Asia: An interpretation based on the Flying Geese Paradigm', *Asia Pacific Viewpoint*, 55(1): 102-122.
- García, I.J.M. (2016) 'Japanese Capital Internationalization and Its regional Leadership in Southeast Asia', *Revista de Economía Mundial*, No. 42, 109-128.
- Garnaut, R. (2014) 'China: International Macro-economic Impact of Domestic Change', in Fan, S., R. Kanbur, S. Wei and X. Zhang (eds) *The Oxford Companion to the Economics of China*, pp. 173-177. Oxford: Oxford University Press.
- Gereffi, G. (2014) 'Global Value Chains in a post-Washington Consensus World', *Review of International Political Economy*, 21(1): 9-37.
- Gereffi, G. (1998) 'Commodity Chains and Regional Division of Labor', in Kim, E.-M (ed.) *The Four Tigers: Economic development and the global political economy*, pp. 94-124. San Diego, CA: Academic Press.
- Gereffi, G. (1994) 'The Organization of Buyer-driven Global Commodity Chain: How U.S. retailers shape overseas production networks', in Gereffi, G. and M. Korzeniewicz (eds) *Commodity Chains and Global Capitalism*, pp.95-122. Westport, Connecticut: Praeger. .
- Gereffi, G. (1989) 'Rethinking development theory: Insights from East Asia and Latin America', *Sociological Forum* 4(4): 505-533.
- Gereffi, G., J. Humphrey and T. Sturgeon (2005) 'The Governance of Global Value Chains', *Review of International Political Economy*, 12(1): 78-104.
- Gerschenkron, A. (1962) *Economic Backwardness in Historical Perspective: A book of essays*. Cambridge, MA: Belknap Press of Harvard University Press.
- Ghosh, J. (2018) 'global instability and the development project: is the twenty-first century different?', *European Journal of Economics and Economic Policies: Intervention*, 15(2) 193-207.
- Gibney, F.B. (1992) 'The promise of the Pacific', *The Wilson Quarterly*, 16(1): 64-75.
- Gill, I., Y. Hunag, and H. Kharas (2007) 'Perspective on East Asian Development: An introduction', in Gill, I., Y. Hunag and H. Kharas (eds) *East Asian Visions: Perspectives on economic development*, pp. 1-23. Washington, D.C.: World Bank and Singapore: Institute of Policy Studies.
- Gill, I., H. Kharas, D. Bhattasali, M. Brahmabhatt, G. Datt, M. Haddad, E. Mountfield, R. Tatucu, E. Vostroknutova (2007) *An East Asian Renaissance: Ideas for economic growth*. Washington, D.C.: World Bank.
- Gill, I., Y. Hunag and H. Kharas (eds) (2007) *East Asian Visions: Perspectives on economic development*. Washington, D.C.: World Bank and Singapore: Institute of Policy Studies.

- Gilpin, R. (2000) *The Challenge of Global Capitalism: The world economy in the 21st century*. Princeton: Princeton University Press.
- Gilpin, R. (1995) 'Economic Changes and the Challenge of Uncertainty', in Ross, R. S. (ed.) *East Asia in Transition: Toward a new regional order*, pp. 3-20. Singapore: Institute of Southeast Asian Studies.
- Ginzburg, A. and A. Simonazzi (2005) 'Patterns of Industrialization and the Flying Geese Model: The case of electronics in East Asia', *Journal of Asian Economics*, 15(6): 1051-1078.
- Girth, K. (2012) 'A new "brand" of Chinese economic nationalism: from Chinese made to Chinese managed', in D'Costa, A.P. (ed.) *Globalization and Economic Nationalism in Asia*, pp. 202-223. Oxford: Oxford University Press.
- Gilpin, R. (2000) *The Challenge of Global Capitalism: The world economy in the 21st century*. Princeton: Princeton University Press.
- Goh, E. (2013) *The Struggle for Order: Hegemony, Hierarchy, and Transition in Post-Cold War East Asia*. Oxford: Oxford University Press.
- Goh, E. (2011) *Japan, China, and the Great Power Bargain in East Asia*. EAI Fellows Program Working Paper Series No.31. Seoul, the Republic of Korea: East Asian Institute.
- Golub, P.S. (2016) *East Asia's Reemergence*. Cambridge, UK: Polity Press.
- Gore, C. (1996) 'Methodological Nationalism and the Misunderstanding of East Asian Industrialization', *The European Journal of Development Research*, 8(1): 77-122.
- Gooday, G.J.N. and M.F.Low (1998) 'Technology Transfer and Cultural Exchange: Western scientists and engineers encounter late Tokugawa and Meiji Japan', *Osiris*. Vol.13. 99-128.
- Graham, E.M. and N.T. Anzai (1994), 'The Myth of De Facto Asian Economic Bloc: Japan's foreign direct investment in East Asia', *The Columbia Journal of World Business*, 29(3): 6-20.
- Green, M. (2014) 'Japan's Role in Asia: Searching for certainty', in Shambaugh, D. and M. Yahuda (eds) *International Relations of Asia* (2nd edition), pp. 317-342. Lanham, MD: Rowman & Littlefield.
- Grilli, E. (1993) 'Regionalism and multilateralism: conflict or coexistence?', *Development and International Cooperation*, IX (17). 31-64.
- Grinin, L., A. Korotayev, and A. Tausch (2016) *Economic Cycles, Crises, and the Global Periphery*, Switzerland: Springer International Publishing.
- Grinin, L. and A. Korotayev (2015) *Great Divergence and Great Convergence: How former colonies became the world economic locomotives*. Switzerland: Springer International Publishing.
- Griyoyannis, E.C. (2012) 'International Implications of China's Transition into an Open Market Economy', in Griyoyannis, E.C. (ed) *The New Chinese Economy: Dynamic transition into the future*, pp.173-183. New York: Palgrave Macmillan.
- Gruel J. and W. Hout (1999) 'Regions, regionalism and the South,' in Gruel, J. and W. Hout (eds) *Regionalism Across the North-South Divide: State strategies and globalization*, pp. 3-13. London and New York: Routledge.
- Gruel, J. and W. Hout (eds) *Regionalism Across the North-South Divide: State strategies and globalization*. London and New York: Routledge.
- Gu, J., Y. Chen, and Y. Zhang (2014) 'Understanding China's Approaches to International Development', *IDS Policy Briefing*, Issue 75.
- Gutov, M. (2007) 'U.S. Policy and Sino-Japanese Rivalry', in Hsiung, J.C. (ed.) (2007) *China and Japan at Odds*, pp. 113-132. New York: Palgrave Macmillan.

- Gwynne, R.N., T. Klak, and D.J.B. Shaw (2003) *Alternative Capitalisms: Geographies of emerging regions*. London: Arnold.
- Ha, H. (2000) 'ASEAN's Position in the New Asian Order after the Economic Crisis: Management Strategies of Singapore: "Present Pain for Future Gain"', in Richter, F.J. (ed.) *The East Asian Development Model: Economic growth, institutional failure and the aftermath of the crisis*, pp. 239-250. London: Macmillan Press Ltd.
- Ha, N.T. (2005) 'Catching-up Industrial Development of East Asian economies and its implication to Vietnam', *The Journal of Developing Areas*, 39(1): 71-98.
- Haak, R. (2002) 'Japanese Business Strategies towards China: A theoretical approach', in Hilpert, H.G. and R. Haak (eds) *Japan and China: Cooperation, competition and conflict*, pp. 158-173. New York: Palgrave.
- Haddad, W.W. (1980) 'Japan, the Fukuda Doctrine, and ASEAN', *Contemporary Southeast Asia*, 2(1) 10-29.
- Haggard, S. (2018) *Developmental States*. Cambridge: Cambridge University Press.
- Haggard, S. (2014) 'The Liberal View of the International Relations of East Asia', in Pekkanen, S.M., J. Ravenhill and R. Foot (eds) *Oxford Handbook of the International Relations of Asia*, pp. 45-63. Oxford: Oxford University Press.
- Haggard, S. (1990) *Pathways from the periphery: The politics of growth in the newly industrializing countries*. Ithaca: Cornell University Press.
- Haggard, S. (1988) 'The Politics of industrialization in the republic of Korea and Taiwan', in Hughes, H. (ed.) *Achieving Industrialization in East Asia*, pp. 260-282. Cambridge: Cambridge University Press.
- Haggard, S. (1986) 'The Newly Industrializing Countries in the International System', *World Politics*, 38(2): 343-370.
- Hamashita, T. (1997) 'The Intra-regional System in East Asia in Modern Times', in Katzenstein, P.J. and T. Shiraiishi (eds) *Network Power: Japan and Asia*, pp. 113-135. Ithaca and London: Cornell University Press.
- Hamilton-Hart, N. (2003) 'Co-operation on money and finance: how important? How likely?', *Third World Quarterly*, 24 (2): 283-297.
- Han, C.M. (2002). Korea's Direct Investments in China: Technology, experience, and ownership factors in performance. *Asia Pacific Journal of Management*, 19(1): 109-126.
- Hanieh, A. (2015) 'Development through Unity. Assessing ESCWA's Arab Integration: A 21st century development imperative', *Development and Change*, 46(4): 979-992.
- Hanson, G.H. (2014) 'Effects of China's Trade on Other Countries', in Fan, S., R. Kanbur, S. Wei and X. Zhang (eds) *The Oxford Companion to the Economics of China*, pp. 104-108. Oxford: Oxford University Press.
- Haque, S.M.I. and I.A. Thaku (2015) 'Development of Textile Industry of India and China: Flying geese model revisited', *Pacific Business Review International*, 8(2): 68-75
- Harding, H. (1995) 'International Order and Organization in the Asia-Pacific Region', in Ross, R.S. (ed.) *East Asia in Transition: Toward a new regional order*, pp. 325-355. Singapore: Institute of Southeast Asian Studies.

- Harris, N. (1992) 'States, Economic Development, and the Asian Pacific Rim', in Applebaum, R.P. and J. Henderson (eds) *States and Development in the Asian Pacific Rim*, pp.71-84. Newbury Park, CA: SAGE Publications, Inc.
- Harrison, A. (2014) 'Trade and Industrial Policy: China in the 1990s to today', in Fan, S., R. Kanbur, S. Wei and X. Zhang (eds) *The Oxford Companion to the Economics of China*, pp. 161-170. Oxford: Oxford University Press.
- Hart-Landsberg, M. and P. Burkett (2006) 'China and the dynamics of transnational accumulation: Causes and consequences of global restructuring', *Historical Materialism* 14(3): 3-43.
- Hart-Landsberg, M. and P. Burkett (1998) 'Contradictions of capitalist industrialization in East Asia: a critique of 'flying geese' theories of development', *Economic Geography*, 74(2): 87-110.
- Hatch, W. (2002) 'Regionalizing the State: Japanese Administrative and Financial Guidance for Asia', *Social Science Japan Journal* 5(2): 179-197.
- Hatch, W.F. (2010) *Asia's Flying Geese: How regionalism shapes Japan*. Ithica and London: Cornell University Press.
- Hatch, W.F., J. Bair and G. Heiduk (2015) 'Connected Channel: MNCs and production networks in global trade', in Martin, L. L. (ed.) *The Oxford Handbook of The Political Economy of international Trade*, pp. 233-255. Oxford: Oxford University Press.
- Hatch, W. and K. Yamamura (1996) *Asia in Japan's Embrace: Building a regional production alliance*. Cambridge, New York and Melbourne: Cambridge University Press.
- Harvey, D. (2003) *The New Imperialism*. Oxford: Oxford University Press.
- Harvey R. (1994) *The Undeclared: The rise, fall and rise of Greater Japan*. London: Macmillan London Limited.
- Harvie, C. and H.H. Lee (2002) 'New Regionalism in East Asia: How does it related to the East Asian economic development mode?', *ASEAN Economic Bulletin*, 19(2): 123-140.
- Hayashi, S. (2010) 'The Developmental State in the Era of Globalization: Beyond the Northeast Asian model of political economy', *The Pacific Review*, 23(1): 45-69.
- Hayter, R. and D.W. Edgington (2004) 'Flying geese in Asia: the impacts of Japanese MNCs as a source of industrial leaning', *Tijdschrift voor Economische en Sociale Geografie*, 95(1): 3-26.
- He, B. (2004) 'East Asian Ideas of Regionalism: A normative critique', *Australian Journal of International Affairs*, 58(1): 105-125.
- He, L. and M. Söderberg (2005) 'ODA for China: Seed money and a window for contracts', Center for Pacific Asia Studies Working Paper 214. Stockholm University.
- He, Y. (2007) 'History, Chinese nationalism and the emerging Sino-Japanese conflict', *Journal of Contemporary China*, 16(50): 1-24.
- Heckscher, E. (1935) *Mercantilism*. London: George Allen & Unwin.
- Held, D., A. Magrew, D. Goldblatt and J. Perraton (1999) *Global Transformations: Politics, economics and culture*. Stanford: Stanford University Press.
- Henderson, J. (2011) *East Asian Transformation: On the political economy of dynamism, governance and crisis*. London and New York. Routledge.
- Henderson, J. and R.P. Appelbaum (1992) 'Situating the State in the East Asian Development process', in Applebaum, R. P. and J. Henderson (eds) *States and Development in the Asian Pacific Rim*, pp.1-30. Newbury Park, CA: SAGE Publications, Inc.

- Henderson, J., R.P. Appelbaum and S.Y. Ho (2013) 'Globalization with Chinese characteristics: Externalization, dynamics and transformations', *Development and Change*, 44(6) 1221-1253.
- Henderson, J. and R. Phillips (2007) 'Unintended Consequences: Social policy, state institutions and the 'stalling' of the Malaysian industrialization project', *Economy and Society*, 36(1): 78-102.
- Heng, S.-H. (2010) 'The 2008 Financial Crisis and the Flying Geese Model', *East Asia*, 27(4): 381-394.
- Hettne, B. (1999) 'Globalization and the new regionalism: the second great transformation', in Hettne, B., A. Inotai and O. Sunkel (eds) *Globalism and the New Regionalism*, pp. 1-24. London: Macmillan Press Ltd.
- Hettne, B., A. Inotai and O. Sunkel (eds) (1999) *Globalism and the New Regionalism*. London: Macmillan Press Ltd.
- Hiley, M. (1999) 'The Dynamics of Changing Comparative Advantage in the Asia-Pacific Region', *Journal of the Asia Pacific Economy*, 4(3): 446-467.
- Hill, H. (1995) 'Indonesia: from "chronic dropout" to "miracle"?', *Journal of International Development*, 7(5): 775-789.
- Hill, H. (1990) 'Foreign investment and East Asian economic development', *Asian-Pacific Economic Literature*, 4(2): 21-58.
- Hill, H. and P.C. Athukorala (1998) 'Foreign investment in East Asia: A survey', *Asian-Pacific Economic Literature*, 12(2): 23-50.
- Hill, H. and M.S. Gochoco-Bautista, (eds) (2013) *Asia Rising: Growth and resilience in an uncertain global economy*. Cheltenham, UK and Northampton, MA, USA: Edward Elgar.
- Hilpert, H.G. (2002) 'China and Japan: Conflict or cooperation? What does trade data say?', in Hilpert, H.G. and R. Haak (eds) *Japan and China: Cooperation, competition and conflict*, pp. 32-51. New York: Palgrave.
- Hilpert, H.G. and R. Haak (2002) 'Introduction', in Hilpert, H.G. and R. Haak (eds) *Japan and China: Cooperation, competition and conflict*, pp. 1-11. New York: Palgrave.
- Hilpert, H.G. and R. Haak (eds) (2002) *Japan and China: Cooperation, competition and conflict*. New York: Palgrave.
- Hirakawa, H. (2012) 'Akamatsu Kaname and the Nagoya College of Commerce: An Essay on the Birth of Flying Geese Model and its Development (in Japanese)', *Keizai Kagaku*, 60(4): 13-64.
- Hiratsuka, D. (2011) *Production Networks in Asia: A case study from the hard disk drive industry*. ADBI Working Paper 301. Asian Development Bank Institute.
- Hiratsuka, D. (2006) 'Outward FDI from and Intra-regional FDI in ASEAN: trends and drivers'. *Discussion Paper 77*. Makuhari: Institute of Developing Economies.
- Hiratsuka, D. (2005) 'The "Catching up" Process of Manufacturing in East Asia'. IDE Discussion Paper 22, Institute of Developing Economies.
- Hirono, R. (1988) 'Japan: Model for East Asian Industrialization?', in Hughes, H. (ed.) *Achieving Industrialization in East Asia*, pp. 241-259. Cambridge: Cambridge University Press.
- Hirsh, M. and E. K. Henry (1997) 'Unraveling of Japan Inc.-Multinationals as Agents of Change', *Foreign Affairs*, 76(2): 11-16.
- Hirschman, A.O. (1958) *The Strategy of Economic Development*. New Haven, CT: Yale University Press.
- Hobday, M. (1995a) 'East Asian latecomer firms: Learning the technology of electronics', *World Development*, 23(7): 1171-1193.

- Hobday, M. (1995b) 'Innovation in East Asia: Diversity and development', *Technovation*, 15(2): 55-63.
- Hoen, A.R. and J. Oosterhaven. (2006) 'On the measurement of comparative advantage', *ANN Reg. Sci* 40 677-491.
- Hone, A. (1974) 'Multinational corporations and multinational buying groups: Their impact on the growth of Asia's exports of manufactures: Myths and realities', *World Development*, 2(2): 145-149.
- Hones, H.J. (1968) 'The Formulation of the Meiji Government Policy toward the Employment of Foreigners', *Monumenta Nipponica* 23(1/2): 9-30.
- Hoogvelt, A. (1997) *Globalisation and the Postcolonial World: The new political economy of development*. London: Macmillan Press Limited 78–80.
- Hook, G.D., J. Gilson, C.W. Hughes and H. Dobson (2012) *Japan's International Relations: Politics, economics and security* (3rd edition). London and New York: Routledge.
- Hook, G.D., J. Gilson, C.W. Hughes and H. Dobson (2001) *Japan's International Relations: Politics, economics and security*. London and New York: Routledge.
- Hook, S.W. and G. Zhang (1998) 'Japan's Aid Policy since the Cold War', *Asian Survey*, 38(1): 1051-1066.
- Hoontrakul, P. (2014) 'The Rise of ASEAN 2.0 – AEC and Regional Connectivity', in Hoontrakul, P., C. Balding and R. Marwah (eds.) *The Global Rise of Asian Transformation: Trends and Developments in Economic Growth Dynamics*, pp. 164-187. New York: Palgrave Macmillan.
- Hoontrakul, P., C. Balding and R. Marwah (eds.) (2014) *The Global Rise of Asian Transformation: Trends and developments in economic growth dynamics*. New York: Palgrave Macmillan.
- Hopper, P. (2012) *Understanding Development: Issues and debates*. Cambridge, UK and Malden, MA: Polity Press.
- Horesh, N. and K.F. Lim (2017) 'China: an East Asian alternative to neoliberalism?', *The Pacific Review*, 30(4): 425-442.
- Horikane, Y. (2005) 'The Political Economy of Heavy Industrialization: The Heavy and Chemical industry (HCI) Push in South Korea', *Modern Asian Studies*, 39(2) 369-397.
- Horikane, Y. (2009) 'The Politics of Economic cooperation: Industrialization in South Korea and Japan's Official Development Assistance', *Journal of Social Sciences Sri Lanka*, 1(2) 225-240.
- Horn, S.A. and A.R. Cross (2009) 'Japanese Management at a Crossroads? The changing role of China in the transformation of corporate Japan', *Asia Pacific Business Review*, 15(3): 285-308.
- Horn, S.A., B.H. Wittek, and C. Iguchi (2018) 'Japanese foreign direct investment: Promoting an "interactive" institutional approach', in McCarthy, M.M. (ed) *Routledge Handbook of Japanese Foreign Policy*, pp. 281-305. London: Routledge.
- Hout, W. (1999) 'Theories of international relations and the new regionalism,' in Grugel, J. and W. Hout (eds) *Regionalism Across the North-South Divide: State strategies and globalization*, pp. 14-28. London and New York: Routledge.
- Howe, C. (1996) *The Origins of Japanese Trade Supremacy: Development and technology in Asia from 1540 to the Pacific War*. London: Hurst & Company.
- Howe, C. (1990) 'China, Japan and Economic Interdependence in the Asia Pacific Region', *The China Quarterly*, No 124, 662-693.
- Hsiao, F.S. and M.W. Hsiao (2003) 'Miracle Growth" in the Twentieth Century—International Comparisons of East Asian Development', *World Development*, 31(2): 227-257.

- Hsiao, H. H. M. (1995) 'The State and Business in Taiwan', in Fitzgerald, R. (ed.) *The State and Economic Development: Lessons from the Far East*, pp. 76-97. London: Taylor & Francis.
- Hsiung, J.C. (2007) 'Periscoping the Future: Will China and Japan ever be like France and Germany?', in Hsing, J. C. (ed.) *China and Japan at Odds*, pp. 193-222. New York: Palgrave Macmillan.
- Hsiung, J.C. (ed.) (2007) *China and Japan at Odds*. New York: Palgrave Macmillan.
- Hua, S. (ed.) (2018) *Routledge Handbook of Politics in Asia*. London and New York: Routledge.
- Hua S. and R. Hu (eds) *East Asian Development Model: Twenty-first century perspectives*. London and New York: Routledge.
- Huang, X. (ed) (2013) *Modern Economic Development in Japan and China: Developmentalism, capitalism, and the world economic system*, pp. 68-97. New York: Palgrave Macmillan.
- Huang, Y(asheng) (2014) 'Political Economy of privatization in China', in Fan, S., R. Kanbur, S. Wei and X. Zhang (eds) *The Oxford Companion to the Economics of China*, pp. 291-295. Oxford: Oxford University Press.
- Huang, Y(iping) (2014) 'Local Government Debts', in Fan, S., R. Kanbur, S. Wei and X. Zhang (eds) *The Oxford Companion to the Economics of China*, pp. 207-211. Oxford: Oxford University Press.
- Huang, Y. and B. Wang (2011) 'Chinese Outward Direct Investment: Is there a China model', *China and World Economy*, 19 (4): 1-21.
- Huang, Q. (2018) *China's Industrialization Process*. Beijing: Social Science Academic Press.
- Huang, X. (ed) (2013) *Modern Economic Development in Japan and China: Development, capitalism and the world economic system*. New York: Palgrave Macmillan.
- Huff, W.G. (1995a) 'The Developmental State, Government, and Singapore's Economic Development since 1960s', *World Development*, 23(8): 1421-1438.
- Huff, W.G. (1995b) 'What is the Singapore Model of Economic Development?', *Cambridge Journal of Economics*, 19(6): 735-759.
- Hughes, C.W. (2009) 'Japan's response to China' rise: Regional engagement, global containment, dangers of collision', *International Affairs*, 85(4): 837-856.
- Hughes, C.W. (2006) 'Japan, East Asian Regionalization, and Selective Resistance to Globalization', in Stubbs, R. and R.D. Underhill (eds) *Political Economy and the Changing Global Order* (3rd edition), pp. 454- 464. Oxford: Oxford University Press.
- Hughes, C.W. (1999) *Japanese policy and the East Asian currency crisis: abject defeat or quiet victory?* CSGR Working Paper No. 24/99. The Centre for the Study of Globalisation and Regionalisation.
- Hughes H. (1980) 'Ideas, identity, and policy coordination in the Asia-Pacific', in Cody, J., H. Hughes and D. Wall (eds) *Policies for Industrial Progress in Developing Countries*, New York: Oxford University Press. Pp.11-37.
- Hughes, H. (ed.) (1988) *Achieving Industrialization in East Asia*. Cambridge: Cambridge University Press.
- Hund, M. (2003) 'ASEAN Plus Three: towards a new age of pan-East Asian regionalism? A skeptic's appraisal', *The Pacific Review*, 16(3): 383-417.
- Hung, H.F. (2015) *The China Boom: Why China will not rule the world*. New York: Columbia University Press.
- Hung, H.F. (2009) 'Introduction: The three transformations of global capitalism', in Hung, H.F. (ed.) *China and the Transformation of Global Capitalism*, pp. 1-21. Baltimore: the Johns Hopkins University Press.

- Hung, H.F. (ed.) (2009) *China and the Transformation of Global Capitalism*. Baltimore: The Johns Hopkins University Press.
- Hveem, H. (2000) 'Explaining the regional phenomenon in an era of globalization', in Stubbs, R. and R.D. Underhill (eds) *Political Economy and the Changing Global Order* (2nd edition), pp. 70-81. Oxford: Oxford University Press.
- Hyter, R. and Edgington D.W. (2003) 'Flying Geese in Asia: The impact of Japanese MNCs as a source of industrial learning', *Tijdschrift voor Economische en Sociale Geografie*, 25(1): 3-26.
- Ikeda, E. (2018) *Global and Developing Country Business Cycles*. PhD Dissertation, the International Institute of Social Studies, Erasmus University Rotterdam.
- Ikenberry, G.J. (2010). 'The liberal international order and its discontents', *Millennium-Journal of International Studies*, 38(3) 1-13.
- Ikenberry, G.J. (2005). 'Power and Liberal Order: America's postwar world order in transition', *International Relations of the Asia-Pacific*, 5(2): 133-152.
- Ikenberry, G.J. (2004) 'American Hegemony and East Asian order', *Australian Journal of International Affairs*, 58(3): 353-367.
- Itagaki, H. (2013) 'Japanese corporation in China's development economy', in Yokokawa, N., J. Ghosh and R. Rowthorn (eds) *Industrialization of China and India: Their impacts on the world economy*, pp. 88-111. London and New York: Routledge.
- Ikeo, A. (2008) *Akamatsu Kaname* (Japanese). Tokyo: Nippon-keizai-shinpyousha.
- Ikeo, A. (ed) (1997) *Economic Development in Twentieth Century East Asia: The international context*. London and New York: Routledge.
- Inada, J. (2002) 'Japan's ODA: Its impact on China's industrialization and Sino-Japanese relations', in Hilpert, H.G. and R. Haak (eds) *Japan and China: Cooperation, competition and conflict*, pp. 121-139. New York: Palgrave.
- Inoguchi, T. (2011) 'Japanese Ideas of Asian Regionalism', *Japanese Journal of Political Science*, 12(2): 233-249.
- Islam, I. (1992) 'Political economy and East Asian economic development', *Asian-Pacific Economic Literature*, 6(2): 69-101.
- Ito, T. (2001) 'Growth, Crisis, and the Future of Economic Recovery in East Asia', in Stiglitz, J. and S. Yusuf (eds) *Rethinking the East Asian Miracle*, pp. 55-94. Washington, D. C.: World Bank, and New York: Oxford University Press.
- Ito, T. (1996) 'Japan and the Asian economies: A "miracle" in transition', *Brookings Papers on Economic Activity*, 2, 205-272.
- Jacques, M. (2009) *When China Rules the World: The end of the western world and the birth of a new global order* (2nd edition). London: Penguin Books.
- Jaggi, G., M. Rundle, D. Rosen and Y. Takahashi (1996) 'China's Economic Reforms: Chronology and statistics', *Institute for International Economics Working Paper 96-5*.
- James, W.E. and O. Movshuk (2003) 'Comparative advantage in Japan, Korea, and Taiwan between 1980 and 1999: Testing for convergence and implications for closer economic relations', *The Developing Economies*, 41(3): 287-308.
- James, W.E., S. Naya and R.M. Meier (1989) *Asian Development: Economic success and policy lessons*. Madison: The University of Wisconsin press.

- Jayanthakumaran, K. (2016) *Industrialization and Challenges in Asia*. Singapore: Palgrave Macmillan (Springer Science + Business Media Singapore Pte Ltd.).
- Jenkins, R. (2019) *How China is Reshaping the Global Economy: Development impact in Africa and Latin America*. Oxford: Oxford University Press.
- Johnson, C. (1982) *MITI and the Japanese Miracle: The growth of industrial policy, 1925-1975*. Stanford: Stanford University Press.
- Johnson, C. (1999) 'The Developmental State: Odyssey of a Concept', in Woo-Cumings, M. (ed.) *The Developmental State*, pp. 32-58. Ithaca and London: Cornell University Press.
- Johnson, C. (1998) 'Economic Crisis in East Asia: the clash of capitalisms', *Cambridge Journal of Economics*, 22(6): 653-661.
- Johnstone, C.B. (1998) 'Japan's China Policy', *Asian Survey*, 38(11): 1067-1085.
- Jomo, K.S. (2009) 'Growth after the Asian crisis: what remains of the East Asian model?'. *Group of 24 Discussion Paper 10*.
- Jomo, K.S. (2007) 'Economic Development and Regional Cooperation in East Asia', in Gill, I., Y. Hunag and H. Kharas (eds) *East Asian Visions: Perspectives on economic development*, pp. 107-127. Washington, D.C.: World Bank and Singapore: Institute of Policy Studies.
- Jomo, K.S. (2003) 'Chinese Capitalism in Southeast Asia', in Jomo, K.S. and Folk, B.C. (eds) *Ethnic Business: Chinese Capitalism in Southeast Asia*, pp. 10-24. New York: Routledge Curzon.
- Jomo, K.S. (2001) 'Growth after the Asian Crisis: What remains of the East Asian Model?', *G-24 Discussion Paper 10*. New York and Geneva: United Nations.
- Jomo, K.S. and his associates (1997) *Southeast Asia's Misunderstood Miracle: industrial policy and economic development in Thailand, Malaysia and Indonesia*. Boulder: Westview Press.
- Jomo, K.S. (ed) (2005) *The Pioneers of Development Economics: Great economists on development*. New Delhi: Tulika Books, and London, Zed Books.
- Jomo, K.S. (ed) (1998) *Tigers in Trouble: Financial governance, liberalisation and crises in East Asia*. Hong Kong: Hong Kong University Press.
- Jomo, K.S. and B. C. Folk (eds) (2003) *Ethnic Business: Chinese Capitalism in Southeast Asia*. New York: Routledge Curzon.
- Jones, R.J.B. (1995) *Globalization and Interdependence in the International Political Economy: Rhetoric and reality*. London and New York: Pinter Publishers.
- Jordan, D.K., A.D. Morris and M.L. Moskowitz (eds) (2004) *The Minor Arts of Daily Life: Popular culture in Taiwan*. Honolulu: The University of Hawaii Press.
- Jun, S.-I. (1999) 'No (Logical) Place for Asian Values in East Asia's Economic Development', *Development and Society*, 28(2) 191-204.
- Kahn, M. J. (2011) 'The BRICS and South Africa as the gateway to Africa', *Journal of the Southern African Institute of Mining and Metallurgy*, 111(7): 493-496.
- Kahn, H. (1971) *The Emerging Japanese Superstate: Challenge and response*. Englewood Cliff, NJ: Prentice-Hall.
- Kalotay, K. (2004) 'The European Flying Geese: New FDI for the old continent', *Research in International Business and Finance*, 18(1): 27-49.
- Kamińska, T. (2016). 'Is the "flying geese" paradigm useful to explain advancement in the European Union by means of FDI phenomenon?', *Journal of International Studies*, 9(2), 9-24.

- Kanchoochat, V. (2015) 'The Middle-Income Trap and East Asian Miracle Lessons', in Calcagno, A., S. Dullien, A. Marquez-Velazquez, N. Maystre and J. Piewe (eds) (2015a) *Rethinking Development Strategies After the Financial Crisis – Vol. I: Making the Case for Policy Space*, pp.55-66. New York and Geneva: United Nations.
- Kang, D.C. (1995). 'South Korean and Taiwanese Development and the New Institutional Economics', *International Organization*, 49(3): 555-587.
- Kang, D. (2012) 'East Asia when China was at the centre: The tribute system in early modern East Asia', in Beeson, M. and R. Stubbs (eds) *Routledge Handbook of Asian Regionalism*, pp. 58-73. London and New York: Routledge.
- Kang, M. (2014) 'South Korea's Foreign Economic Relations and Government Policies', in Pekkanen, S.M., J. Ravenhill and R. Foot (eds) *Oxford Handbook of the International Relations of Asia*, pp. 199-216. Oxford: Oxford University Press.
- Kang, Y. and F. Jiang, (2012) 'FDI location choice of Chinese multinationals in East and Southeast Asia: Traditional economic factors and institutional perspective', *Journal of World Business*, 47(1): 45-53.
- Kanta Ray, P., M. Ida, C.S. Suh and S.U. Rhaman (2004) 'Dynamic Capabilities of Japanese and Korean Enterprises and the "Flying Geese" of International Competitiveness', *Asia Pacific Business Review*, 10(3-4): 463-484.
- Kaosa-ard, M. (1998) 'Economic Policy in Thailand: Some success and some failures', in Adams, F.G. and W.E. James (eds) (1999) *Public Policies in East Asian Development: Facing new challenges*, pp. 153-162. Westport, CO: Praeger Publishers.
- Kaplan, R.D. (2010) 'The Geography of Chinese Power', *Foreign Affairs*, 89(3): 22-41.
- Kaplinsky, R. (2008) 'What does the rise of China do for industrialization in sub-Saharan Africa?', *Review of African Economy* No 115, 7-122
- Kasahara, S. (2017a) 'BRICS' New Development Bank: Its potential implications to international political economy', in Lane, D. and Zhu, C. (eds.) *Changing Regional Alliances for China and the West*, pp. 173-198. Lanham, Boulder, New York and London: Lexington Books.
- Kasahara, S. (2017b) 'The New Development Bank (NDB) vs The Asian Infrastructure Investment Bank (AIIB): An analytical comparison from a critical perspective', *BICAS Conference Paper No. 19*.
- Kasahara, S. (2013) 'The Asian Developmental State and the Flying Geese Paradigm', *UNCTAD Discussion Paper 213*. Geneva: UNCTAD.
- Kasahara, S. (2004) 'The Flying Geese Paradigm: A critical study of its application to East Asia', *UNCTAD Discussion Paper 169*. Geneva: UNCTAD.
- Kasahara, S. (1995) 'The Role of Agriculture at the Early Phase of Industrialization', Background Paper (No.4) prepared for the 1995 Conference on East Asian Development (Malaysia).
- Kasahara, S. (1994) 'A Rescue Plan for the Post-Bubble Japanese Economy: The establishment of the Cooperative Credit Purchasing Company', *UNCTAD Discussion Paper 77*. Geneva: UNCTAD.
- Katada, S. N. (2009) 'Political Economy of East Asian regional integration and cooperation', *ADB Working Paper 170*. Asian Development Bank Institute.
- Kato, H. (2012) 'Globalization: Will China Change the World?', *The Journal of Contemporary China Studies*, 1(1): 5-22.

- Katzenstein, P.J. (2006) 'East Asia – Beyond Japan', in Katzenstein, P.J. and T. Shiraishi (eds) *Network Power: Japan and Asia*, pp. 1-33. Ithaca and London: Cornell University Press.
- Katzenstein, P.J. (1997) 'Introduction: Asian regionalism in comparative perspective', in Katzenstein, P.J. and T. Shiraishi (eds) *Network Power: Japan and Asia*, pp.1-44. Ithaca and London: Cornell University Press.
- Katzenstein P.J. and T. Shiraishi (1997) 'Region in World Politics', in Katzenstein P.J. and T. Shiraishi (eds) *Network Power: Japan and Asia*, pp. 341-381, Ithaca and London: Cornell University Press.
- Katzenstein P.J. and T. Shiraishi (eds) (1997) *Network Power: Japan and Asia*. Ithaca and London: Cornell University Press.
- Katzenstein, P.J. and T. Shiraishi (eds) (2006) *Beyond Japan: The dynamics of East Asian regionalism*. Ithaca and London: Cornell University Press.
- Kaur, I. (2014) 'Are The Geese Still Flying? Catch-up industrialization in a changing international economic environment', in Kaur, I. and N. Singh (eds) *The Oxford Handbook of the Economics of the Pacific Rim*, pp. 395-414. Oxford: Oxford University Press.
- Kaur, I. and N. Singh (eds) (2014) *The Oxford Handbook of the Economics of the Pacific Rim*. Oxford: Oxford University Press.
- Kawai, M. (2005) 'East Asian Economic Regionalism: Progress and challenges', *Journal of Asian Economics* 16(1): 29-55.
- Kawai, M. and G. Wignaraja (2008) 'Regionalism as an Engine of Multilateralism: A Case for a Single East Asian FTA', *ADB Working Paper Series on regional Economic Integration No.14*.
- Kay, C. (2005) 'André Gunder Frank: From the "development of underdevelopment" to the "world system"', *Development and Change*, 36(6): 1177-1183.
- Kelly, D. (2002) *Japan and the Reconstruction of East Asia*. New York: Palgrave
- Kenderdine, T. (2018) 'Death of the East Asian Goose and the Rise of China's Geoindustrial Policy', *Journal of Chinese Science Studies*, pp.1-17. Available at: <https://www.researchgate.net/profile/Tristan_Kenderdine/publication/325107266_Death_of_the_East_Asian_Goose_and_the_Rise_of_China%27s_Geoindustrial_Policy/links/5af7fab64585157136e6abc0/Death-of-the-East-Asian-Goose-and-the-Rise-of-Chinas-Geoindustrial-Policy.pdf>.
- Kennedy, S. (2010) 'The myth of the Beijing Consensus', *Journal of Contemporary China*, 19(65): 461-477.
- Kettunen, E. (1998) 'Economic Integration of the ASEAN Countries', in van Grusven, L. (ed.) *Regional Change in Industrializing Asia: Regional and local response to changing competitiveness*, pp. 43-53. Aldershot, UK: Ashgate Publishing Ltd.
- Khan, H. (1979) *The Japanese Challenge: The success and failure of economic success*. Morrow: Andre Deutch.
- Khan, S.R. (2014) *A History of Development Economics Thought: Challenges and counter-challenges*. London and New York: Routledge.
- Khan, S.R. and J. Christensen (eds) (2010) *Towards New Developmentalism: Market as Means rather than master*. London and New York: Routledge.
- Kholodilin, K.A. and E. Girardin (2011) 'Are Geese Flying by themselves inside China? An LSTR-SEM approach to income convergence of Chinese counties'. DIW Discussion Paper 1124. Deutsches Institut für Wirtschaftsforschung.
- Kiely, R. (2014) 'Global Shift: Industrialization and development,' in Desai, V. and R. B. Potter (eds) *The Companion to Development Studies (third edn)*, pp. 174-178. New York: Routledge.

- Kiely, R. (2007) *The New Political Economy of Development: Globalization, imperialism, hegemony*. New York: Palgrave Macmillan.
- Kiem, C.S. (2007) 'East Asian Economic Integration: Problems for late-entry countries', in Gill, I., Y. Hunag and H. Kharas (eds) *East Asian Visions: Perspectives on economic development*, pp. 128-141. Washington, D. C.: World Bank and Singapore: Institute of Policy Studies.
- Kikkawa, T. (2011) 'Beyond product lifecycle and flying geese: International competitiveness of East Asian region and the Japanese position within,' *Hitotsubashi Journal of Commerce and Management*, 45(1): 89-97.
- Kikuchi, T. (2002) 'East Asian regionalism: a look at the "ASEAN Plus Three" framework', *Japan Journal of international Affairs*, 16(2): 23-45.
- Kim, E.M. (ed.) (1998) *The Four Tigers: Economic development and the global political economy*. San Diego, CA: Academic Press.
- Kim, E.M. and J.S. Mah (2006) 'Patterns of South Korea's Foreign Direct Investment Flows into China', *Asian Survey*, 46(6): 881-897.
- Kim, Y. C. (ed) (2017) *China and Africa: A new paradigm of global business*, The Palgrave Macmillan Asian Business series, DOI 10.1007/978-3-319-47030-6
- Kimura, F and A. Obashi (2010) '*Production Network in East Asia. What we know so far*', ADBI Working Paper Series. No. 320. Asian Development Bank Institute.
- Kingsbury, D. (2017) *Politics in Contemporary Southeast Asia: Authority, democracy and political change*. London and New York: Routledge.
- Kirkman, K.E. (1989) 'Graduation in the Generalized System of Preferences: The projected impact on remaining beneficiaries in the United States scheme', *World Development*, 17(10): 1597-1600.
- Kirshner, J. (2001) 'Mercantilism', in Jones, R.J.B. (ed) *Routledge Encyclopedia of International Political Economy*, Vol. 2, pp. 1009-1011. London and New York: Routledge.
- Kiyokawa, Y. (1973) 'Menkougyou Gijutsu no Teichaku to Kokusanka nitsuite [On the Establishment and the Domestic Production of Cotton Industry Technologies]' *Keizai Kenkyuu*, 24(2): 117-137.
- Klein, B.P. and K.N. Cukier (2009) 'Tamed Tigers, Distressed Dragon: How export-led growth derailed Asia's economies', *Foreign Affairs*, 88(4): 8-16.
- Klepper, S. (1997) 'Industry life cycles', *Industrial and Corporate Change*, 6(1): 145-182.
- Knoerich, J. (2016) 'Has outward foreign direct investment contributed to the development of the Chinese economy?', *Transnational Corporations*, 23(2):1-48.
- Knox, P., J. Agnew and L. McCarthy (2014) *The Geography of the World Economy* (6th edition). London and New York: Routledge.
- Kohpaiboon, A. (2007) 'Thai Automotive Industry: Multinational enterprises and global integration', *Economic Research and Training Center Discussion Paper No. 0004*. Thammasat University.
- Kojima, K. (2000) 'The "flying geese" model of Asian economic development: origin, theoretical extensions, and regional policy implication', *Journal of Asian Economics*, 11(4): 371-401.
- Kojima, K. (1985) 'Japanese and American direct investment in Asia: a comparative analysis', *Hitotsubashi Journal of Economics*, 26(1): 1-35.
- Kojima, K. (1975) 'International trade and foreign investment: substitutes or complements', *Hitotsubashi Journal of Economics*, 16(1): 1-12.

- Kojima, K. (1973) 'Reorganization of North-South Trade: A Japanese model of multinational business operation', *Hitotsubashi Journal of Economics*, 13(2): 1-28.
- Kokubuyn, R., Y. Soeya, A. Takahara, and S. Kawashima (2017) *Japan-China Relations in the Modern Era* (Translated by K. Krulak). London and New York: Routledge.
- Koppel, B. M. (1989) 'Cooperation or Co-prosperity? Japan's ascendancy as an ODA power in Asia', in Morrison, C. E. (ed.) *Japan, China, and the Newly Industrialized Economies of Asia: Discussion and papers from a symposium held in Atlanta, Georgia*, pp. 41-47. Honolulu, HI: East-West Center.
- Korhonen, P. (1994a) *Japan and the Pacific Free Trade Area*. London: Routledge.
- Korhonen, P. (1994b) 'The Theory of the Flying Geese Pattern of Development and its Interpretations', *Journal of Peace Research* 31(1): 93-108.
- Kosai, Y. and K. Matsuyama (1991) 'Japanese Economic Cooperation', *The Annals of the American Academy of Political and Social Science*, 513: 62-75.
- Kosai, Y. and V.T. Tran (1994) 'Japan and industrialization in Asia-An essay in memory of Dr. Saburo Okita', *Journal of Asian Economics*, 5(2): 155-176.
- Koschmann, J.V. (1997) 'Asianism's Ambivalent Legacy', in Katzenstein, P. J. and T. Shiraishi (eds) *Network Power: Japan and Asia*, pp. 83-110. Ithaca and London: Cornell University Press.
- Kozul-Wright, R. (1998) 'Spoilt for Choice? Multinational corporations and the geography of international production', *Oxford Review of Economic Policy*, 14(2): 74-92.
- Kozul-Wright, R. and D. Poon (2018) 'Asian development after the *Asian Drama*', *WIDER Working Paper 2018/135*. United Nations University World Institute for Development Economics Reserch (UNU-WIDER).
- Kozul-Wright, R. and P. Raymond (2007) *The Resistible Rise of Market Fundamentalism: Rethinking development policy in an unbalanced world*. London and New York: Zed Books.
- Kong, Y. T. (1999) 'Public Policy in the Singapore Economy', in Adams, F. G. and W. E. James (eds) *Public Policies in East Asian Development: Facing new challenges*, pp. 129-144. Westport, CO: Praeger Publishers.
- Kregel, J.A. (1998) 'East Asia is not Mexico: The difference between balance of payments crisis and debt deflation', in Jomo, K.S. (ed.) *Tigers in Trouble: Financial governance, liberalisation and crises in East Asia*, pp. 44-62. Hong Kong: Hong Kong University Press.
- Kreinin, M.E. and M.G. Plummer (1992) 'Effects of Economic Integration in Industrial Countries on ASEAN and the Asian NIEs', *World Development*, 20(9): 1345-1366.
- Krueger A.O. (1978) *Foreign Trade Regimes and Economic Development: Liberalization attempts and consequences*. Cambridge, MA: Ballinger for the National Bureau of Economic Research.
- Krugman, P. (1996) 'Making Sense of the Competitiveness Debate,' *Oxford Review of Economic Policy*, 12(3): 17-25.
- Krugman, P. (1979) 'A Model of Innovation, Technology Transfer, and the World Distribution of Income,' *Journal of Political Economy* 87(2): 253-266.
- Kuchiki, A. (2007) 'Industrial Policy in Asia'. *IDE Discussion Paper128*. Institute of Developing Economies.
- Kumagai, S. (2008) 'A journey through the secret history of the Flying Geese Model'. *IDE Discussion Paper 158*. Institute of Developing Economies.
- Kurlantzick, J. (2001) 'Is East Asia Integrating?', *Washington Quarterly* 24(4): 19-28.

- Kuruville, S. (1996) 'Linkages between industrialization strategies and industrial relations/human resource policies: Singapore, Malaysia, the Philippines, and India', *Industrial & Labor Relations Review*, 49(4): 635-657.
- Kuruville, S and C.S. Venkataratnam (1996) 'Economic Development and Industrial Relations: The case of South and Southeast Asia', *Industrial Relations Journal*, 27(1): 9-23.
- Kwak, S. and H. Lee (1997) 'Conditions of Economic Development in Korea in the First Half of the Twentieth Century,' in Ikee, A. (ed) *Economic Development in Twentieth Century East Asia: The international context*, pp. 87-99. London and New York: Routledge.
- Kwan, C.H. (2002a) 'The Rise of China and Asia's flying-geese pattern of economic development: an empirical analysis based on US import statistics', NRI papers, 52, 1-19.
- Kwan, C.H. (2002b) 'The Rise of China as an Economic Power: Implication for Asia and Japan', in Hilpert, H.G. and R. Haak, (eds) *Japan and China: Cooperation, competition and conflict*, pp. 12-31. New York: Palgrave.
- Kwon, J. (2011) The East Asian model of economic development, *Asian-Pacific Economic Literature*, 25(2): 116-130.
- Kwon, J. (1994) 'The East Asia Challenge to Neoclassical Orthodoxy', *World Development*, 22(4): 635-644.
- Lai, H.H. (2002) 'China's Western Development Program: Its Rationale, Implementaionn, and Prospects', *Modern China*, 28(4): 432-466.
- Lall, S. (2001) 'World Trade and Developmnet'' in Beynon, R. (ed) *The Routledge Companion in Global Economics*, pp. 21-46. London and New York: Routledge.
- Lall, S. (2000) 'The Technological Structure and Performance of Developing Country Manufactured Export, 1985-98', *Oxford Development Studies*, 28(3): 337-369.
- Lall, S. (1993) 'Promoting Technology Development: The role of technology transfer and indigenous effort', *Third World Quarterly*, 14(1): 95-108.
- Lall, S. (1991) 'Direct Investment in South-East Asia by the NIEs: Trends and prospects', *BNL Quarterly Review* 44(179): 463-480.
- Lall, S. (1978) 'Transnationals, domestic enterprises, and industrial structure in host LDCs: a survey', *Oxford Economic Papers*, 30(2): 217-248.
- Lall, S. and M. Albaladejo (2004) 'China's competitive performance: a threat to East Asian manufactured exports?', *World Development*, 32(9): 1441-1466.
- Lardy, N.R. (1995) 'The role of foreign trade and investment in China's economic transformation', *The China Quarterly*, 144: 1065-1082.
- Laš, L. (2011) 'Sino-Japanese Relations toward the Second Decade of the 21st Century', *Contemporary European Studies*, 01: 53-63.
- Lawrence, R.Z. and D.E. Weinstein (2001) 'Rethinking the Role of the Government Policy in Southeast Asia', in Stiglitz, J. and S. Yusuf (eds) *Rethinking the East Asian Miracle*, pp. 379-408. Washington, D. C.: World Bank, and New York: Oxford University Press.
- Lecler, Y. (2002) 'The Cluster Role in the Development of the Thai Car Industry', *International Journal of Urban and Regional Research*, 26(4): 799-814.
- Lee, C. (2013) 'The Compatibility of East Asia and Asia Pacific Multilateralism: Japan's strategic rationales', in Rose, C and V. Teo (eds) *The United States between China and Japan*, pp. 423-440. New Castles upon Tyne, UK: Cambridge Scholars Publishing.

- Lee, J. (1995) 'Comparative advantage in manufacturing as a determinant of industrialization: the Korean case', *World Development*, 23(7): 1195-1214.
- Lee, K. (1994) 'Political culture in the "advocacy of an expedition to Korea" in the 1970s: an aspect of Japanese imperialism', *Korea Journal of Population and Development*, 23(1): 97-116.
- Lee, K and F. Malerba (2018) 'Economic Catch-up by Latecomers as an evolutionary process', in Nelson R.R., G. Dose, C.E. Helfat, A. Pyka, S. G. Winter, O. P Saviotti, K. Lee, F. Malerba, and K. Doper, *Modern Evolutionary Economics: An overview*, pp. 172-207. Cambridge: Cambridge University Press.
- Lee, K.U. (1999) 'Public Policy in the Korean Economy', in Adams, F.G. and W.E. James (eds) *Public Policies in East Asian Development: Facing new challenges*, pp. 111-128. Westport, CO: Praeger Publishers.
- Lee, S.Y. (1973) 'Some Basic Problems of Industrialization in Singapore', *The Journal of Developing Areas*, 7(2): 185-216.
- Lee, Y.S. (1986) 'Changing export patterns in Korea, Taiwan and Japan', *Weltwirtschaftliches Archiv*, 122(1): 150-163.
- Lee, Y.W. (2008) 'The Japanese Challenge to Neoliberalism: Who and what is 'normal' in the history of the world economy?', *Review of International Political Economy*, 15(4): 506-534.
- Lee, Y.W. (2006) 'Japan and the Asian Monetary Fund: an identity-intention approach', *International Studies Quarterly*, 50(2): 339-366.
- Leng, T. and R. Aoyama (2018) 'Introduction,' in Leng, T. and R. Aoyama (eds) (2018) *Decoding the Rise of China: Taiwanese and Japanese perspectives*, pp 1-10. Singapore: Palgrave Macmillan.
- Leng, T. and R. Aoyama (eds) (2018) *Decoding the Rise of China: Taiwanese and Japanese perspectives*: Singapore: Palgrave Macmillan.
- Li, J.S. (2003) 'Relation-based versus rule-based Governance: an Explanation of the East Asian Miracle and Asian Crisis', *Review of International Economics*, 11(4): 651-673.
- Li, W. (1998) 'An Analysis of China's Regional Economic Development Policy', in Adams, F.G. and W.E. James (eds) *Public Policies in East Asian Development: Facing new challenges*, pp. 231-236. Westport, CO: Praeger Publishers.
- Li, X. (2007) 'East Asian Regional Integration: From Japan-led "Flying-geese" to China-centred "Bamboo capitalism"', CCIS Research Series Working Paper No.3.
- Li, X. and Y. Ding (2015) 'From Export Platform to Market Provider: China's perspectives on its past and future role in a globalized Asian economy', *Third World Quarterly*, 36(11): 2098-2111.
- Li, X. and S. Zhang (2009) 'China and Regional Integration in East Asia: Opportunities, Constraints and Challenges', *CCIS Research Series Working Paper No.9*.
- Liang, Z. (1999) 'Foreign investment, economic growth, and temporary migration: The case of Shenzhen special economic zone, China', *Development and Society*, 28(1): 115-137.
- Lie, C.H. (2012) *Industrial Structure and Development: Hunting for the "Flying Geese"*, The Master's Thesis. University of Oslo.
- Lim, E. (2014) 'The Influence of Foreign Economists in the Early Stages of China's Reforms', in Fan, S, R. Kanbur, S. Wei and X. Zhang (eds) *The Oxford Companion to the Economics of China*, pp. 47-52. Oxford: Oxford University Press.

- Lim, K.F. (2016) “Emptying the cage, changing the birds”: state rescaling, path-dependency and the politics of economic restructuring in post-crisis Guangdong’, *New Political Economy*, 21(4): 414-435.
- Lim, L. (1989) ‘The NICs and the Near NICs in Asia: Economics and political transformation’, in Morrison, C.E. (ed.) *Japan, China, and the Newly Industrialized Economies of Asia: Discussion and papers from a symposium held in Atlanta, Georgia*, pp. 25-32. Honolulu, HI: East-West Center.
- Lim, L.Y.C. (1995) ‘Southeast Asia: Success through international openness’, in Stallings, B. (ed.) *Global Change, Regional Response: The new international context of development*, pp. 238-271. Cambridge: Cambridge University Press.
- Lim, T.C. (2014) *Politics in East Asia: Explaining change and continuity*. Boulder: Lynne Rienner Publishers.
- Lin, S. (2014) ‘Government expenditure’, in Fan, S., R. Kanbur, S. Wei and X. Zhang (eds) *The Oxford Companion to the Economics of China*, pp. 183-189. Oxford: Oxford University Press.
- Lin, J.Y. (1992) ‘Rural reforms and agricultural Growth in China’, *American Economic Review*, 82(1): 34-51.
- Lin, J.Y. (2011) *From Flying Geese to Leading Dragons: New opportunities and strategies for structural transformation in developing countries*. WIDER Annual Lecture 15. United Nations University, World Institute for Development Economics Research (UNU-WIDER).
- Lin, J.Y. (2012) ‘From Flying Geese to Leading Dragons: New opportunities and strategies for structural transformation in developing countries’, *Global Policy*, 3(4) 397-409.
- Lin, J.Y. (2014a) ‘Development Strategy and Industrialization’, in Fan, S., R. Kanbur, S. Wei and X. Zhang (eds) *The Oxford Companion to the Economics of China*, pp. 251-255. Oxford: Oxford University Press.
- Lin, J. Y. (2014b) ‘Industrial Policy Revisited: A new structural economics perspective’, *China Economic Journal*, 7(3): 382-396.
- Lin, J.Y., F. Cai, and Z. Li, (1996) *The Chinese Miracle: Development strategy and economic reform*. Hong Kong: The Chinese University Press.
- Lin, J.Y. and Y. Wang (2017) *Going beyond Aid: Development for structural transformation*. Cambridge: Cambridge University Press.
- Lincoln, E.J. (2014) ‘The Asian Regional Economy’, in Shambaugh, D. and M. Yahuda (eds) *International Relations of Asia* (2nd edn), pp. 317-342. Lanham, ML: Rowman & Littlefield.
- Lipsy, P. Y. (2003) ‘Japan’s Asian Monetary Fund Proposal’, *Stanford Journal of East Asian Affairs*, 3(1): 93-104.
- Liu, H. and Shi, D. (2018). ‘China’s role in the new round of restructuring of regional division of labor in East Asia’, *Asian Education and Development Studies*. Accessed on 4 November 2018, at: <https://www.emeraldinsight.com/doi/pdfplus/10.1108/AEDS-07-2017-0077>
- Ljungwall, C. and O. Sjoberg (2005) ‘The Economic Impact of Globalization in Asia-Pacific: The case of the flying geese’, *Working Paper No. E2005007*. China Center for Economic Research.
- Lu, F. (2014) ‘China’s Inflation in the Post-reform period’, in Fan, S., R. Kanbur, S. Wei and X. Zhang (eds) *The Oxford Companion to the Economics of China*, pp. 200-206. Oxford: Oxford University Press.
- Lu, J., X. Liu and H. Wang (2011) ‘Motives for Outward FDI of Chinese Private Firms: Firm resources, industry dynamics, and government policies’, *Management and Organization Review*, 7(2): 223-248.

- Lui, T.L. and S.W.K. Chiu (2001) 'Flexibility under Unorganized Industrialism? The experience of industrial restructuring in Hong Kong', in Deyo, F.C., R.F. Doner and E. Hershberg (eds) *Economic Governance and the Challenge of Flexibility in East Asia*, pp. 79-105. Lanham, MY: Rowman & Littlefield Publishers, Inc.
- Luo, X. (2014) 'From a Manipulated Revolution to manipulated marketization: A logic of the Chinese model', In Fan, S., R. Kanbur, S. Wei and X. Zhang (eds) *The Oxford Companion to the Economics of China*, pp. 31-35. Oxford: Oxford University Press.
- Lutz, J.M. (1987) 'Shifting Comparative Advantage, the NICs, and the Developing Countries', *The International Trade Journal*, 1(4): 339-358.
- Lutz, J.M. and Y. Kihl (1990) 'The NICs, shifting comparative advantage, and the product life cycle', *Journal of World Trade*, 24(1): 113-134.
- Lockwood, W.W. (1954) *The Economic Development of Japan: Growth and structural change, 1868-1938*. Princeton, NJ: Princeton University Press.
- Lovely, M.E. (2009) 'Agglomeration and Foreign Direct Investment', in Reinert, K. A., R. S. Rajan, A. J. Glass and L. S. Davis (eds) *Encyclopedia of the World Economy*, pp. 12-15. Princeton and Oxford: Princeton University Press.
- Low, L. (2006) 'A Putative East Asian Business Model', *International Journal of Social Economics*, 33(7): 512-528.
- Low, L. (2002) *East Asian regionalism: would that help globalisation, growth and (in)equality?* Paper presented at the 5th annual conference of the Centre for the Study of Globalization and Regionalization, University of Warwick, Coventry, UK, 15-17 March.
- Low, L. (2000) 'The Singapore developmental state in the new economy and polity', *The Pacific Review*, 14(3): 411-441.
- Lutz, J.M. (1987) 'Shifting comparative advantage, the nics, and the developing countries', *The International Trade Journal*, 1(4): 339-358.
- Machado, K.L. (2003) 'Japanese Transnational Production Networks and Ethnic Chinese Business Networks in East Asia: linkages and regional integration', in Jomo, K. S. and B. C. Folk (eds) *Ethnic Business: Chinese Capitalism in Southeast Asia*, pp. 213-24. New York: Routledge Curzon.
- Machado, K.L. (1995) 'Japanese foreign direct investment in East Asia: the expanding division of labor and the future of regionalism', in Chan, S. (ed.) *Foreign Direct investment in a Changing Global Political Economy*, pp. 39-66. New York. St. Martin's Press, Inc.
- MacIntyre, A.S. and B. Naughton (2005) 'The decline of a Japan-Led model of the East Asia economy', in Pempel, T. J. (ed.) *Remapping East Asia: The construction of a region*, pp. 77-100. Ithaca and London: Cornell University Press.
- Mackie, J.A.C. (1992) 'Overseas Chinese Entrepreneurship', *Asian-Pacific Economic Literature*, 6(1): 41-61.
- Mackie, J.A.C. (1988) 'Economic Growth in ASEAN Region', in Hughes, H. (ed.) *Achieving Industrialization in East Asia*, pp. 283-282. Cambridge: Cambridge University Press.
- Macpherson, W.J. (1995) *The Economic Development of Japan 1868-1941*. Cambridge: Cambridge University Press.
- Mahbubani, K. (2007) 'From Confucius to Kennedy: Principles of East Asian governance', in Gill, I., Y. Hunag and H. Kharas (eds) *East Asian Visions: Perspectives on economic development*, pp. 1-23. Washington, D. C.: World Bank and Singapore: Institute of Policy Studies.

- Malafia, T. C. (2016) 'Japanese International Relations: An assessment of the 1971-2011 period', *A Journal of the Brazilian Political Science Association*, 10(1): 1-28.
- Maneschi, A. (2009) 'Comparative Advantage', in Reinert, K. A., R. S. Rajan, A. J. Glass and L. S. Davis (eds) *Encyclopedia of the World Economy*, pp. 198-215. Princeton and Oxford: Princeton University Press.
- Manglapus, R.S. (1976) *Japan in Southeast Asia: Collision course*. New York and Washington, D. C.: Carnegie Endowment for International Peace.
- Markusen, J.R. (2009) 'Foreign direct Investment', in Reinert, K. A., R. S. Rajan, A. J. Glass and L. S. Davis (eds) *Encyclopedia of the World Economy*, pp. 444-450. Princeton and Oxford: Princeton University Press.
- Martin, B. (1990) 'The German Role in the Modernization of Japan', *Oriens Extremus*, 33(1): 77-88.
- Marukawa, T. (2002) 'Japan's FDI and China's Industrial Development in the Automobile, Electronics and Textiles', in Hilpert, H. G. and R. Haak (eds) *Japan and China: Cooperation, competition and conflict*, pp. 174-193. New York: Palgrave.
- Martin, K. (1991) 'Modern development Theory', in Martin, K. (ed.) *Strategies of Economic Development: Readings in the political economy of industrialization*, pp. 27-73. London: MacMillan Academic and Professional Ltd.
- Martin, K. (ed.) (1991) *Strategies of Economic Development: Readings in the political economy of industrialization*. London: MacMillan Academic and Professional Ltd.
- Martin, L.L. (ed.) (2015) *The Oxford Handbook of The Political Economy of international Trade*. Oxford: Oxford University Press.
- Mason, M. (1987) 'Foreign Direct Investment and Japanese Economic Development, 1899-1931,' *Business and Economic History*, 2nd series 19, 93-107.
- Masuda, M. (2003) 'Japan's Changing ODA Policy towards China', *China Perspectives*, No 47. French Centre for Research on Contemporary China.
- Mathews, J.A. (2006) 'Catching-up Strategy and the Latecomer Effect in Industrial Development', *New Political Economy*, 11(3): 313-335.
- Mathews, J.A. (2005) 'The Intellectual Roots of Latecomer Industrial Development', *International Journal of Technology and Globalisation*, 1(3/4): 433-450.
- Mattoo, A. and A. Subramanian (2014) 'China and the WTO', in Fan, S., R. Kanbur, S. Wei and X. Zhang (eds) *The Oxford Companion to the Economics of China*, pp. 119-124. Oxford: Oxford University Press.
- Mayer, J. (1996) 'Learning sequences and structural diversification in developing countries', *The Journal of Development Studies*, 33(2): 210-229.
- Mayer, J. (2003) 'The Fallacy of Composition: A review of literature'. UNCTAD Discussion Paper 166. Geneva: UNCTAD.
- McCawley, P. (2017). *Banking on the Future of Asia and the Pacific: 50 Years of the Asian Development Bank*. Manila: Asian Development Bank.
- McGlinchey, S., R. Walters and C. Scheinplflug (eds) (2017) *International Relations Theory*. Bristol, UK: E-International Relations Publishing.
- McKay, H. and L. Song (eds) (2012) *Rebalancing and sustaining growth in China*. ANU E Press.
- Meier, G.M. (1989) *International Economics: The theory and policy*. New York and Oxford: Oxford University Press.

- Memis, E. (2009) *The Potential for Cooperative Regional Industrial Development Strategies in Asia and the Implications of Emerging China and India*. UNDP Regional Centre for Asia Pacific, Colombo Office Policy Paper Series.
- Memis, E. and M.F. Montes (2006) 'Assessing RAT in the Context of the Flying Geese Framework', *UNU-CRIS Occasional Paper O-2006/18*.
- Menon, J. (1998) 'The expansion of AFTA', *Asian Pacific Economic Literature*, 12(2): 10-22.
- Meyer, C. (2011) *China or Japan: Which will lead Asia?* London: C. Hurst & Co. Publishers Ltd. (Originally published in 2010, *Chine ou Japon*. Presses de Sciences Po.)
- Migdal, J. S. (1988) *Strong Societies and Weak States: State-society relations and state capabilities in the third world*. Princeton: Princeton University Press.
- Milberg, W. (2004) 'Globalized Production: Structural challenges for developing country workers', in Milberg, W. (ed) *Labor and the Globalization of Production: Causes and consequences of industrial upgrading*, pp.1-18. New York: Palgrave Macmillan Ltd.
- Milberg, W. (1994) 'Technology gap', in Arestis P. and M Sawyer (eds) *The Elgar Companion to Radical Political Economy*, pp. 415-419. Hants, UK: Edward Elgar Publishing Limited.
- Milberg, W. (ed) (2004) *Labor and the Globalization of Production: Causes and consequences of industrial upgrading*. New York: Palgrave Macmillan Ltd.
- Miller, D. and P.H. Friesen (1984) "A longitudinal study of the corporate life cycle", *Management Science*, 30(10) 1161-1183.
- Minambres Garcia, J.J. (2016) 'Japanese Capital Internationalization and Its Regional Leadership in Southeast Asia', *Revista de Mundial*, 42, 109-128.
- Mingqi, X. (2003) 'East Asian Economic Integration: China's perspective and policy', *Pacific Economic Paper No.341*. The Australian National University.
- Minns, J. (2001) 'Of Miracle and Models: The rise and decline of the developmental state in South Korea,' *Third Worlds Quarterly*, 22(6) 1025-1043
- Mochizuki, M.M. (2007) 'Japan's shifting strategy toward the rise of China', *The Journal of Strategic Studies*, 30(4-5): 739-776.
- Mochizuki, M.M. (1995) 'Japan as an Asian Power', in Ross, R.S. (ed.) *East Asia in Transition: Toward a new regional order*, pp. 124-159. Singapore: Institute of Southeast Asian Studies.
- Montiel, P. J. (2014) *Ten Crises*. New York: Routledge.
- Moon, W. and Y. Rhee (2012) *Asian Monetary Integration: Coping with a new monetary order after the global crisis*. Cheltenham, UK and Northampton, USA: Edward Elgar Publishing Limited.
- Moore, T.G. (2008) 'China as an Economic Power in the Contemporary Era of Globalization', *Journal of Asian and African Studies*, 43(5): 497-521.
- Morris, A.D. (2004) 'Taiwan's History: An introduction', in Jordan, D.K., A.D. Morris and M.L. Moskowitz (eds) *The Minor Arts of Daily Life: Popular culture in Taiwan*, pp. 3-31. Honolulu: The University of Hawaii Press.
- Morris, J. (1991) 'Globalization and Global Localization: Explaining trends in Japanese foreign manufacturing investment', in Morris, J. (ed.) *Japan and the Global Economy: Issue and trends in the 1990s*, pp. 1-13. London and New York: Routledge.
- Morris, J. (ed.) (1991) *Japan and the Global Economy: Issue and trends in the 1990s*. London and New York: Routledge.

- Morrison, C.E. (ed.) (1989) *Japan, China, and the Newly Industrialized Economies of Asia: Discussion and papers from a symposium held in Atlanta, Georgia*. Honolulu, HI: East-West Center.
- Morrison, W.M. (2018) *China's Economic Rise: History, trends, challenges, and implications for the United States*. Congressional Research Service 7-5700.
- Morrissey, O., R.A. Lopez and K. Sharma (eds) (2015) *Handbook on Trade and Development*. Cheltenham, UK and Northampton, USA: Edward Elgar Publishing Limited.
- Morris-Suzuki, T. (1991) 'Reshaping the international Division of Labour: Japanese manufacturing investment in South-East Asia', in Morris, J. (ed.) *Japan and the Global Economy: Issue and trends in the 1990s*, pp. 14-44. London and New York: Routledge.
- Morse, R.A. (1987-1988) 'Japan's Drive to Pre-Eminence', *Foreign Policy*, 69 (winter): 3-21.
- Mortimore, M. (1993) 'Flying Geese or Sitting Ducks? Transnational and Industry in Developing Countries', *CEPAL Review*, 51: 15-34. Santiago: ECLAC.
- Mortimore, M. (1992) 'A New International Industrial Order', *CEPAL Review*, 48: 39-60. Santiago: ECLAC.
- Muldavin, J.S.S. (2000) 'Aiding Regional Instability? The geopolitical paradox of Japanese development assistance to China', *Geopolitics*, 5 (3): 22-47.
- Mukherjee, K. (2013) 'Prospects and Challenges of ASEAN', *Strategic Analysis*, 37(6): 742-757.
- Murakawa, T. (2002) 'Japanese FDI and China's Industrial Development in the Automobile, Electronics and Textile Industries', in Hilpert, H.G. and R. Haak (eds) *Japan and China: Cooperation, competition and conflict*, pp. 174-193. New York: Palgrave.
- Muraokas, T. (1991) 'Pursuing the New International Economic Order: overseas investment and trade of Japan, the Asian NIEs and ASEAN', in Morris, J. (ed) *Japan and the Global Economy: Issue and trends in the 1990s*, pp. 154-172. London and New York: Routledge.
- Murata, K. (2017) 'The 1990s: from a drifting Relationship to a redefinition of the Alliance', in Iokibe, M. (ed.), Minohara, T. (trans. ed.) *The History of US-Japan Relations: From Perry to the Present*, pp. 215-233. Palgrave Macmillan: Singapore.
- Munakata, N. (2002) *Whither East Asian economic integration*. Brooking Working Paper. Washington, D. C.: The Brookings Institution.
- Myint, H. (1959) 'The "Classical Theory" of International Trade and the Underdeveloped Countries', *Economic Journal*, 68 (270): 317-37.
- Myrdal, G. (1968) *Asian Drama: An inquiry into the poverty of nations*. Harmondsworth: Penguin Books.
- Nabers, D. (2010) 'Power, leadership, and hegemony in international politics: The case of East Asia', *Review of International Studies*, 36(4): 931-949.
- Nabers, D. (2008) 'China, Japan and the Quest for Leadership in East Asia', GIGA Working Papers. No.67.
- Nakagane, K. (2013) 'China's Economic Development and Sino-Japanese Economic Relationships: Beyond the flying geese pattern theory', *The Journal of Contemporary China Studies*, 2(1): 29-54.
- Nakagane, K. (2002) 'Japanese Direct Investment in China: Its effects on China's economic development', in Hilpert, H. G. and R. Haak (eds) *Japan and China: Cooperation, competition and conflict*, pp. 52-71. New York: Palgrave.
- Nakamura, M, and W. M. Fruin (2012) 'Implications of the Japan model for corporate governance and management for China and other emerging economies in Asia', *Journal of Asia Business Studies*, 6(2):122-142.

- Nasadurai, H.E.S. (2014) 'The Political Economy of Southeast Asia's Foreign Economic Policies and Relations', in Pekkanen, S.M., J. Ravenhill and R. Foot (eds) *Oxford Handbook of the International Relations of Asia*, pp. 217-240. Oxford: Oxford University Press.
- Nasadurai, H.E.S. (2003) 'Attempting developmental regionalism through AFTA: the domestic sources of regional governance', *Third World Quarterly*, 24(2): 235-253.
- Nasadurai, H. (2002) *Globalisation and Economic Realism: A survey and critique of literature*. CSGR Working Paper. No. 108/02.
- Naseem, S.M. (2003) 'Rethinking the East Asian Miracle', *Journal of Economic Studies*, 30(6): 636-644.
- Natsuda, K. (2008) 'Japan's Foreign Economic Policies towards East Asia in the Post War Era', *Asia Profile*, 36(5): 453-468.
- Natsuda, K. and G. Butler (2005) 'Building Institutional Capacity in Southeast Asia: Regional Governed Interdependence', *ASEAN Economic Bulletin*, 22(3): 331-339.
- Natsuda, K. and K. Otsuka (2007) 'East Asian Industrial Development: The Flying Geese or International Production Networks?', *Asia Profile*, 35(4): 293-311.
- Natsuda, K. and J. Thoburn (2013) 'Industrial Policy and the Development of the Automotive Industry in Thailand', *Journal of the Asia Pacific Economy*, 18(3): 413-437.
- Naudé, W. (2010) 'Industrial Policy: Old and new issues', *UNU-WIDER Working Paper No.2010/106*.
- Nayyar, D. (2013) *Catch Up: Developing countries in the world economy*. Oxford: Oxford University Press.
- Nederveen Pieterse, J. (2015a) 'China's contingencies and globalisation', *Third World Quarterly*, 36(11): 1985-2001.
- Nederveen Pieterse, J. (2015b) 'What happened to the Miracle Eight? Looking East in the twenty-first century', *Canadian Journal of Development Studies*, 36(3): 263-282.
- Nester, W. R. (1992) *Japan and the Third World: Patterns, power, prospects*. London: Macmillan.
- Nester, W.R. (1990) *Japan's Growing Power over East Asia and the World Economy: Ends and means*. London: Macmillan.
- Ng, B.K. (2007) 'The Economic Rise of China: Its Threats and Opportunities from the Perspective of Southeast Asia', *The Copenhagen Journal of Asian Studies*, 25: 9-27.
- Ng, F. and A. Yeats (2003) *Major Trade trends in East Asia: What are their implications for regional cooperation and growth?* World Bank Policy Research Working Paper 3084.
- Nuechterlein, D.E. (1967) 'Thailand: Another Vietnam?', *Asian Survey*, 7(2)126-130.
- Numazaki, I. (1998) 'The Export-Oriented Industrialization of Pacific Rim Nations and Their Presence', in Kim, E. M. (ed.) *The Four Tigers: Economic development and the global political economy*, pp. 61-89. San Diego, CA: Academic Press.
- O'brien, R. and M. Williams (2010) *Global Political Economy: Evolution and dynamics* (3rd edition). New York: Palgrave Macmillan.
- Osborne, M. (1986) *China's Special Economic Zones*. Paris: OECD.
- Ogura, K. (2015) *Japan's Asian Diplomacy: A legacy of two millennia*. (Translated by D. Nobel), Tokyo: International House of Japan. Originally in Japanese *Nihon no Ajim gaiko: nisen'nen no keifu*. (2013).
- O'Hearn, D. (1999) 'Tigers and Transnational Corporations: {athways from the periphery?}', in Munck, R. and D. O'Hearn (eds) *Critical Development Theory: Contributions to a new paradigm*, pp. 113-134. London and New York: Zed Books.

- Ohno, K. (2018) *The History of Japanese Economic Development: Origins of private dynamism and policy competence*. London and New York: Routledge.
- Ohno, K. (2013) *Learning to Industrialize: From given to policy-aid value creation*. London and New York: Routledge.
- Ohno, K. (2006) *The Economic Development of Japan: The path travelled by Japan as a developing country*. GRIP Development Forum. (Translated from *Tojokoku Nippon no Ayumi: Edo kara Heisei madeno Keizai Hatten*, Yuhikaku Publishing Co Ltd., Tokyo, 2005.)
- Ohno, K. and I. Ohno (eds) (1998) *Japanese Views on Economic Development: Diverse paths to the market*. London and New York: Routledge.
- Ohtsuki, T. (2017) 'Changes in the Pacifism of Akamatsu Kaname from the Interwar period to WWII', in Bientinesi, F. and R. Patalano (eds) *Economists and War: A heterodox perspective*, pp. 117-132. New York: Routledge.
- Ohtsuki, T. (2011) 'The Background of K. Akamatsu's *Gankou Keitai Ron* and its Development: Early Empirical Analysis at Nagoya', in Kurz, H. D., T. Nishizawa and K. Tribe (eds) *The Dissemination of Economic Ideas*, pp. 292-314. Chaltenham, UK and Northampton, MA, USA: Edward Elgar.
- Ohtsuki, T. (2010) *Akamatsu Kaname's "gankou keitai ron" and its development: his Nagoya period and the perspectives of a stage theory of economic development* (in Japanese). PhD Dissertation submitted to the Tokyo University of Foreign Studies. Unpublished document.
- Ojendal, J. (2001) 'South East Asia at a constant crossroad: an ambiguous "new region"', in Schulz, M., F. Soderbaum and J. Ojendal (eds) *Regionalization in a Globalizing World: A comparative perspective on forms, actors and processes*, pp. 147-172. London and New York: Zed Book.
- Okita, S. (1991) 'Japan's Role in Asia-Pacific Cooperation', *The Annals of the American Academy of Political and Social Science*, 513(1): 25-37.
- Okita, S. (1986) 'Pacific development and its implications for the world economy', *Proceedings of the Academy of Political Science*, 36(1): 23-34.
- O'Malley, W. J. (1988) 'Culture and Industrialization', in Hughes, H. (ed.) *Achieving Industrialization in East Asia*, pp. 327-343. Cambridge: Cambridge University Press.
- Oman, C.P., D. H. Brooks and C. Foy, (eds) (1997) *Investing in Asia*. Paris: OECD.
- Oman, T. (1994) 'Foreign direct investment and economic development', *Transnational Corporation*, 1(1): 27-54.
- Ortmann, S. and M.R. Thompson (2014) 'China's Obsession with Singapore: Leaning authoritarian modernity', *The Pacific Review*, 27(3): 433-455.
- Ottaviano, G.I.P. (2009) 'New Economic Geography', in Reinert, K.A., R.S. Rajan, A.J. Glass and L.S. Davis (eds) *Encyclopedia of the World Economy*, pp. 821-825. Princeton and Oxford: Princeton University Press.
- Otsuka, K., G. Ranis and G.R. Saxonhouse (1988) *Comparative Technology Choice in Development: The Indian and Japanese Cotton Textile Industries*. London: MacMillan Press.
- Ozawa, T. (2016) *The Evolution of the World Economy: The 'Flying Geese' theory of multinational corporations and structural transformation*. Cheltenham, UK and Northampton, USA: Edward Elgar Publishing Limited.

- Ozawa, T. (2015) ‘The “Flying-Geese” Theory of Catch-up Growth and International Business’, in Yu, F. T. and H.-D. Yan (eds) *Handbook of East Asian Entrepreneurship*, pp. 18-29. London and New York: Routledge.
- Ozawa, T. (2010) *The (Japan-Born) “Flying-Geese” Theory of Economic development Revisited – and reformulated from a Structuralist Perspective. Working Paper Series. No. 291.* Columbia Business School.
- Ozawa, T. (2009) *The Rise of Asia: The “Flying-Geese” Theory of Tandem Growth and Regional Agglomeration.* Cheltenham, UK, and Northampton, USA: Edward Elgar Publishing Limited.
- Ozawa, T. (2008) ‘History Repeats Itself, Evolutionary Structural Changes and TNC’s involvement in Infrastructure Overseas, Flying-Geese Style’, *Working Paper Series. No. 261.* Columbia Business School.
- Ozawa, T. (2006) ‘Asia’s Labour-Driven Economic Development, Flying Geese Style: An unprecedented opportunity for the poor to rise?’, *UNU-WIDER Research Paper No. 2006/59.*
- Ozawa, T. (2005a) ‘Asia’s labor-driven economic development, flying-geese style: an unprecedented opportunity for the poor to rise?’. *Discussion Paper 40.* APEC Study Center, Columbia University.
- Ozawa, T. (2005b) *Institutions, Industrial Upgrading, and Economic Performance of Japan: The “flying geese” paradigm of catch-up growth.* Cheltenham, UK and Northampton, USA: Edward Elgar Publishing Limited.
- Ozawa, T. (2004) ‘Hegelian dialectics and evolutionary economic change’, *Global Economic Journal*, 4(1): 1-21.
- Ozawa, T. (2003) ‘Pax America-led macro-clustering and flying-geese-style catch-up in East Asia: mechanisms of regionalized endogenous growth’, *Journal of Asian Economics*, 13(6): 699-7013.
- Ozawa, T. (2000) ‘The “hidden” side of the “flying-geese” catch-up: Japan’s dirigiste institutional setup and a deepening financial morass’, *Journal of Asian Economics*, 12(4): 471-491.
- Ozawa, T. (1996) ‘Japan: The macro-IDP, meso-IPP and the technology development path (TDP)’, In Dunning, J.H. and R. Narula (eds) *Foreign Direct Investment and Government: Catalysts for economic restructuring*, pp. 142-173. London: Routledge.
- Ozawa, T. (1992a) ‘Foreign Direct Investment and Economic Development’, *Transnational Corporation*, 1(1): 27-54.
- Ozawa, T. (1992b) ‘The New Economic Nationalism and the “Japanese Disaster”: The conundrum of managed economic growth’, *Journal of Economic Issues*, 30(2): 483-491.
- Ozawa, T. (1979) ‘International Investment and Industrial Structure: New theoretical implications from the Japanese experience’, *Oxford Economic Papers*, 31(1): 72-92.
- Ow, C.H. and C.H. Ow-Taylor (1993) ‘Graduation from the US GSP: A comparative study of the East Asian newly industrializing economies’, *Journal of Asian Economics* 4(1): 89-98.
- Pack, H. and L.E. Westphal (1986) ‘Industrial strategy and technological change: theory versus reality’, *Journal of Development Economics*, 22(1): 87-128.
- Page, J.M. (1994) ‘The East Asian Miracle: An introduction’, *World Development* 22(4): 615-625.
- Palley, T.I. (2002) *A New Development Paradigm: Domestic demand-led growth.* Foreign Policy in Focus Discussion Paper, September: <https://fpif.org/a-new-development-paradigm-domestic-demand-led-growth> (Accessed 18 June 2017).

- Palma, J.G. (2009) 'Flying geese and waddling ducks: the different capabilities of East Asia and Latin-America to "demand-adapt" and "supply-upgrade" their export productive capacity', in Cimoli, M., G. Dosi and J.E. Stiglitz (eds) *Industrial Policy and Development: The political economy of capabilities accumulation*, pp. 203-238. Oxford: Oxford University.
- Panchamukhi, V.R. (1993) 'Strengthening complementarities and intraregional trade in Asia and the Pacific', *Economic Bulletin for Asia and the Pacific*, 43 (2): 71-90.
- Pangestu, M. (2007) 'Visions of East Asia: Three engines for a way forward' in Gill, I., Y. Hunag and H. Kharas (eds) *East Asian Visions: Perspectives on economic development*, pp. 231-243. Washington, D. C.: World Bank and Singapore: Institute of Policy Studies.
- Park, D. (2000) 'The Dichotomy between Northeast Asian Capitalism and Southeast Asian Capitalism', *Journal of the Asia Pacific Economy*, 5(3): 234-254.
- Park, J.H. (2002) 'The East Asian model of economic development and developing countries', *Journal of Developing Societies*, 18(4): 330-353.
- Park, P.H. (2009) 'The Collapse of the Flying Geese Development Model: Advent of new order in East Asia and a foreign policy alternative for the Republic of Korea', *The Review of Korean Studies*, 12(4): 155-180.
- Park, P.H. (2000) 'A Reflection on the East Asian Development Model: Comparison of the South Korean and Taiwanese Experience', in Richter, F.J. (ed.) *The East Asian Development Model: Economic growth, institutional failure and the aftermath of the crisis*, pp. 141-168. London: Macmillan Press Ltd.
- Park, Y.C. and C.Y. Song (2011) 'Prospects for monetary cooperation in East Asia', *ADB Working Paper No. 314*. Asian Development Bank Institute.
- Park, Y.C. and Y. Wang (2005) 'The Chiang Mai initiative and beyond', *The World Economy*, 28(1): 91-101.
- Park, Y.I. and K. Anderson (1991) 'The Rise and Demise of Textiles and Clothing in Economic Development: The case of Japan', *Economic Development and Cultural Change*, 39(3): 531-548.
- Park, Y.J. and Y. Oh (2010) 'East Asian Financial and Monetary Cooperation and Its Prospect: Beyond the CMI', *KIEP Working Paper 10-04*.
- Parry, T. (1988) 'The Role of Foreign capital in East Asian Industrialization, Growth and Development', in Hughes, H. (ed.) *Achieving Industrialization in East Asia*, pp. 95-128. Cambridge: Cambridge University Press.
- Pasuk, P. (1990) *The New Wave of Japanese Investment in ASEAN*. Singapore: Institute of Southeast Asian Studies.
- Patrick, H. (ed.) (1976) *Japanese Industrialization and Its Social Consequences*. Berkeley: University of California Press.
- Patrick, H.T. and H. Rosovsky (eds) (1976) *Asia's New Giant*. Washington, D.C.: Brookings Institution.
- Payne, A. and N. Phillips (2010) *Development*. Cambridge: Polity Press.
- Pearson, M. M. (2005) 'The Institutional, Political and Global Foundations of China's Trade Liberalization', in Pekkanen, S. M. and K. S. Tsai (eds) *Japan and China in the World Political Economy*, pp. 89-107. London and New York: Routledge.
- Pearson, M.M. (2014) 'China's Foreign Economic Relations and Policies', in Pekkanen, S.M., J. Ravenhill and R. Foot (eds) *The Oxford Handbook of the International Relations of Asia*, pp. 160-178. Oxford: Uxford Press.

- Pekkanen, S.M., and K.S. Tsai (2014) 'The Evolution of Foreign Direct Investment,' in Pekkanen, S.M., J. Ravenhill and R. Foot (eds) *Oxford Handbook of the International Relations of Asia*, pp. 327-347. Oxford: Oxford University Press.
- Pekkanen, S.M. and K.S. Tsai (2005) 'Late Liberalizer; Comparative perspectives on Japan and China,' in Pekkanen, S.M. and K.S. Tsai (eds) *Japan and China in the World Political Economy*, pp. 11-28. London and New York: Routledge.
- Pekkanen, S.M., J. Ravenhill and R. Foot (eds) (2014) *Oxford Handbook of the International Relations of Asia*. Oxford: Oxford University Press.
- Pekkanen, S.M. and K.S. Tsai (eds) (2005) *Japan and China in the World Political Economy*. London and New York: Routledge.
- Pempel, T.J. (2015) 'Back to the Future? Japan's search for a meaningful new role in the emerging regional order', *Asian Perspective*, 39(3): 361-380.
- Pempel, T. J. (2005a) 'Introduction: Emerging webs of regional connectedness', in Pempel, T. J. (ed.) *Remapping East Asia: The construction of a region*, pp. 1-28. Ithaca and London: Cornell University Press.
- Pempel, T.J. (2005b) 'The Race to Connect East Asia: An unending steeplechase', *Asian Economic Policy Review*, 1(2): 239-254.
- Pempel, T.J. (2005c) 'Revisiting the Japanese Economic Model', in Pekkanen, S. M. and K. S. Tsai (eds) (2005) *Japan and China in the World Political Economy*, pp. 29-44. London and New York: Routledge.
- Pempel, T.J. (1999) 'The Developmental State in a Changing World Economy', in Woo-Cumings, M. (ed.) *The Developmental State*, pp. 137-181. Ithaca and London: Cornell University Press.
- Pempel, T.J. (1998) *Regime Shift: Comparative dynamics of the Japanese political economy*. Ithaca: Cornell University Press.
- Pempel, T.J. (1997) 'Transpacific Torii', in Katzenstein P.J. and T. Shiraishi (eds) *Network Power: Japan and Asia*, pp. 47-82. Ithaca and London: Cornell University Press.
- Pempel, T.J. (ed.) (2005) *Remapping East Asia: The construction of a region*. Ithaca and London: Cornell University Press.
- Peng, D. (1997) 'Does Confucianism matter? The role of the Oriental tradition in economic development of East Asia', in Ikee, A. (ed) (1997) *Economic Development in Twentieth Century East Asia: The international context*, pp.170-189. London and New York: Routledge.
- Peng, D. (2000) 'The Changing nature of East Asia as an economic region', *Pacific Affairs*, 73(2): 171-191.
- Perkins, D.H. (2014) 'China's Future Performance and Development Challenges', in Fan, S., R. Kanbur, S. Wei and X. Zhang (eds) *The Oxford Companion to the Economics of China*, pp. 61-65. Oxford: Oxford University Press.
- Perkins, D.H. (2013) *East Asian Development: Foundations and strategies*. Cambridge, MA: Harvard University Press.
- Perkins, D.H. (1994) 'There are at least three models of East Asian development', *World Development*, 22(4): 655-661.
- Perkins, D.H. and Tang, J.P. (2017) 'East Asian Industrial Pioneers: Japan, Korea, and Taiwan', in O'Rourke, K.H. and Williamson, J.G. (eds) *The Spread of Modern Industry to the Periphery since 1871*, pp. 169-196. Oxford: Oxford University Press.

- Petri, P.A. (2012) 'The determinants of bilateral FDI: Is Asia different?', *Journal of Asian Economics*, 23(3): 201-209.
- Petri, P.A. (1996) 'Historical roots of Asia-Pacific interdependence', in Das, D.K. (ed.) *Emerging Growth Pole: The Asian Pacific Economy*, pp. 299-326. Singapore: Prentice Hall.
- Petri, P.A. (1993) 'The East Asian trading bloc: an analytical history', in Frankel, J.A. and M. Kahler (eds) *Regionalism and Rivalry: Japan and the US in Pacific Asia*, pp. 21-48. University of Chicago Press.
- Pettman, R. (1999) 'Globalization and regionalism: the costs of dichotomy', in Hettne, B., A. Inotai and O. Sankel (eds) *Globalism and the New Regionalism*, pp. 181-201. London: Macmillan Press Ltd.
- Pillay, S.S. (2000) 'The Malaysian Model: Governance, economic management and the future of the developmental state', in Richter, F.J. (ed.) *The East Asian Development Model: Economic growth, institutional failure and the aftermath of the crisis*, pp. 203-238. London: Macmillan Press Ltd.
- Polli, R. and V. Cook (1969) 'Validity of the Product Life Cycle', *The Journal of Business*, 42(4): 385-400
- Potter, R.B., T. Binns, J.A. Elliott, and D. Smith (2008) *Geographies of Development: An introduction to development studies* (3rd edition). Harlow, UK: Pearson Education.
- Prasad, E. and B. Zhang. (2014) 'Monetary Policy in China', in Fan, S., R. Kanbur, S. Wei and X. Zhang (eds) *The Oxford Companion to the Economics of China*, pp. 193-199. Oxford: Oxford University Press.
- Prieue, J. (2015) 'Seven Strategies for Development in Comparison', in Calcagno, A., S. Dullien, A. Marquez-Velazquez, N. Maystre and J. Piewe (eds) (2015a) *Rethinking Development Strategies After the Financial Crisis – Vol. I: Making the Case for policy space*, pp.27-44. New York and Geneva: United Nations.
- Pryke, S. (2012) 'Economic nationalism: Theory, history and prospects', *Global Policy*, 3(3): 281-291.
- Qu, Y., F. Cai, and X. Zhang (2013) 'Has the "Flying Geese" Paradigm Occurred in China?', *China Economist*, 8(6) 18-30.
- Qu, Y., F. Cai, and X. Zhang (2012) 'Has the "flying geese" phenomenon in industrial transformation occurred in China?', in McKay, H. and L. Song (eds) *Rebalancing and Sustaining Growth in China*, pp. 93-110. Banberra: Australian National University Press.
- Radelet, S. and J. Sachs (1997) 'Asia's reemergence', *Foreign Affairs*, 76(6): 44-59.
- Radosevic, S. (1999) *International Technology Transfer and "Catch Up" in Economic Development*. Cheltenham, UK and Northampton, USA: Edward Elgar Publishing Limited.
- Ramasamy, B. and V.T. Viana (1995) 'ASEAN's Foreign Direct Investment into the People's Republic of China', *Discussion Paper 95.12*. School of Applied and International Economics, Massey University.
- Rana, P. (2006) 'Economic Integration in East Asia: Trends, Prospects and a Possible Roadmap'. *ADB Working Paper on Regional Economic Integration No.2*.
- Rana, P.B. (1990) 'Shifting comparative advantage among Asian and Pacific countries', *The International Trade Journal*, 4(3): 243-258.
- Rapp, W.V. (1975) 'The many possible extensions of product cycle analysis', *Hitotsubashi Journal of Economics*, 16(1): 22-29.
- Rasiah, R. (2011) 'Is Malaysia Facing Negative Deindustrialization?', *Pacific Affairs*, 84(4): 714-735.

- Ravenhill, J. (2014) 'Production networks in Asia', in Pekkanen, S. M., J. Ravenhill and R. Foot (eds) *Oxford Handbook of the International Relations of Asia*, pp. 348-368. Oxford: Oxford University Press.
- Reilly, J. (2012) 'A norm-taker or a norm-maker? Chinese aid in Southeast Asia', *Journal of Contemporary China*, 21(73): 71-91.
- Reinert, E.S. (1999) 'The Role of the State in Economic Growth', *Journal of Economic Studies*, 26(4/5): 268-326.
- Reinert, K.A., R.S. Rajan, A.J. Glass and L.S. Davis (eds) (2009) *Encyclopedia of the World Economy*. Princeton and Oxford: Princeton University Press.
- Reinhardt, N. (2000) 'Back to Basics in Malaysia and Thailand: The role of resource-based exports in their export-led growth', *World Development*, 28(1): 57-77.
- Rhodes, M. and R. Higgott (2000) 'Introduction: Asian crises and the myth of capitalist "convergence"', *The Pacific Review*, 13(1): 1-19.
- Richter, F.J. (ed.) (2000) *The East Asian Development Model: Economic growth, institutional failure and the aftermath of the crisis*. London: Macmillan Press Ltd.
- Riedel, J. (1974) 'The Industrialization of Hong Kong'. *KIEL Discussion Paper 124*. Kiel Institute of World Economics.
- Rix, A. (1980) *Japan's Economic Aid: Policy-making and politics*. London: Croom Helm.
- Rix, A. (1989-1990) 'Japan's Foreign Aid: A capacity for leadership?', *Pacific Affairs*, 62(4): 461-475.
- Robertson, P.E. (2014) 'The Global Impact of China's Growth', in Fan, S., R. Kanbur, S. Wei and X. Zhang (eds) *The Oxford Companion to the Economics of China*, pp. 97-103. Oxford: Oxford University Press.
- Rodrik, D. (2016) 'Premature Deindustrialization', *Journal of Economic Growth*, 21(1):1-33.
- Rodrik, D. (2013) *The Globalization Paradox: Why global markets, states, and democracy can't coexist*. Oxford: Oxford University press.
- Rodrik, D. (1992) *The Rush to Free Trade in the developing World: Why so late? Why now? Will it last?* (No. 3947). National Bureau of Economic Research.
- Rolland, N. (2017) 'China's "Belt and Road Initiative": Underwhelming or Game-changer?', *The Washington Quarterly*, 40(1): 127-142.
- Root, H. L. (2000) 'Suharto's Tax on Indonesia's Future', in Richter, F.J. (ed.) *The East Asian Development Model: Economic growth, institutional failure and the aftermath of the crisis*, pp. 228-238. London: Macmillan Press Ltd.
- Rose, C. and V. Teo (eds) *The United States between China and Japan*. New Castles upon Tyne, UK: Cambridge Scholars Publishing.
- Ross, R.S. (1995a) 'China and the Stability of East Asia' in Ross, R.S. (ed.) *East Asia in Transition: Toward a new regional order*, pp. 89-123. Singapore: Institute of Southeast Asian Studies.
- Ross, R.S. (1995b) 'Introduction: East Asia in Transition', in Ross, R.S. (ed.) *East Asia in Transition: Toward a new regional order*, pp. xi-xx. Singapore: Institute of Southeast Asian Studies.
- Ross, R.S. (ed.) (1995) *East Asia in Transition: Toward a new regional order*. Singapore: Institute of Southeast Asian Studies.

- Roubini, N. and A. Wolfe (2014) 'China is Heading for a Financial Crisis and a Sharp Slowdown', in Fan, S., R. Kanbur, S. Wei and X. Zhang (eds) *The Oxford Companion to the Economics of China*, pp. 207-211. Oxford: Oxford University Press.
- Routley, L. (2012) *Developmental State: A review of the literature*. ESID Working Paper No. 03.
- Rowthorn, R.E. (1996) "East Asian Development: The Flying Geese paradigm reconsidered", *Study No. 8*. Background paper prepared for the International Conference on East Asian Development Policy. 29 February and 1 March 1996. Kuala Lumpur.
- Rowthorn, R. and K. Coutts (2004) 'De-industrialisation and the balance of payments in advanced economies'. UNCTAD Discussion Paper 170. Geneva: United Nations.
- Roy, D. (2004) 'Stirring Samurai, disapproving dragon: Japan's growing security activity and Sino-Japan relations', *Asian Affairs: An American Review*, 31(2): 86-101.
- Rozman, C. (2012) 'East Asian Regionalism', in Beeson, M and R. Stubbs (eds) *Routledge Handbook of Asian Regionalism*, pp. 21-32. London and New York: Routledge.
- Ruan J. and X. Zhang (2014) "Flying geese" in China: the textile and apparel industry's pattern of migration", *Journal of Asian Economics* 34:79-91.
- Ruan, J. and X. Zhang (2010) 'Do Geese Migrate Domestically? Evidence from the Chinese textile and apparel industry'. *IFPRI Discussion Paper 01040*. International Food Policy Research Institute.
- Ruigrok, W. (2006) 'Multinational Corporations on the Global Economy', in Stubbs, R. and R.D. Underhill (eds) *Political Economy and the Changing Global Order* (3rd edition), pp. 197- 210. Oxford: Oxford University Press.
- Saad-Filho, A. (2014) 'The "Rise of the South": Global Convergence at Last?', *New Political Economy*, 19(4): 578-600.
- Saggi, K. (2009) 'Foreign Direct Investment and International Technology Transfer', in Reinert, K.A., R.S. Rajan, A.J. Glass and L.S. Davis (eds) *Encyclopedia of the World Economy*, pp. 460-464. Princeton and Oxford: Princeton University Press.
- Saito, M. (1975) 'Introduction of Foreign Technology in the Industrialization Process — Japanese experience since the Meiji Restoration (1868)', *The Developing Economies*, 13(2): 168-186.
- Sakakibara, E. and S. Yamakawa (2003a) 'Regional Integration in East Asia – Challenges and Opportunities: Part I: history and institutions', *Policy Research Working Paper 3078*. The World Bank.
- Sakakibara, E. and S. Yamakawa (2003b) 'Regional Integration in East Asia – Challenges and Opportunities: Part II: trade, finance and integration', *Policy Research Working Paper 3078*. The World Bank.
- Salazaar-Xirinachs, J. M., I. Nubler and R. Kozul-Wright (2014) 'Introduction – Industrial policy, productive transformation and jobs: theory, history and practice', in Salazaar-Xirinachs, J.M., I. Nubler and R. Kozul-Wright (eds) *Transforming Economies: Making industrial policy work for growth, jobs and development*, pp. 1-38. Geneva: ILO
- Salazaar-Xirinachs, J.M., I. Nubler and R. Kozul-Wright (eds) (2014) *Transforming Economies: Making industrial policy work for growth, jobs and development*. Geneva: ILO.
- Salvatore, D. (1974) *International Economics* (4th edition). New York: MacGraw-Hill Companies, Inc.
- Sanchez, O. (2003) 'The Rise and Fall of the Dependancy Movement: Does it inform underdevelopment today?', *Estudios Interdisciplinarios de América Latina y el Caribe*, 14(2): 31-50.

- Sanidas, E. and Y. Shin (2011) 'Convergence towards the Revealed Comparative Advantage Neutral Point for East Asia: Similarities and Differences between the Three Countries', *Seoul Journal of Economics*, 24 (1): 21-50.
- Saravanamuttu, J. (1998) 'The Southeast Asian Development Phenomenon Revisited: From Flying Geese to Lame Ducks', *Pacific Review* 10(2) 111-125.
- Sasaki, T. and H. Nakanishi (2017) 'The 1950s: Pax America and Japan's Postwar Resurgence', in Iokibe, M. (ed.), Minohara, T. (trans. ed.) *The History of US-Japan Relations: From Perry to the Present*, pp. 127-148, Palgrave Macmillan: Singapore.
- Sato, Y. (2016) 'Curse or Opportunities? A model of industrial development for natural resource-rich countries on the basis of Southeast Asian experience,' in Sato, Y. and H. Sato (eds) *Varieties and Alternatives of Catching Up: Asian development in the context of the 21st century*, pp. 211-246. London, Palgrave Macmillan.
- Sato, Y. and H. Sato (eds) (2016) *Varieties and Alternatives of Catching Up: Asian development in the context of the 21st century*. London, Palgrave Macmillan.
- Saunders, P.C. (2014) 'China's Role in Asia: attractive or assertive?', in Shambaugh, D. and M. Yahuda, (eds), *International Relations of Asia* (2nd edition), pp. 147-172. Lanham, MD: Rowman & Littlefield.
- Saxonhouse, G.R. (1976) 'Country Girls and Communication among Competitors in the Japanese Cotton-Spinning Industry', in Patrick, H. (ed.) *Japanese Industrialization and Its Social Consequences*, pp. 97-125. Berkeley: University of California Press.
- Scalapino, R.A. (1995) 'Korea in the Cold War and its Aftermath', in Ross, R. S. (ed.) *East Asia in Transition: Toward a new regional order*, pp. 183-215. Singapore: Institute of Southeast Asian Studies.
- Schaede, U. (2004) 'What Happened to the Japanese model?', *Review of International Economics*, 12(2) 277-294.
- Schenk, C.R. (2011) *International Economic Relations since 1945*. London and New York: Routledge.
- Schrank, A. (2003) 'Foreign investors, "flying geese," and the limits to export-led industrialization in the Dominican Republic', *Theory and Society*, 32(4): 415-443.
- Schröppel, C. and M. Nakajima (2002) 'The Changing Interpretation of the Flying Geese Model of Economic Development', *German Institute of Japanese Studies Yearbook 2002*, pp. 203-236. Verlag: German Institute of Japanese Studies.
- Schulz, M., F. Soderbaum and J. Ojendal (eds) (2001) *Regionalization in a Globalizing World: A comparative perspective on forms, actors and processes*. London and New York: Zed Book.
- Segal, A. (2005) 'Chinese Technonationalism: Autonomy and security in the world economy', in Pekkanen, S.M. and K.S. Tsai (eds) (2005) *Japan and China in the World Political Economy*, pp. 205-222. London and New York: Routledge.
- Segawa, N. (2013) 'Affirmative Action and Nation Building in Malaysia: The future of Malay preferential policies', *African and Asian Studies*, 12(3): 189-214.
- Selden, M. (1997) 'China, Japan, and the Regional Political Economy of East Asia, 1945-1995', in Katzenstein, P.J. and T. Shiraiishi (eds) *Network Power: Japan and Asia*, pp. 306-340. Ithaca and London: Cornell University Press.

- Selden, M. (2012) 'Economic nationalism and regionalism in contemporary East Asia', in D'Costa, A.P. (ed) *Globalization and Economic Nationalism in Asia*, pp. 33-58. Oxford: Oxford University Press.
- Sen, G. (1999) 'Developing States and the End of the Cold War: Liberalization, globalization and their consequences', in Fawcett, L. and Y. Sayigh (eds) *The Third World beyond the Cold War: Continuity and change*, pp. 118-133. Oxford: Oxford University Press.
- Setapa, A. and S. Abe (1999) 'Economic development and Malaysian Public Policies', in Adams, F. G. and W. E. James (eds) *Public Policies in East Asian Development: Facing new challenges*, pp. 163-172. Westport, CO: Praeger Publishers.
- Shafaeddin, S.M. (2012) *Competitiveness and Development: Anthem Studies in Development and Globalization*. Anthem Press.
- Shafaeddin, S.M. (2005a) 'Fredrich List and the Infant Industry Argument,' in Jomo, K.S. (ed) *The Pioneers of Development Economics: Great economists on development*, pp. 42-61. New Delhi: Tulika Books, and London, Zed Books.
- Shafaeddin, S.M. (2005b) 'Towards an Alternative Perspective on Trade and Industrial Policies', *Development and Change*, 36(6): 1143-1162.
- Shafaeddin, S.M. (2004) 'Is China's accession to WTO threatening exports of developing countries?', *China Economic Review*, 15(2): 109-144.
- Shafaeddin, S.M. and J. Pizarro (2010) 'The evolution of value added in assembly operations: the case of China and Mexico', *Journal of Chinese Economic and Business Studies*, 8(4): 373-397.
- Shibayama, F and A. Kusunoki (2017) 'The Pacific War and the Occupation of Japan, 1941-52', in Iokibe, M. (ed.), Minohara, T. (trans. ed.) *The History of US-Japan Relations: From Perry to the Present*, pp. 105-125, Palgrave Macmillan: Singapore.
- Shambaugh, D. and M. Yahuda (eds) (2014) *International Relations of Asia* (2nd edition). Lanham, ML: Rowman & Littlefield.
- Sharif, N. and M.M. Tseng (2011) 'The Role of Hong Kong in Mainland China's Modernization in Manufacturing', *Asian Survey*, 51(4): 633-658.
- Sheng, A. (2007) 'The Asian Network Economy in the 21st Century', in Gill, I., Y. Hunag and H. Kharas (eds) *East Asian Visions: Perspectives on economic development*, pp. 258-284. Washington, D. C.: World Bank and Singapore: Institute of Policy Studies.
- Shenker, O. (2009) 'Becoming multinational: challenges for Chinese firms', *Journal of Chinese Economic and Foreign Trade Studies*, 2(3): 149-162.
- Shimizu, H. (1987) 'Nanshin-ron: its turning point in World War' *The Developing Economies*, 25(4): 386-402.
- Shin, K. Y. (1998) 'Political Economy of Economic Growth in East Asia: South Korea and Taiwan' in Kim, E.M. (ed.) *The Four Tigers: Economic development and the global political economy*, pp. 3-31. San Diego, CA: Academic Press.
- Shiraishi, T. (1997) 'Japan and Southeast Asia', in Katzenstein, P.J. and T. Shiraishi (eds) *Network Power: Japan and Asia*, pp. 169-194. Ithaca and London: Cornell University Press.
- Shiraishi, T. and J. Okamoto (eds) (2012) *Engaging East Asian Integration: States, markets and the movement of people*. Singapore: Institute of southeast Asian Studies.
- Shinohara, M. (1996) 'The Flying Geese Model Revisited: Foreign direct investment, trade in machinery and the "boomerang effect"', *Journal of the Asia Pacific Economy*, 1(3): 411-419.

- Shive, C. and H.F. Lee (1999) 'Public Policy in the Taiwan Economy: The nurturing of a market economy', in Adams, F.G. and W.E. James (eds) *Public Policies in East Asian Development: Facing new challenges*, pp. 93-110. Westport, CO: Praeger Publishers.
- Sit, V.F.S. (1985) 'The Special Economic Zones – A new type of export processing zones', *The Developing Economies*, 23(1): 69-87.
- Singh, A. (2012), 'Foreword', in D'Costa, A. P. (ed.) *Globalization and Economic Nationalism in Asia*, pp. v-xi. Oxford: Oxford University Press.
- Smart, A. and J.Y. Hsu (2004) 'The Chinese Diaspora, Foreign Investment and Economic Development in China', *The Review of International Affairs*, 3(4): 544-566.
- Smith, S.C. and P. Yao (2014) 'US-China Economic Relations', in Fan, S., R. Kanbur, S. Wei and X. Zhang (eds) *The Oxford Companion to the Economics of China*, pp. 119-124. Oxford: Oxford University Press.
- Snitwongse, K. (2003) 'A New World Order in East Asia?', *Asia-Pacific Review*, 10(2): 36-51.
- Söderberg, M. (2002a) 'Changes in Japanese Foreign Aid Policy', *Center for Pacific Asia Studies Working Paper 157*. Stockholm: Stockholm University.
- Söderberg, M. (2002b) 'Japan's ODA Policy in Northeast Asia', Center for Pacific Asia Studies, Working Paper 158. Stockholm: Stockholm University.
- So, A.Y. and Y.-W. Chu (2012) 'The Transition from Neoliberalism to State Neoliberalism in China at the turn of the Twenty-First Century', in Kyung-Sup, C, B. Fine and L. Weiss (eds) pp. 166-187.
- Soesastro, H. (2003) An ASEAN Economic Community and ASEAN-3: How do they fit together, *Pacific Economic Paper*, No. 338. The Australian National University.
- Solingen, E. (2005) 'East Asian regional Institutions: Characteristics, sources, distinctiveness' in Pempel, T. J. (ed.) *Japan and China in the World Political Economy*, pp. 31-53. Ithaca and London: Cornell University Press.
- Solis, M. (2014) 'Japan's foreign economic policies', in Pekkanen, S. M., J. Ravenhill and R. Foot (eds) *Oxford Handbook of the International Relations of Asia*, pp.141- 159. Oxford: Oxford University Press.
- Solis, M. (2005) 'From Iron Doors to Paper Screens: The Japanese state and multilateral investment', in Pekkanen, S.M. and K.S. Tsai (eds) *Japan and China in the World Political Economy*, pp. 108-129. London and New York: Routledge.
- Song, L. (2014) 'Rebalancing China's Growth', in Fan, S., R. Kanbur, S. Wei and X. Zhang, X (eds) *The Oxford Companion to the Economics of China*, pp. 75-79. Oxford: Oxford University Press.
- Spinanger, D. (1984) 'Objectives and Impact of Economic Activity Zones: Some evidence from Asia', *Weltwirtschaftliches Archiv*, 120(1) 64-89.
- Spindler, M. (2002) 'New Regionalism and the Construction of Global Order', CSGR Working Paper No. 93/02. Centre for the Study of Globalization and Regionalization. University of Warwick, Coventry, UK.
- Stallings, B. (ed.) (1995) *Global Change, Regional Response: The new international context of development*. Cambridge: Cambridge University Press.
- Stein, H. (ed.) (1995) *Asian industrialization and Africa: Studies in policy alternatives to structural adjustment*. New York: St. Martin's Press.

- Steven, R. (1991) 'Structural Origins of Japan's direct foreign investment', in Morris, J. (ed.) *Japan and the Global Economy: Issue and trends in the 1990s*, pp. 14-44. London and New York: Routledge.
- Stewart, J.R. (1971) *Japan's Textile Industry*. Ann Arbor, MI: University Microfilms. (Originally published in 1949, New York: Institute of Pacific Relations.)
- Stiglitz, J.E. (2014) 'Transition to a Market Economy: Explaining the Success and failure'. in Fan, S., R. Kanbur, S. Wei and X. Zhang (eds) *The Oxford Companion to the Economics of China*, pp. 36-41. Oxford: Oxford University Press.
- Stiglitz, J.E. (2001a) 'From Miracle to Crisis to Recovery: Lessons from four decades of East Asian experience', in Stiglitz, J.E. and S. Yusuf (eds) *Rethinking the East Asian Miracle*, pp. 509-526. Washington, D. C.: World Bank, and New York: Oxford University Press.
- Stiglitz, J.E. (2001b) 'Globalization and the economic role of the state in the new millennium', *Industrial and Corporate Change*, 12(1): 3-26.
- Stiglitz, J.E. and S. Yusuf (eds) (2001) *Rethinking the East Asian Miracle*. Washington, D. C.: World Bank, and New York: Oxford University Press.
- Storm, S. (2015) 'Structural change', *Development and Change*, 46(4): 666-699.
- Strange, G. (2011) 'China's Post-Listian Rise: Beyond radical globalisation theory and the political economy of neoliberal hegemony', *New Political Economy*, 16(5): 539-559.
- Stubbs, R. (2018) *Rethinking Asia's economic miracle: The political economy of war, prosperity, and crisis* (2nd edition). New York: Palgrave.
- Stubbs, R. (2014) 'ASEAN's Leadership in East Asian Region-building: Strength in weakness', *The Pacific Review*, 42(3): 523-541.
- Stubbs, R. (2012) 'The Developmental State and Asian regionalism', in Beeson, M. and R. Stubbs (eds) *Routledge Handbook of Asian Regionalism*, pp. 90-99. London and New York: Routledge.
- Stubbs, R. (2009) 'What ever happened to the East Asian developmental state? The unfolding debate', *The Pacific Review*, 27(1): 1-22.
- Stubbs, R. (2005) *Rethinking Asia's economic miracle: The political economy of war, prosperity, and crisis*. New York: Palgrave Macmillan.
- Stubbs, R. (1999) 'War and Economic Development: Export-oriented industrialization in East and Southeast Asia', *Comparative Politics*, 31(3): 337-355.
- Stubbs, R. and R.D. Underhill (eds) (2006) *Political Economy and the Changing Global Order* (3rd edition). Oxford: Oxford University Press.
- Sturgeon, T.J. (2007) 'From commodity chains to value chains: interdisciplinary theory building in an age of globalization', *ITEC Working Paper Series 07-28*.
- Sudo, S. (2007) 'It Takes Two to Tango: The conflict as Japan sees it', in Hsiung, J.C. (ed.) *China and Japan at Odds*, pp. 43-58. New York: Palgrave Macmillan.
- Suehiro, A. (2008) *Catch-Up Industrialization: The Trajectory and Prospects of East Asian Economies*. Honolulu, University of Hawaii Press.
- Suehiro, A. (1999) 'The Road to Economic Re-entry: Japan's Policy toward Southeast Asian Development in the 1950s and 1960', *Social Science Japan Journal*, 2(1): 85-105.
- Sum, N. (1996) 'The NICs and competing strategies of East Asian regionalism', in Gamble, A. and A. Payne (eds) *Regionalism and World Order*, pp. 207-246. New York: St. Martin's Press.

- Sussman, N. and Y. Yafeh (2000) 'Institutions, reforms, and country risk: lessons from Japanese government debt in the Meiji era', *The Journal of Economic History*, 60(2): 442-467.
- Sutter, J.O. (1966) 'Two Faces of Konfrontasi: 'Crush Malaysia' and the Gestapu', *Asian Survey*, 6(10): 523-546.
- Suzuki, T. (2012) 'Globalization, finance, and economic nationalism: the changing role of the state in Japan', in D'Costa, A. P. (ed) *Globalization and Economic Nationalism in Asia*, pp. 109-134. Oxford: Oxford University Press.
- Szirmai, A. (2005) *The Dynamics of Socio-economic Development: An introduction*. Cambridge, Cambridge University Press.
- Tabb, W.K. (1999) 'The End of the Japanese postwar system', *Monthly Review*, 51(3) 71-80.
- Tachiki, D. (2005) 'Between Foreign Direct Investment and Regionalism: The role of Japanese production networks', in Pempel, T.J. (ed.) *Japan and China in the World Political Economy*, pp. 149-69. Ithaca and London: Cornell University Press.
- Tadjoeddin, M.Z. (2007) 'A Future Resource Curse in Indonesia: The political economy of natural resources, conflict and development', *CRISE Working Paper 35*. Centre for Research on Inequality, Human Security and Ethnicity, Department of International Development, University of Oxford.
- Takamine, T. (2006) 'The Political Economy of Japanese Foreign Aid: The role of yen loans in China's economic growth and openness', *Pacific Affairs*, 79(1): 29-48.
- Tamamoto, M. (1991) 'Japan's Uncertain Role', *World Policy Journal* 8(4): 579-597.
- Tan, J. (2014) 'Running out of steam? Manufacturing in Malaysia', *Cambridge Journal of Economics*, 38(1): 153-180.
- Tan, K.S. and H.E. Khor (2006) 'China's changing economic structure and implications for regional patterns of trade, production and integration', *China & World Economy*, 14(6): 1-19.
- Tan, K.Y. (1995) 'Economic Development and the State: Lessons from Singapore', in Fitzgerald, R. (ed.) *The State and Economic Development: Lessons from the Far East*, pp. 55-75. London: Taylor & Francis.
- Tan, K.W. and K. S. Jomo (1995) 'Economic Theory and Industrial Policy in East Asia', in Fitzgerald, R. (ed.) *The State and Economic Development: Lessons from the Far East*, pp. 17-54. London: Taylor & Francis.
- Tanaka, A. (2017) *Japan in Asia: Post-Cold-War Diplomacy* (second ed., translated by Hoff, J.C.). Tokyo: Japan Publishing Industry Foundation for Culture (JPIC)
- Tanaka, A. and M. Tadokoro (2017) 'The 1980s: The decade of neoliberalism', in Iokibe, M. (ed.), Minohara, T. (trans. ed.) *The History of US-Japan Relations: From Perry to the Present*, pp. 193-213. Palgrave Macmillan: Singapore.
- Taniguchi, R. and S. Babb (2009) 'The global construction of development models: the US, Japan and the East Asian miracle' *Socio-Economic Review*, 7(2): 277-303.
- Tao, Y.F. (2005) 'A Catch-up Strategy? China's policy toward foreign direct investment', in Pekkanen, S.M. and K.S. Tsai (eds) (2005) *Japan and China in the World Political Economy*, pp. 130-50. London and New York: Routledge.
- Taube, M. (2002) 'Japan's role in China's industrialization', in Hilpert, H. G. and R. Haak (eds) *Japan and China: Cooperation, competition and conflict*, pp. 103-120. New York: Palgrave.
- Taylor, M. (1986) 'The product-cycle model: a critique', *Environment and Planning A*, 18(6): 751-761.

- Taylor, R. (1996) *Greater China and Japan: Prospects for an economic partnership in East Asia*. London and New York: Routledge.
- Techakanont, K. (2011) 'Thailand automotive Industry', in Kagami, M. (ed) *Intermediate goods Trade in East Asia: Economic deepening through FTAs/EPAs*. BRC Research Report No.5, pp. 193-229. Bangkok: Bangkok Research Center, IDE-JETRO.
- Terada, T. (2014) 'Japan's Asian Policy Strategy: Evolution of and Prospects for Multilateralism in Security, Trade and Financial Cooperation', *Public Policy Review*, 10(1): 227-252.
- Terada, T. (2008) 'Japan's Foreign Economic Policies towards East Asia in the Post War Era', *Asia Profile*, 36(5): 453-468.
- Terry, E. (2002) *How Asia Got Rich: Japan, China and the Asian Miracle*. Armonk: New York: An East Gate Book.
- Terry, E. (2000) 'How Asia Got Rich', *Japanese Economy*, 28(2): 76-96.
- Terry, E. (1996) 'An East Asian Paradigm', *Atlantic Economic Journal*, 24(3): 183-198.
- The State Council, the People's Republic of China (2016) *New five-year plan brings hope to China's west*.
- Thomas, N. (2001) 'ASEAN + 3: Community building in East Asia?', *Journal of International and Area Studies*, 8(2): 1-19.
- Thomsen, S. (1999) 'Southeast Asia: The Role of Foreign Direct Investment Policies in Development', *OECD Working Papers on International Investment 1999/01*. Paris: Organization of Economic Cooperation and Development.
- Thompson, G. (ed.) (1998) *Economic Dynamics in the Asia-Pacific: The growth of industrialization and competitiveness*. London and New York: Routledge.
- Thompson, M.R. (2016) 'East Asian Authoritarian Modernism: From Meiji Japan's "Prussian Path" to China's "Singapore Model"', *Asian International Studies Review*, 17(2): 125-141.
- Thompson, M.R. (2010) 'Japan's "German Path" and Pacific Asia's Flying Geese', *Asian Journal of Social Science*, 38(5): 697-715.
- Thorbecke, W., M. Lamberte and G. Komoto (2010) 'Promoting learning and industrial upgrading in ASEAN countries', *ADB Working Paper 250*. Asian Development Bank Institute.
- Thorbecke, W. and N. Salike (2011) 'Understanding Foreign Direct Investment', *ADB Working Paper 290*. Asian Development Bank Institute.
- Thorborg, M. (2017) 'From White Elephants to Flying Geese: China in Africa a new model for development or more of the same', in Kim, Y.-C. (ed) *China and Africa: A new paradigm of global business*, the Palgrave Macmillan Asian Business Series, pp. 55-79, DOI 10.1007/978-3-319-47030-6_3.
- Thurbon, E and L. Weiss (2006) 'Investing in openness: The evolution of FDI strategy in South Korea and Taiwan', *New Political Economy*, 11(1): 1-22,
- Tipps, D.C. (1973) 'Modernization Theory and the Contemporary Study of Societies: A critical perspectives', *Comparative Studies in Society and History*, 15(2): 199-226.
- Trinidad, D.D. (2007) 'Japan's ODA at the Crossroads: Disbursement patterns of Japan's development assistance to Southeast Asia', *Asian Perspective*, 31(2): 95-125.
- Tripathi, D. (1997) *Historical Roots of Industrial Entrepreneurship in India and Japan: A comparative interpretation*. New Delhi: Monohar Publishers & Distribution.

- Truong, T.D. (1999) 'The Underbelly of the Tiger: Gender and the demystification of the Asian miracle', *Review of International Political Economy*, 6(2): 133-165.
- Tsunekawa, K. (2005) 'Why So Many Maps There? Japan and regional cooperation', in Pempel, T. J. (ed.) *Japan and China in the World Political Economy*, pp. 101-148. Ithaca and London: Cornell University Press.
- Tsai, K.S. and S. Cook (2005) 'Developmental Dilemma in China: Socialist transition and late liberalization', in Pekkanen, S.M. and K.S. Tsai (eds) (2005) *Japan and China in the World Political Economy*, pp. 45-66. London and New York: Routledge.
- Tsai, Z.-J. and J.W.Y. Wang (2014) 'Japan's Manufactured Innovation: In search of influence', in Cohen, B.J. and E.M.P. Chiu (eds) *Power in a Changing World Economy: Lessons from East Asia*, pp. 163-179. London and New York: Routledge.
- Tuan, C. and L.F.Y. Ng (1995) 'Hong Kong's outward investment and regional economic integration with guandong: Process and implications', *Journal of Asian Economics*, 6(3): 385-405.
- Tung, A.C. (2003) 'Beyond flying geese: the expansion of East Asia's electronics trade', *German Economic Review*, 4(1): 35-51.
- Tzeng, F. (1991) 'The Political Economy of China's Coastal Development Strategy', *Asian Survey*, 31(3): 270-284.
- UNCTAD (2019) *Economic Development in Africa Report: Maximizing opportunities for value addition and trade creation through the AfCFTA*. Geneva: UNCTAD.
- UNCTAD (2018) *World Investment Report 2018: Investment and new industrial policies*. Geneva: UN.
- UNCTAD (2016a) 'Robotics and Industrialization in Developing Countries', *UNCTAD Policy Brief No 50*, October.
- UNCTAD (2016b) *Trade and Development Report 2016 – Structural transformation for inclusive and sustained development*. New York and Geneva: UN.
- UNCTAD (2015a) *Global Value Chains and South-South Trade: Economic cooperation and integration among developing countries*. Geneva: UNCTAD.
- UNCTAD (2015b) *Review of Maritime Transport*. New York and Geneva: UN.
- UNCTAD (2014) *Trade and Development Report 2014 – Global governance and policy space for development*. New York and Geneva: UN.
- UNCTAD (2011) *Least Developed Countries Report 2011*. New York and Geneva: UN.
- UNCTAD (2007) *Trade and Development Report 2007 – Regional cooperation for development*. New York and Geneva: UN.
- UNCTAD (2006) *World Investment Report 2006 – FDI from Developing and Transitional Economies: Implications for Development*. New York and Geneva: UN.
- UNCTAD (2003a) *Trade and Development Report 2003 – Capital accumulation, growth and structural change*. New York and Geneva: UN.
- UNCTAD (2003b) *World Investment Report 2003 – FDI Policies for development: National and International Perspectives*. New York and Geneva: UN.
- UNCTAD (2002) *Trade and Development Report 2002*. New York and Geneva: UN.
- UNCTAD (1999) *World Investment Report 1999: Foreign Direct Investment and the Challenge of Development*. New York and Geneva: UN.
- UNCTAD (1997) *Proceedings of the International Conference on East Asian Development: Lessons for a new global environment*. Kuala Lumpur, Malaysia. 29 February – 1 March 1996. Geneva: UNCTAD.

- UNCTAD (1996) *Trade and Development Report 1996 – Rethinking development strategies: Some lessons from East Asian experiences*. New York and Geneva: UN.
- UNCTAD (1995a) *Trade and Development Report 1995*. New York and Geneva: UN.
- UNCTAD (1995b) *World Investment Report 1995: Transnational corporations and competitiveness*. New York and Geneva: UN.
- UNCTAD (1994) *Trade and Development Report 1994*. New York and Geneva: UN.
- UNDP (2015) *Human Development Report 2015: Work for human development*. New York and Oxford: Oxford University Press.
- UNDP (2013) *Human Development Report 2013: The Rise of the South: Human progress in a diverse world*. New York and Oxford: Oxford University Press.
- UNDP (1999) *Human Development Report 1999*. New York and Oxford: Oxford University Press.
- Unger, D. (1995) ‘From Domino to Dominant: Thailand’s security policies in the twenty-first century’ in Ross, R.S. (ed.) *East Asia in Transition: Toward a new regional order*, pp. 216-233. Singapore: Institute of Southeast Asian Studies.
- UNIDO (2016) *Industrial Development Report 2016: The Role of Technology and Innovation in Inclusive and Sustainable Industrial Development (Overview)*. Vienna: UNIDO.
- UNIDO (2013) *Industrial Development Report 2013: Sustaining Employment Growth: The role of manufacturing and structural Change (Overview)*. Vienna: UNIDO.
- UNIDO (2009) *Industrial Development Report 2009: Breaking in and moving up: New industrial challenges from the bottom Billion and the middle-income countries (Summary)*. Vienna: UNIDO.
- UNIDO (2002) *Industrial Development Report 2002/2003: Competing through innovation and learning*. Vienna: UNIDO.
- Urata, S., S.Y. Chia and F. Kimura (eds) (2005) *Multinationals and Economic Growth in East Asia: Foreign direct investment, corporate strategies and national economic development*. New York: Routledge.
- Urata, S. and H. Kawai (2000) ‘The Determinants of the Location of Foreign Direct Investment by Japanese Small and Medium-sized Enterprises’, *Small Business Economics*, 15(1): 79-103.
- Urrutia, M. and S. Yukawa (eds) (1988) *Economic Development Policies in Resource-Rich Countries*. Tokyo: United Nations University Press.
- Vatikiotis, M.R.J. (1995) ‘A Giant Treats carefully: Indonesia’ foreign policy in the 1990s’, in Ross, R.S. (ed.) *East Asia in Transition: Toward a new regional order*, pp. 216-233. Singapore: Institute of Southeast Asian Studies.
- van Bergeijk, P.A.G., A. de Haan, and R. van der Hoeven (eds) (2011) *The Financial Crisis and Developing Countries: A global multidisciplinary perspective*. Cheltenham, Glos, UK: Edward Elgar Publishing Limited.
- van Grunsven, L. (ed.) (1998) *Regional Change in Industrializing Asia: Regional and local response to changing competitiveness*. Aldershot, UK: Ashgate Publishing Ltd.
- Vernon, R. (1989) ‘Technological Development: The historical experience’, An EDI Seminar Paper, No.39. Washington, D. C.: World Bank.
- Vernon, R. (1979) ‘The Product Cycle Hypothesis in a New International Environment’, *Oxford Bulletin of Economics and Statistics*, 41(4): 255-267.
- Vernon, R. (1966) ‘International investment and international trade in the product cycles’, *Quarterly Journal of Economics*, 80(2): 190-207.

- Vogel, E. (2005) 'Foreword: Patterns of Late Development and the Origin of Late Industrialization', in Pekkanen, S.M. and K.S. Tsai (eds) (2005) *Japan and China in the World Political Economy*, pp. 1-10. London and New York: Routledge.
- Vogel, E. (1991) *The Four Little Dragons: The spread of industrialization in East Asia*. Cambridge, MA: Harvard University Press.
- Vogel, E.F. (1981) *Japan as Number One: Lessons for America*. Cambridge, MA: Harvard University Press, 1981.
- Voinea, I. (2019) 'The role of Japan in the development of emerging markets in Asia. Key lessons learned for China', *Theoretical and Applied Economics*, 26(2): 47-62.
- Vollrath, T.L. (1991) 'A theoretical evaluation of alternative trade intensity measures of revealed comparative advantage', *Weltwirtschaftliches Archiv*, 127(2): 265-280.
- Watanabe, T. and H. Kajiwarra (1983) 'Pacific manufactured trade and Japan's options', *The Developing Economies*, 21(4): 313-339.
- Wade, R.H. (2018) 'Escape the Periphery: The East Asia "mystery" solved', WIDER Working Paper 2018/101. United Nations University World Institute for Development Economic Research (UNU-WIDER).
- Wade, R. (2015) 'The Role of Industrial Policy in Developing Countries', in Calcagno, A., S. Dullien, A. Marquez-Velazquez, N. Maystre and J. Piewe (eds) (2015a) *Rethinking Development Strategies After the Financial Crisis* Wade, R. (1990) *Governing the Market: Economic theory and the role of government in East Asian industrialization*. Princeton: Princeton University Press.
- Wade, R. (1994) 'Selective Industrial Policies in East Asia: is the East Asian Miracle right?', in Fishlow, A. and C. Gwin (eds) *Miracle or Design? Lessons from the East Asian experiences*, pp. 55-79. Washington, D. C.: Overseas Development Council.
- Wade, R. (1996) 'Japan, the World Bank, and the Art of Paradigm Maintenance: the East Asian miracle in political perspective', *New Left Review*, 3-37.
- Wakamatsu, I. (2012) 'Economic Integration in East Asia and Japan's Strategy', in Shiraishi, T. and J. Okamoto (eds) *Engaging East Asian Integration: States, markets and the movement of people*, pp. 97-126. Singapore: Institute of Southeast Asian Studies.
- Wang, B. and X. Li (2017) 'From World Factory to World Investor: the new way of China integrating into the world', *China Economic Journal*, 10(2): 175-193.
- Wang, J. (2008) *China's Rise and East Asian Economies: Towards a Sino-centric regional grouping?* Paper for presentation at KDI International Conference on "Growth and Structural Changes of the Korean Economy after the Crisis Coping with the Rise of China;" Seoul 21-22 July, 2008.
- Wang, K. and C. Hun (2000) 'Geese, Tigers and Dragons: Convergence and integration of East Asian economies', *Foresight*, 2(1): 69-83.
- Wang, M.Y. (2002) 'The Motivations behind China's Government-initiated Industrial Investments Overseas', *Pacific Affairs*, 75(2)187-206.
- Wang, T. (1999) 'Development of China, 1978-1998', in Adams, F. G. and W. E. James (eds) *Public Policies in East Asian Development: Facing new challenges*, pp. 203-230. Westport, CO: Praeger Publishers.
- Wang, Y. (2011) 'Understanding economic development and institutional change: East Asian development model reconsidered with implications for China', *Journal of Chinese Political Science*, 16(1): 47-67.

- Wang, Z. (2010) 'Contending East Asian Regional Identity: Market-led, institutions or social reconstruction', *East Asian Review*, 13 (March): 15-39.
- Warr P. and Kohpaiboon, A. (2018) 'Explaining Thailand's Automobile Manufacturing Success', *Journal of Southeast Asian Economies* 35(3): 425-448.
- Watanabe, T. (2006) 'How should Japanese ODA be viewed? The importance of support for self-help efforts', *Asia-Pacific Review*, 13(2): 17-26.
- Watanabe, T. (1980) 'An analysis of economic interdependence among the Asian NICs, the ASEAN nations, and Japan', *The Developing Economies*, 18(4): 393-411.
- Watanabe, T. and H. Kajiwara (1983) 'Pacific manufactured trade and Japan's options', *The Developing Economies*, 21(4): 313-339.
- Weiss, J. (2011) 'Industrial Policy in the Twenty-first Century', UNU-WIDER Working Paper No. 2011/55.
- Weiss, L. (2012) 'The Myth of the Neoliberal States', in Chang, K.-S., B. Fine and L. Weiss (eds) *Developmental Politics in Transition: The neoliberal era and beyond*, pp. 1-23. New York: Palgrave Macmillan.
- Weiss, L. (1997) 'Globalization and the Myth of the Powerless State', *New Left Review*, I/225 3-27.
- Weiss, L. and J.H. Hobson (1995) *States and Economic Development: A comparative historical analysis*. Oxford: Polity Press.
- Wells Jr, L.T. (1998) 'Multinationals and the developing countries', *Journal of International Business Studies*, 29(1): 101-114.
- Whittaker, D.H. (2008) *Technology and the Culture of Progress in Meiji Japan*. London and New York: Routledge.
- Whittaker, D.H., T. Zhu, T. Sturgeon, M.H. Tsai, and T. Okita (2007) 'Compressed Development in East Asia', IITEC Working Paper, 07-29. Institute for Technology, Enterprise, and Competitiveness.
- Whyte, M. K. (1975) 'Inequality and Stratification in China', *The China Quarterly*, 64 (Dec.) 684-711.
- Widodo, T. (2008) 'Dynamic changes in comparative advantage: Japan 'flying geese' model and its implication for China', *Journal of Chinese Economic and Foreign Trade Studies*, 1(3): 200-213.
- Wiggham, B. (1989) 'Hong Kong Countdown to 1997: An insider's view', in Morrison, C.E. (ed.) *Japan, China, and the Newly Industrialized Economies of Asia: Discussion and papers from a symposium held in Atlanta, Georgia*, pp. 17-23. Honolulu, HI: East-West Center.
- Willis, K. (2005) *Theories and Practices of Development*. London and New York: Routledge.
- Womack, B. (2003/4) 'China and Southeast Asia: asymmetry, leadership and normalcy', *Pacific Affairs*, 76(4): 529-548.
- Wong, C.Y. and K.Y. Chenong (2014) 'Diffusion of Chatch-up Industrialization Staregies: The dynamics of East Asia's policy leaning process', *Journal of Contemporay Asaian Development*, 13(3) 369-404.
- Wong, J. (2013) 'A China-Centric Economic Order in East Asia', *Asia Pacific Business Review*, 19(2): 286-296.
- Wong, L.K. (1978) 'Its Growth as an Entrepôt Port, 1819-1941', *Journal of Southeast Asian Studies*, 9(1): 50-84.

- Wong, P.K. (2001) 'Flexible Production, High-Tech Commodities, and Public Policies: The hard disk drive industry in Singapore', in Deyo, F.C., R.F. Doner and E. Hershberg (eds) *Economic Governance and the Challenge of Flexibility in East Asia*, pp. 137-164. Lanham, MY: Rowman & Littlefield Publishers, Inc.
- Wong, S.S. (2005) 'Economic Statecraft across the Strait', *Asian Perspective*, 29(2): 41-72.
- Wong, T.Y.C. (1990) 'The Role of Hong Kong in Sino-Taiwan and Sino-Korea Trade, 1981-87', *Asian Economic Journal*, 4(1): 16-45.
- Wong, Y.C.R. (1999) 'Public Policy in the Hong Kong Economy: Emphasis on manufacturing', in Adams, F.G. and W.E. James (eds) *Public Policies in East Asian Development: Facing new challenges*, pp. 145-152. Westport, CO: Praeger Publishers.
- Woo-Cumings, M. (ed.) (1999) *The Developmental State*. Ithaca and London: Cornell University Press.
- Woodall, B. (2015) 'The Development of Japan's developmental state: Stages of growth and the social costs of energy and export promotion policies', in Hua, S. and R. Hu (eds) *East Asian Development Model*, pp. 101-120. London and New York: Routledge.
- World Bank (2000) *East Asia: Recovery and beyond*. Washington, D. C.: World Bank.
- World Bank (1998) *East Asia. The road to recovery*. Washington, D. C.: World Bank.
- World Bank (1997) *China Engaged: Integration with the global economy*. Washington, D. C.: World Bank.
- World Bank (1993) *East Asian Miracle: Economic growth and public policy*. Washington, D. C.: World Bank.
- Wu, C.-T. (1998) 'Diaspora Investments and their Regional Impacts in China', in van Grunsven, L. (ed.) *Regional Change in Industrializing Asia: Regional and local response to changing competitiveness*, pp. 77-105. Aldershot, UK: Ashgate Publishing Ltd.
- Wu, H.L. and C.H. Chen (2004) 'Changes in the Foreign Market Competitiveness of East Asian Export', *Journal of Contemporary Asia*, 34(4): 503-522.
- Xing, L. (2007) 'East Asian Regional Integration from Japan-led "Flying Geese" to China-centred "Bamboo Capitalism"', CCIS Research Series, Working paper No.3. Center for Comparative Integration Studies, Aalborg University.
- Xing, L. and Z. Shengjun (2009) 'China and Regional Integration in East Asia: Opportunities, Constraints and Challenges', CCIS Research Series. Working Paper No.9.
- Xu, B. (2014) 'Trade Policy Reform and Trade Volume', in Fan, S., R. Kanbur, S. Wei and X. Zhang (eds) *The Oxford Companion to the Economics of China*, pp. 156-160. Oxford: Oxford University Press.
- Xu, J. and P. Hubbard (2018) 'A flying goose chase: China's overseas direct investment in manufacturing (2011-2013)' *China Economic Journal*, DOI: 10.1080/17538963.2018.1449445, accessed at: <https://doi.org/10.1080/17538963.2018.1449445>
- Yamamoto, Y. (2013) 'Asia and Regional Integration Theory: Between a regional complex and a regional society', in Amako, S., S. Matsuoka and K. Horiuchi (eds) *Regional Integration in East Asia: Theoretical and Historical Perspectives*, pp.3-34, Tokyo, New York and Paris: United Nations University Press.
- Yamamura, K. (1977) 'Success Illgotten? The role of Meiji Militarism in Japan's technological progress', *The Journal of Economic History*, 37(1): 113-135.
- Yamazawa, I. (1996) 'On the Asia-Pacific economic integration: a Japanese perspective', in Das, D. K. (ed.) *Emerging Growth Pole: The Asian Pacific economy*, pp. 281-298. Singapore: Prentice Hall.

- Yamazawa, I. (1990) *Economic Development and Industrial Trade: The Japanese model*. Honolulu: East-West Center.
- Yamazawa, I. (1975) 'Industrial growth and trade policy in prewar Japan', *The Developing Economies*, 13(1): 38-65.
- Yamazawa, I. (ed.) (2000) *Asian Pacific Cooperation (APEC): Challenges and tasks for the twenty-first century*. London and New York: Routledge.
- Yanagihara, T. (1999) 'Japanese Economic Policy toward East Asia', in Adams, F. G. and W. E. James, (eds) *Public Policies in East Asian Development: Facing new challenges*, pp. 83-92. Westport, CO: Praeger Publishers.
- Yang, A.H. (2014) 'China-Vietnam Relational Asymmetries: A fungibility problem', in Cohen, B.J. and E.M.P. Chiu (eds) *Power in a Changing World Economy: Lessons from East Asia*, pp. 125-143. London and New York: Routledge.
- Yang, D.L. (1991) 'China Adjusts to the World Economy: The political economy of China's Coastal Development Strategy', *Pacific Affairs*, 64(1) 42-64.
- Yang, L. (2016) 'Production Sharing in East Asia: China's position, trade pattern and technology upgrading', in Calcagno, A., S. Dullien, A. Marquez-Velazquez, N. Maystre and J. Piewe (eds) *Rethinking Development Strategies After the Financial Crisis – Vol. II: Country Studies and international comparison*, pp. 57-70. New York and Geneva: United Nations.
- Yang, T.-H. and D-S. Huang (2011) 'Multinational Corporation, FDI and the East Asian Economic Integration'. RIETI Discussion Paper 11-E-71. Research Institute of Economy, Trade and Industry.
- Yano, T. (1978) 'The "Fukuda Doctrine" and its implications for Southeast Asia: A Japanese perspective', *Southeast Asian Affairs, 1978*, Institute of South East Asian Studies, pp. 60-64.
- Yao, Y. (2014) 'The Lewis Turning Point: Is there a labour shortage in China?', in Fan, S., R. Kanbur, S. Wei and X. Zhang (eds) *The Oxford Companion to the Economics of China*, pp. 291-295. Oxford: Oxford University Press.
- Yasutomo, D.T. (1989) 'Why Aid? Japan as an "Aid Great Power"', *Pacific Affairs*, 63(4): 490-503. Yeats, A. (1984) 'China's recent export performance: Some basic features and policy implications', *Development and Change*, 15(1): 1-22.
- Yeophantong, P. (2017) 'Asian Perspectives' in McGlinchey, S., R. Walters and C. Scheinpflug (eds) *International Relations Theory*, pp. 117-124. Bristol, UK: E-International Relations Publishing.
- Yeung, H.W.C. (2014) 'Governing the Market in a Globalizing Era: Developmental states, global production networks and inter-firm dynamics in East Asia', *Review of International Political Economy*, 21(1): 70-101.
- Yeung, H.W.C. (2012) 'East Asian Capitalisms and Economic Geographies'. in Barnes, T.J., J. Peck and E. Sheppard (eds) *The Wiley-Blackwell Companion to Economic Geography*, pp. 118-131. Chichester, West Sussex: Wiley-Blackwell.
- Yeung, H.W.C. (2009) 'The Rise of East Asia: An emerging challenges to the study of international political economy', in Blyth, M. (ed.) *Routledge Handbook of International Political Economy (IPE): IPE as global convention*, pp. 201-215. New York: Routledge.
- Yeung, H.W.C. (2007) 'The Dynamics of Southeast Asian Chinese Business', in Yeung, H.W.C. (ed.) *Handbook of Research on Asian Business*, pp. 356-380. Cheltenham, UK and Northampton, USA: Edward Elgar Publishing Limited.

- Yeung, H.W.C. (2006) 'Change and Continuity in Southeast Asian Ethnic Chinese Business', *Asia Pacific Journal of Management*, 23(3): 229-254.
- Yeung, H.W.C. (1998) 'The Political Economy of Transnational Corporations: A study of the regionalization of Singaporean firms', *Political Geography*, 17(4): 389-416.
- Yeung, H.W.C. (ed.) (2007) *Handbook of Research on Asian Business*. Cheltenham, UK and Northampton, USA: Edward Elgar Publishing Limited.
- Yokokawa, N. (2016) 'Dynamic comparative advantage and the new flying geese theory of capitalist development,' in Yokokawa, N., K. Yagi, H. Uemura and R. Westra. (eds) *The Rejuvenation of Political Economy*, pp. 175-196. London and New York; Routledge.
- Yokokawa, N. (2013) 'Dynamic Comparative Advantage and the Evaluation of the Capitalist World System,' in Huang, X. (ed) *Modern Economic Development in Japan and China: Development, capitalism and the world economic system*, pp. 37-67. New York: Palgrave Macmillan.
- Yokokawa, N., J. Ghosh and R. Rowthorn (eds) (2013) *Industrialization of China and India: Their impacts on the world economy*. London and New York: Routledge.
- Yokokawa, N., K. Yagi, H. Uemura and R. Westra. (eds) (2016) *The Rejuvenation of Political Economy*, London and New York; Routledge.
- Yoshihara, K. (1994) *Japanese Economic Development: A short introduction*. Tokyo: Oxford University Press.
- Yoshimatsu, H. (2018) 'New Dynamics in Sino-Japanese Rivalry: Sustaining infrastructure development in Asia', *Journal of Contemporary China*, 27(113): 719-734.
- Yoshimatsu, H. (2005) 'Political Leadership, Informality, and Regional Integration in East Asia: The evolution of ASEAN plus three', *European Journal of East Asian Studies*, 4(2): 205-232.
- Yoshimatsu, H. (2003a) *Japan and East Asia in Transition: Trade policy, crisis and evolution, and regionalism*. New York: Palgrave Macmillan.
- Yoshimatsu, H. (2003b) 'Japanese Policy in the Asian Economic Crises and the Developmental State Concept', *Journal of the Asia Pacific Economy*, 8(1): 102-125.
- Yu, F.T. and H.D. Yan (eds) (2015) *Handbook of East Asian Entrepreneurship*. London and New York: Routledge.
- Yu, H. (2017) 'Motivation behind China's "One Belt, One Road" Initiative and Establishment of the Asian Infrastructure Investment Bank', *Journal of Contemporary China*, 26(105): 353-368.
- Yu, H.-S. (2003) 'Explaining the Emergence of New East Asian Regionalism: Beyond power and interest-based approach', *Asian Perspective*, 27(1): 261-288.
- Yue, C. and P. Hua (2002) 'Does comparative advantage explains export patterns in China?', *China Economic Review*, 13(2): 276-296.
- Yueh, L.Y. (2010) *The Economy of China*. Cheltenham, UK and Northampton, USA: Edward Elgar Publishing Limited.
- Yun, C. (2004) *Rise of the Chinese Economy and East Asian FTA: Japan's Strategic Change and Continuity*. Inst. für Weltwirtschaft u. Internat. Management, Univ. Bremen, Fachbereich Wirtschaftswiss.
- Yun, C. (2003) 'International Production Networks and the Role of the States: Lessons from East Asian development experience', *The European Journal of Development Research*, 15(1) 170-193.
- Zafarullah, H. and A.S. Huque (2012) *Managing Development in a Globalized World: Concepts, Processes, Institutions (public administration and public policy)*. CRC Press.
- Zagoria, D. (1995) 'The United States and the Asia-Pacific Region in the Post-Cold War Era', in Ross, R.S. (ed.) *East Asia in Transition: Toward a new regional order*, pp. 160-179. Singapore: Institute of Southeast Asian Studies.

- Zeng, D.Z. (2011) 'How do special economic zones and industrial clusters drive China's rapid development?', Policy Research Working Paper 5583. World Bank.
- Zha, D. (2002) 'The politics of China-ASEAN economic relations: assessing the move toward a free trade area', *Asian Perspective* 26(4): 53-82.
- Zhang, J. and X. Zhang (2015) 'Exports and FDI in China', in Morrissey, O., R.A. Lopez and K. Sharma (eds) *Handbook on Trade and Development*, pp. 398-407. Cheltenham, UK and Northampton, USA: Edward Elgar Publishing Limited.
- Zhang, K.H. (2009) 'Foreign Direct Investment and Export Performance', in Reinert, K.A., R.S. Rajan, A.J. Glass and L.S. Davis (eds) *Encyclopedia of the World Economy*, pp. 454-456. Princeton and Oxford: Princeton University Press.
- Zhang, K.H. (2005) 'Why Does So Much FDI from Hong Kong and Taiwan Go to Mainland China?', *China Economic Review* 16(3): 293-307.
- Zhang, K.H. and S. Song (2002) 'Promoting exports: the role of inward FDI in China', *China Economic Review*, 11(4): 385-396.
- Zhang, L. and Q. Gou. (2016) 'Demystifying China's Economic Growth: retrospect and prospect', in Calcagno, A., S. Dullien, A. Marquez-Velazquez, N. Maystre and J. Piewe (eds) *Rethinking Development Strategies After the Financial Crisis – Vol. II: Country Studies and international comparison*, pp. 57-70. New York and Geneva: United Nations.
- Zhang, Q. (2018) 'Evolving Comparative Advantage and Choosing a Pathway for China's Industrial Upgrading', in Zhang Q. (ed.) *Transforming Economic Growth and China's Industrial Upgrading*, pp. 83-100. Beijing: Social Sciences Academic Press.
- Zhang, Q. (2018) 'The Flying Geese Formation Strategy of Industrial Upgrading and Coordinative Regional Development', in Zhang Q. (ed.) *Transforming Economic Growth and China's Industrial Upgrading*, pp. 123-151. Beijing: Social Sciences Academic Press.
- Zhang, Q. (ed.) (2018) *Transforming Economic Growth and China's Industrial Upgrading*. Beijing: Social Sciences Academic Press
- Zhang, Q., Y. Wu and H. Li (2018) 'Evolution of Competitive Advantages of Chinese Industries', in Zhang Q. (ed.) *Transforming Economic Growth and China's Industrial Upgrading*, pp. 3-27. Beijing: Social Sciences Academic Press.
- Zhang, S. (2018) 'China's foreign policy' in Hua, Shiping (ed.) *Routledge Handbook of Politics in Asia*, pp. 273-296. New York: Routledge.
- Zhang, W. (2014) 'The Future of Private and State-owned Enterprises in China', in Fan, S., R. Kanbur, S. Wei and X. Zhang (eds) *The Oxford Companion to the Economics of China*, pp. 273-278. Oxford: Oxford University Press.
- Zhang, X. (2010) 'Do Geese Migrate Domestically? Evidence from the Chinese textile and apparel industry'. IFPRI Discussion Paper 01040. International Food Policy Research Institute.
- Zhao, S. (1993) 'Deng Xiaoping's Southern Tour: Elite politics in post-Tiananmen China', *Asian Survey* 33(8), 739-756.
- Zhu, S and J. Pickles (2014) 'Bring In, Go Up, Go West, Go Out: Upgrading, regionalization and delocalisation in China's apparel production networks', *Journal of Contemporary Asia*, 44 (1): 36-63.

- Zhu, Y. (2002) 'The Role of the Overseas Chinese in the Sino-Japanese Economic Relationship', in Hilpert, H.G. and R. Haak (eds) *Japan and China: Cooperation, competition and conflict*, pp. 194-205. New York: Palgrave.
- Zweig, D. (2014) 'China's Political Economy', in Joseph, W. A. (ed.) *Politics in China: An introduction* (2nd edition), pp. 254-290. Oxford: Oxford University Press.

Brief Biography

Shigehisa Kasahara, a Japanese citizen, worked as an economic affairs officer for the United Nations Conference Trade and Development (UNCTAD) – at the New York office and Geneva Headquarters – from 1987 to 2013. His professional function was mainly in the area of research and publication for the organization, particularly for its flagship publications, namely *The Trade and Development Report*, *The Economic Development in Africa Report*, *The Least Developed Countries Report*, etc. Upon retiring from his international civil service career, he resumed the long-suspended academic life as a PhD researcher at the ISS. His professional interest covers a wide range of international development issues: development economics, trade and development, multilateral development diplomacy, the role of the state (development policy), regional integration (Asia, Africa), industrialization, East Asian development, foreign direct investment (FDI), global value chains, institutional history of UNCTAD, etc. He obtained a BA degree with honors in Economics and Political Science (double majors) from Grand Valley State University, Michigan in 1978, an MA degree in International Affairs from the American University, Washington, D.C, in 1981, and an MA degree in Economics from the Graduate Faculty of the New School of Social Research, New York City in 1986. At the ISS, he undertook his PhD research on the development model known as the Flying Geese paradigm.