

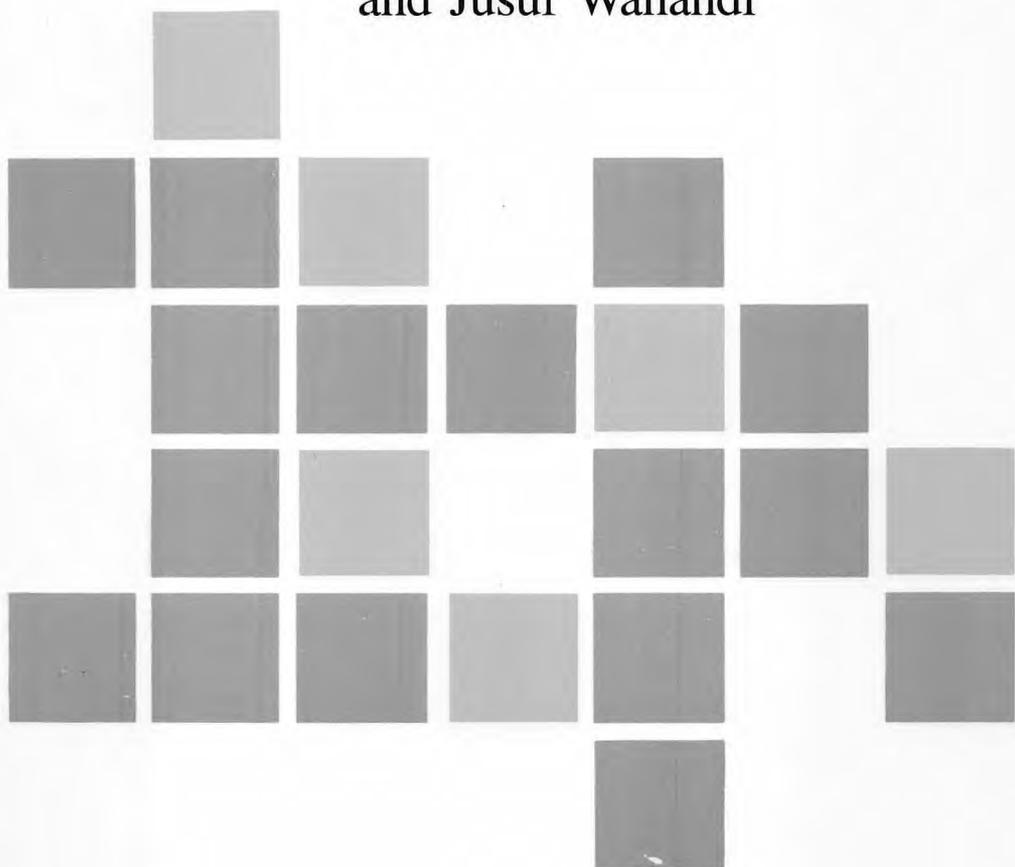


INSTITUTE OF EAST ASIAN STUDIES
UNIVERSITY OF CALIFORNIA • BERKELEY

Asian Economic Development— Present and Future

EDITED BY

Robert A. Scalapino,
Seizaburo Sato,
and Jusuf Wanandi



INSTITUTE OF EAST ASIAN STUDIES
UNIVERSITY OF CALIFORNIA, BERKELEY

The Institute of East Asian Studies was established at the University of California, Berkeley, in the fall of 1978 to promote research and teaching on the cultures and societies of China, Japan, and Korea. It amalgamates the following research and instructional centers and programs: Center for Chinese Studies, Center for Japanese Studies, Center for Korean Studies, Group in Asian Studies, East Asia National Resource Center, and Indochina Studies Project.

INSTITUTE OF EAST ASIAN STUDIES

Director: Robert A. Scalapino

Associate Director: Joyce K. Kallgren

Assistant Director: Ernest J. Notar

Executive Committee: Joyce K. Kallgren
Robert Reed
William McCullough
George DeVos
Chalmers Johnson
Robert Bellah
Ernest J. Notar
Robert A. Scalapino
Van C. Gessel

CENTER FOR CHINESE STUDIES

Chair: Joyce K. Kallgren

CENTER FOR JAPANESE STUDIES

Chair: William McCullough

CENTER FOR KOREAN STUDIES

Chair: George DeVos

GROUP IN ASIAN STUDIES

Chair: Robert Reed

EAST ASIA NATIONAL RESOURCE CENTER

Co-Directors: Stephen West
Robert A. Scalapino

INDOCHINA STUDIES PROJECT

Director: Douglas Pike

Asian Economic Development— Present and Future

A publication of the
Institute of East Asian Studies
University of California
Berkeley, California 94720

The Research Papers and Policy Studies series is one of several publications series sponsored by the Institute of East Asian Studies in conjunction with its three constituent units—the Center for Chinese Studies, the Center for Japanese Studies, and the Center for Korean Studies. The others include the China Research Monograph series, whose first title appeared in 1967, the Japan Research Monograph series, and the Korea Research Monograph series. The Institute sponsors also a Faculty Reprint series.

Correspondence may be sent to:
Ms. Joanne Sandstrom, Editor
Institute of East Asian Studies
University of California
Berkeley, California 94720



INSTITUTE OF EAST ASIAN STUDIES
UNIVERSITY OF CALIFORNIA • BERKELEY

Asian Economic Development— Present and Future

EDITED BY

Robert A. Scalapino,
Seizaburo Sato,
and Jusuf Wanandi

Although the Institute of East Asian Studies is responsible for the selection and acceptance of manuscripts in this series, responsibility for the opinions expressed and for the accuracy of statements rests with their authors.

Copyright © 1985 by the Regents of the University of California
ISBN 0-912966-80-7
Library of Congress Catalog Card Number 85-80729
Printed in the United States of America

Contents

Contributors	vii
Preface	ix
Introduction <i>Robert A. Scalapino</i>	1
1. The State-Planned, Centralized System: China, North Korea, Vietnam <i>Robert F. Dernberger</i>	13
2. Economic Development in Japan: A Reconsideration <i>Yutaka Kosai and Yutaka Harada</i>	43
3. Political Institutions and Economic Performance: The Government-Business Relationship in Japan, South Korea, and Taiwan <i>Chalmers Johnson</i>	63
4. Economic Development Model of Japan: Transferability to Korea and Taiwan <i>Ungsuh Park</i>	90
5. Japan “Teacher”—ASEAN “Pupils”: Can It Work? <i>Hadi Soesastro</i>	114
6. The Newly Industrializing Countries in Asia: Growth Experi- ence and Prospects <i>Edward K. Y. Chen</i>	131
7. ASEAN’s “Other Four”: Economic Policy and Economic Performance Since 1970 <i>Bruce Glassburner</i>	161
8. Southeast Asian Economies in Transition <i>Konosuke Odaka</i>	195
9. Sources of ASEAN Economic Growth and Change <i>Jesus P. Estanislao and Alejandro A. Aquino</i>	216

Contributors

Alejandro A. Aquino is head of the Environmental Scanning Unit, Institute of Industrial Economics, Center for Research and Communication, Manila.

Edward K. Y. Chen is professor of economics at the University of Hong Kong.

Robert Dernberger is professor of economics at the University of Michigan, Ann Arbor.

Jesus P. Estanislao is executive director of the Center for Research and Communication, Manila

Bruce Glassburner is professor of economics emeritus, University of California, Davis, and presently an associate of The Agricultural Development, Inc., Bogor, Indonesia.

Yutaka Harada is First Secretary of the Embassy of Japan in Thailand.

Chalmers Johnson is professor of political science at the University of California, Berkeley.

Yutaka Kosai is professor of economics at the Tokyo Institute of Technology.

Konosuke Odaka is professor of economics at Hitotsubashi University, Tokyo.

Ungsuh Park is executive vice president of Samsung Electronics Corporation, Seoul.

Robert A. Scalapino is Robson Research Professor of Political Science and director of the Institute of East Asian Studies, University of California, Berkeley.

Hadi Soesastro is deputy director of the Centre for Strategic and International Studies, Jakarta, Indonesia.

GENERALISTS

Albert Fishlow is professor of economics at the University of California, Berkeley.

Kenneth T. Jowitt is professor of political science at the University of California, Berkeley.

Guy Pauker is a Southeast Asia specialist with the Rand Corporation in Santa Monica, California.

Seizaburo Sato is professor of political science at the University of Tokyo.

Jusuf Wanandi is director of the Centre for Strategic and International Studies, Jakarta.

Benjamin N. Ward is professor of economics at the University of California, Berkeley.

Ann Willner is professor of political science at the University of Kansas, Lawrence.

Donald S. Zagoria is professor of political science at Hunter College, New York City.

Preface

This volume, together with two others that will follow shortly, is the result of a project that began in 1982. At that time Sato Seizaburo, Robert Scalapino, and Jusuf Wanandi met to plan a series of workshops involving scholars from the five countries then comprising ASEAN (Indonesia, Malaysia, the Philippines, Singapore, and Thailand), Hong Kong, Korea, Japan, and the United States. We determined to focus upon three issues central to the concerns of the peoples of the Pacific-Asian region. The first of these issues is the subject of this volume, namely, the basic question of economic development. A wide range of subjects can naturally be subsumed under this very general topic, among them: preconditions for growth; comparative economic strategies and policies; models or, more appropriately perhaps, negative and positive lessons from the experiences of others; and the interrelation between economic development at the nation-state level and international trends.

A second subject studied was that of political institutionalization, namely, the effort to build viable political institutions in the context of diverse cultural traditions and rapidly changing socioeconomic circumstances. The final issue related to the problems of internal and external security. What are the domestic challenges to the political system and what are those that emanate from external sources?

In September 1983 three workshops—each devoted to one of the above subjects—were held in Bali, Manila, and Tokyo, with ten to fourteen participants. After an interval of some eight months—during which time the authors, taking advantage of the initial discussions, had an opportunity to revise their first drafts—a four-day meeting of the entire group took place in Berkeley on March 17–21, 1984. Some additional individuals were present at this meeting, scholars who had a general or theoretical knowledge of the subjects under discussion. A full list of the workshop participants and the outside scholars is provided elsewhere. Further revisions in the papers took place during the summer and fall of 1984, prior to this publication, but no attempt was made to impose a standardized format on authors. Hence, there are inconsistencies in such matters as capitalization, abbreviations, translations, and forms of citations.

We are deeply indebted to the Ford Foundation, the Fuji Xerox Co. Ltd., the Rockefeller Brothers Fund, and the U.S. Department of Education for support of the project, and to many others for hospitality in the course of the meetings and for assistance in connection with this publication.

Robert A. Scalapino
Berkeley, California, U.S.A.

Seizaburo Sato
Tokyo, Japan

Jusuf Wanandi
Jakarta, Indonesia

January 1985

Introduction

Robert A. Scalapino

The vast literature on economic development in recent years is a response to the global economic revolution now in its opening stages. Goals that were once concentrated primarily in the Western world (Japan was included at a relatively early point) have become nearly universal. Leaders in virtually every nation are committed at present to some combination of agricultural modernization and industrial development, with the aim to raise simultaneously the livelihood of the citizenry and the strength of the state. For the advanced industrial societies, this global revolution presents new challenges. Can structural changes in the domestic economy be accomplished rapidly enough to cope with the new international environment? Or will the response be a return to strongly nationalist, protectionist measures? And can regional and international institutions be devised that are effective for current purposes and sufficiently flexible to enable adjustment to a changing world? For the developing world, the challenges are equally great, and some of them are of similar nature.

The essays that follow explore various routes to development that are being taken in East Asia and attempt to provide preliminary evaluations of their relative effectiveness. They also examine the complex issue of the transferability of a given system or set of experiences to another society, in another time framework. We realize that many of the questions explored in this volume are universal in nature, by no means confined to the realm of Asia. Yet East Asia does provide us with a diversity of economic systems, and significant differences in performance, both among and within the systems operative. One must be constantly aware, of course, of the noneconomic variables including culture, political system, leadership, and scale that can greatly influence outcomes, and our authors repeatedly refer to such factors.

The first essay by Robert Dernberger examines the three principal socialist societies of East Asia, namely, China, North Korea, and Vietnam. Each of these states adopted the Soviet model at the outset, nationalizing the means of production; creating a centralized planning system with state-appointed managers for industry who worked on the basis of assigned targets; collecting revenues from enterprise profits and indirect taxes levied on commodities and agriculture; and proceeding toward agri-

cultural collectivization. By the end of the 1950s, the system had been established in all three states, although North Vietnam was delayed in achieving its goals by various exigencies, including preparations for conflict in the South.

In addition to adopting a similar economic system, the three Asian socialist states also employed a Stalinist "big push" development strategy, stressing high rates of accumulation and the concentration of investments in the material production sectors, especially the producer-goods industries. Yet another similarity has now emerged: by the 1970s, these countries were each faced with certain problems derivative from Stalinist economics that have forced them to consider systemic reforms or, at a minimum, to increase dependence upon imports, especially imports from nonsocialist countries.

It is Dernberger's thesis that any state that adopts and implements a Soviet-type economic system and a Stalinist economic development strategy will, after an initial spurt, encounter specific economic problems including inefficiencies in resource and manpower use, accumulating bottlenecks, and a growing technological gap with the more open societies of the world. And whether structural reform is contemplated at this point or not, the effort to alleviate problems by imports creates additional difficulties in the foreign-trade sector, adding to the pressures for further policy changes and systemic reform. The Soviet system, he asserts, is compatible with limited foreign-trade dependence and autarkic development, but not with an integration of the domestic economy into the world economic system.

Can and will the Asian socialist societies undertake systemic reform? Dernberger regards the answers to this question still in doubt. It is his view that despite several dramatic institutional changes, China's economic system remains basically a Soviet-type system. In a fascinating postscript following his recent trip to China, he acknowledges that recent trends appear to increase the probability of systemic economic reform in all three socialist societies, particularly China. On the basis of extensive discussions with Chinese administrators, however, he regards the attempted divisions among mandatory-planned, guidance-planned, and market-determined economic activities still indistinct and fluid. Moreover, the process of seeking to shift more commodities from the first to the second sector, and from the second to the third sector, is not dissimilar in his view to efforts in other Soviet-type economies at various times in the past. Thus, he believes that it is premature to proclaim the death of centralized planning and controls in China, particularly since the urban reforms are of limited economic significance as yet, in contrast to the sweeping agrarian reforms.

The North Korean economy, after a lengthy period of relatively strong performance, seems to have entered a time of stagnation. This fact, together with the continuance of conditions that earlier created the DPRK's balance of payments crisis and poor credit rating, has heightened the pressures for turning outward for technology and, beyond this, internal economic changes. After pursuing highly autarkic policies for more than three decades, North Korea is being forced by both economic and security considerations to contemplate changes in economic policies; if such changes actually materialize, true systemic reform may become necessary at a later point. But as Dernberger indicates in his postscript, of the three Asian socialist states, North

Korea currently shows the least indication of systemic reform in the near term.

Vietnam has always been in a unique position given its lengthy involvement in conflict, an involvement that continues to the present. The extraordinarily bad economic conditions of the late 1970s prompted DRV leaders to accept delays or retreats in the implementation of a full-fledged socialist economic system, especially in the South. More pragmatic policies in the hands of "reformers" have been a necessity, and it is possible, as Dernberger indicates, that the longer such policies remain in effect, the more difficult will be the implementation of the "true" socialist economic model. There is little indication, however, that the old leaders in political control are disposed to abandon goals previously set, and the extensive influence of the Soviet Union upon Vietnam, including the training of thousands of young Vietnamese in the USSR, will presumably influence future trends.

Nevertheless, one can only conclude from the evidence that Dernberger and others provide that the socialist economies of East Asia stand at a crossroads. Whatever the initial gains through the Stalinist "big push" strategy and autarkic policies, serious problems subsequently emerged, even without taking into consideration the grievous economic errors in China during the middle and late Maoist era. Thus, the search for remedial measures is under way in varying degree in each of the Asian socialist states. Dramatic changes are thus far limited primarily to China, and, even here, much remains tentative and experimental. The leadership itself appears uncertain and, from some indications, divided about the course to be taken. It is thus too early to provide a definitive answer whether basic systemic changes in such economies, even that of China, are enroute and will be sustained over time. The next few years are likely to be crucial in determining the extent to which these societies will deviate from the Soviet model with which they commenced. Political factors, both internal and external, will surely play a significant role in determining the future, together with the economic results of current experiments. It is only possible at this point to say that the Soviet-style system has resulted in widely acknowledged problems, the solutions for which are not easily found. It is not surprising, therefore, that the luster of the Soviet model has appreciably dimmed throughout Asia.

It is logical to turn from the Soviet-style system to that which has evolved in Japan since Japanese economic performance has attracted global attention in recent decades. There is no disagreement that Japan has achieved extraordinary economic success in the past thirty years, setting a pace that is the envy of much of the world. Interestingly, however, despite the extensive studies of the Japanese experience, specialists differ as to the intrinsic nature of Japan's political economy and the basic reasons for its phenomenal achievements. In the essays that follow, these differences are more of degree and emphasis than of kind, but they highlight the complexity of Japan's economic evolution and contemporary political-economic system.

All our authors agree that concepts like Japan Inc. are oversimplified distortions. They also agree that the existing economic system, including the relation between government and the private sector, is highly complicated and has evolved over time, with important variations at different stages in the political and economic development of the country.

Within the framework of this general consensus, Yutaka Kosai and Yutaka Harada (authors' names are presented in Western style) place their primary emphasis on the limited direct role of the Japanese government in the economic sphere in comparison with the centrality of the private sector to Japan's economic development. A key to their analysis is their use of two concepts developed by Tulock and others: "rent-seeking" and "profit-seeking" activities. The former is defined as activities seeking privileges by political means whereas the latter refers to efforts to maximize economic gains by economic means. Kosai and Harada argue that the principal function of the Japanese government, aided by various external as well as internal circumstances, was to keep rent-seeking activities limited and to encourage profit-seeking activities, thereby supporting private-sector initiatives that have underwritten Japanese economic growth.

They assert that analyses of Japan's early development that stress the centralized, statist economic policies of the Meiji era exaggerate the facts and are wrong in their emphasis. They acknowledge that the government performed vitally important functions in promoting public education, establishing a banking system, and performing similar activities relating to the infrastructure, but it was in these respects—not in the direct promotion of and involvement in industries—that the government made its principal contribution.

In examining the period since 1945, Kosai and Harada assert that procedures have been followed that have kept the size of governmental participation in the economy relatively limited. They admit that in the early years after World War II, Japan had a heavily controlled economy, a huge bureaucratic structure, a network of cartel-like organizations, and a bent toward socialism, especially within the intellectual community. They assert, however, that except for continuing restrictions on foreign capital and technology transfer, which they deplore, liberalization of the Japanese economy proceeded rapidly after 1960. While the Japanese government had good relations with business rather than being in an adversary role, its efforts at administrative guidance were not always correct or effective, and in any case, Kosai and Harada argue, the development of the Japanese economy was primarily due to private-sector initiatives aimed at profit-seeking under conditions of intense competition.

This situation was supported because the rate of return on rent-seeking activities in Japan was comparatively low. The authors are concerned about evidence that pressure groups in Japan have recently caused the trend to be toward an increase of rent-seeking, but they believe that this trend can be reversed because there are external pressures and technological innovations that will raise the rewards of profit-seeking activities. And their own preference for a liberal economy is clear. In a brief survey encompassing both the advanced industrial societies and the developing world, they find that interventionist policies on the part of the government have rarely encouraged economic development.

Chalmers Johnson interprets the Japanese experience—and that of South Korea and Taiwan—in somewhat different fashion, although there are important elements of congruity in the Johnson and Kosai-Harada essays. Johnson's central theme is that in Japan, South Korea, and Taiwan, "soft authoritarianism" in the political realm was

combined with a commitment to free enterprise. Thus, these states challenged both Leninist command economies and the “free enterprise” systems historically associated with the pioneer Western experience. The coexistence of authoritarianism and capitalism, he argues, provided a combination of stability and legitimacy. By manipulating incentives and disincentives, government played an important role in the development of the economy, but it was not a command economy of the Soviet type.

Johnson asserts that the structural model of the East Asian high-growth systems has these elements: stable rule by a political-bureaucratic elite not acceding to political demands that would undermine economic growth (thereby concurring with a basic Kosai-Harada thesis); cooperation between the public and private sectors under the overall guidance of a pilot planning agency; heavy and continuing investment in education combined with policies that ensure the equitable distribution of the wealth created by high-speed growth; and a government that understands the need to use and respect methods of economic intervention based on the price mechanism.

Each of these elements, he argues, exists in the contemporary Japanese, Korean, and Taiwanese systems, although in a detailed examination of financial controls, labor relations, the bureaucracy, and the state structure, he identifies differences in relative weighting, historical evolution, and trade-offs. In concluding, Johnson outlines his purposes: to illustrate how economic performance is related to political arrangements; to argue for the essential rationality of the soft authoritarian-capitalist nexus in terms of comparative development strategies; and to explore the range of political problems that must be addressed and solved in implementing this strategy. It is his basic thesis that the “capitalist development state,” whatever its problems, will outperform others, both of the absolutist and of the classical capitalist type.

The two essays that follow, those of Ungsuh Park and Hadi Soesastro, explore from somewhat different perspectives the question whether the Japanese model or experience is transferable to other societies. Park’s focus is upon the relation between the Japanese experience and the experiences of South Korea and Taiwan. Clearly, the precise cultural antecedents and timing of Japan’s development will not be duplicated, even by societies that share certain facets of its culture and history. However, Park notes that various strengths and weaknesses of the Japanese economy of the early 1960s were seen in the Korean economy from the late 1970s onward. Thus, how Japan responded to its problems might provide valuable lessons for Korea and Taiwan.

Park shares with others the view that Japan’s approach to economic development has been exceedingly complex. He submits that Japanese developmental strategy has been compounded from two different sets of policies: liberalization and protectionism. The former has developed largely as a product of external pressures. The latter has represented an effort to cater to perceived domestic needs, and, as the 1979 report of Arthur D. Little consultants indicated, has remained formidable, at least until recently. A mix of liberal and protectionist policies may be the general pattern of newly industrializing countries (NICs), but the particular mix characteristic of the Japanese system may not fit most other societies, even those in a similar transition stage.

Indeed, although both South Korea and Taiwan are classified as NICs, Park finds

important differences as well as similarities between them. In a significant sense, Korea is closer to the Japanese model. It has been and probably will continue to be more protectionist than Taiwan, partly because of balance of payments problems and also because of the bias toward heavy industries. Although the gross national product of Taiwan is only about one-half that of Korea, its export value is slightly greater. Under these circumstances, Korea would lose more than Taiwan by freeing its domestic market for imports. Thus, Park concludes, circumstances may cause Korea to be the better pupil of Japan, whatever the consequences of that fact.

Hadi Soesastro examines the Japanese experience in the light of the needs and concerns of the ASEAN states and their leaders. He dismisses the thesis that in order to borrow from another, one must replicate the background of the state concerned and its evolutionary process. Moreover, he accepts the possibility that the uniqueness of Japan has been exaggerated. At the same time, he argues that it is difficult for states like those of ASEAN to use Japan as a model. The essence of his position, however, is that one can learn important lessons from the Japanese experience without being forced to transplant that experience in its full dimensions to a different society.

In exploring two campaigns to emulate Japan recently undertaken in Southeast Asia, Soesastro reveals some of the political and economic motivations that are present. He first looks at Singapore's governmentally sponsored "Learn from Japan" campaign. Singapore already resembled Japan in some respects, and he believes that Lee Kuan Yew's object in calling upon his people to learn from Japan was to prove to Singaporeans that the traditional values of Asia and the advanced science and technology of the West are compatible, thereby underwriting Lee's own values and, it is hoped, enhancing the citizens' work ethic. A negative reaction to this campaign quickly developed, however, partly because of the extreme manner in which it was pushed.

In the case of the Malaysian "Look East policy," also pushed by the government, the goal was again a change in attitudes and work habits, not merely among blue- and white-collar workers but also among bureaucrats. In describing the West as decadent in comparison with the dynamism of Japan and South Korea, Prime Minister Mahathir was also giving vent to anti-British, strongly nationalist sentiments derived from his youth. In any case, the call to emulate Japan and South Korea evoked strong protest from the principal opposition party and from others as well, although Mahathir appears to be persevering in the campaign up to this point, despite unhappiness over Japanese protectionism in the agricultural sector.

Both of these cases, asserts Soesastro, raise questions about this type of social engineering on the part of the government. If techniques are to be transferred, natural affinities must be present; without these, governmental exhortation will not suffice. Such campaigns, moreover, while appreciated by the Japanese in some respects, also make them uneasy because failure could produce a backlash, and, in any case, there is a danger that Japan will become a factor in domestic politics.

Soesastro's conclusions are similar to those of Park. The art of learning from Japan requires an avoidance of stereotypes and an understanding of the complexity of the Japanese experience. One must study the structure of incentives and disincentives

created in Japan and the nature of the institutions—or the absence of such—that has affected the behavior of the private and public sectors. Following Johnson, Soesastro is drawn to the thesis that Japan managed to combine government-sponsored modernization with private sector-led growth. The manner in which this combination was applied in Japan may be unique, but the concept itself is not a uniquely Japanese trait, and how it can be applied to other countries is a matter of selecting proper policies by taking into account the prevailing conditions. The test is the ability of the government to cooperate with rather than to control the private sector, and it is this fundamental lesson that is relevant to the ASEAN countries, in Soesastro's view. He believes that all of the states comprising ASEAN can profitably advance certain concrete policies such as bringing in Japanese technology and seeking Japanese training in some fields. The premium, however, must be upon avoiding euphoria in relation to Japan or the assumption that systems external to the society can be imposed by fiat. Both governments and the private sector must explore the Japanese experience in concert.

By comparing the economic policies and systems of the four Asian NICs, Edward Chen amplifies and expands earlier themes. He defines the NIC phenomenon at the outset as one characterized by a rapid growth in income accompanied by an equally rapid expansion in manufactured exports. All these societies except Hong Kong, he notes, went through a stage of import substitution before they entered the state of export orientation, and although he agrees with the view that export-oriented policies are better for economic development, he raises certain questions about commonly held positions on this matter, including whether effective implementation of policy is not more important than the choice of policy. He also stresses the importance of noneconomic factors such as ideology and political organization.

After presenting the most important statistics relating to the performance (and variations) of the Asian NICs, Chen notes that the simple division of industrialization strategies into two categories does not suffice. In actuality, four stages exist. A first stage of "easy" import substitution during which nondurable consumer goods are produced is followed by a second stage of "difficult" import substitution involving the production of consumer durables, intermediate goods, and capital goods. The latter stage is difficult because of rapidly increasing costs brought on by limited economies of scale, dependence on foreign resources and expertise, and the development of monopolistic controls. Export orientation can also be divided into two stages: a first stage of exporting manufactures that are relatively labor intensive and a second stage of exporting more capital- and technology-intensive products. The Asian NICs, he asserts, did not go through the second stage of import substitution, and Hong Kong did not even go through the first stage. Both Korea and Taiwan began to enter the second stage of export orientation in the early 1970s, with Hong Kong and Singapore following in the late 1970s. Thus, the common problem facing all Asian NICs relates to type of industrial transformation required in the transition from the first to the second stage of export orientation.

Like most other authors in this volume, Chen believes that, with the exception of Hong Kong, governments have played vital roles in the economic growth of the NICs, and even in Hong Kong, political stability and the government's monopolistic control

over land affected the economy significantly. The other governments were both effective and autocratic, creating stability and the successful implementation of policies. Yet Chen reiterates the thesis that government alone is not sufficient; one must have the cooperation of the private sector both in the creation and execution of policies. And the right kind of factor inputs must support capable bureaucrats and an amicable government-business relationship.

Chen's evaluation of the future prospects for the four Asian NICs is particularly interesting and certain to evoke controversy. He believes that when one combines economic and political considerations, Taiwan has the most promising future. South Korea, in his opinion, may have placed too much emphasis on the development of heavy industry; its short-range prospects are good, but the longer-range future is uncertain. Hong Kong suffers from a lack of governmental support for the necessary industrial transformation and from political uncertainties, although one can be optimistic about the short-run future. Singapore, heavily dependent upon industries related to petroleum and upon governmental guidance and foreign investment, may also face a more troubled future than is commonly assumed, according to Chen. At the same time, he concludes that the past records of all four societies warrant respect and hope.

Bruce Glassburner's essay focuses attention directly on the performance of Indonesia, the Philippines, Thailand, and Malaysia—four countries classified by the World Bank as "middle-income economies." At the outset, Glassburner defines his purposes as fourfold: How "outward looking" have been the international trade and industrialization policies of these countries, and to what extent have the policies pursued been successful? What were the repercussions in each case of the three oil shocks, the first of which commenced in 1972? How has each nation handled its main macroeconomic policy instruments, namely, its budgetary and monetary policies? Finally, how has each nation dealt with its agricultural sector, and how well has that sector performed?

Using these criteria, and providing us with a significant amount of data, Glassburner proceeds to evaluate the past performance, current problems, and future prospects for each of the four countries. His conclusions are sobering, at least for those who have assumed that the high growth rates of the past two decades can be sustained with minimal additional efforts. There are encouraging signs on certain fronts. Each of the four has handled its macroeconomic policies in a generally satisfactory manner, and export trade is presently expanding at a good rate. Yet, in Glassburner's opinion, Indonesia and the Philippines in particular face difficult tasks. Indonesia remains heavily dependent upon recovery of the world demand for petroleum and its traditional exports. It must restructure its industry, which is too dependent upon government subsidies and high levels of protection—but this will require major political as well as economic decisions. The Philippines has been attempting to introduce an industrial restructuring program but has been hampered by global economic conditions as well as by the ongoing domestic political upheaval.

The prospects for Thailand and Malaysia are more promising in Glassburner's opinion. The hope for Thailand lies in that nation's corps of competent technocrats and

in the policies of economic openness traditionally pursued. Malaysia also has excellent technocratic manpower and a record of openness, although some concern must be manifested with respect to that nation's debt problems and Prime Minister Mahathir's interest in introducing a second round of import substitution requiring a shift toward high-capital and high-technology industrialization—goals that cannot be achieved without capital subsidies and protectionist policies.

In any case, one major variable is the future course of world trade. Will growth rates resume the rapid course of the past, and will the four ASEAN countries expand their shares of that trade? It is Glassburner's contention that the latter achievement is not possible if the import-substitution strategy is followed. Moreover, a rapid growth of internal markets in a closed economy can only be reached as domestic productivity grows, but one of the most effective ways to enhance such productivity is to expose protected domestic producers increasingly to competition. Thus, it is Glassburner's view that, although global economic trends are important, much hinges upon decisions with respect to basic economic strategy which policy makers in the four countries will make in the years immediately ahead.

Konosuke Odaka examines the same four ASEAN countries, reviewing their performance since World War II and providing comparisons and contrasts with the Japanese experience. In connection with the latter effort, Odaka finds that the most important difference between Japan and the ASEAN states is that in Japan the stock of natural resources ran out at an early point, whereas such shortages did not become serious in the four ASEAN states despite the population explosion. Consequently, Japan was forced to enter industrialization intensively and at an early point as a way out of its difficulties.

Like Glassburner, Odaka finds current economic problems in the four states serious, and he too criticizes the eagerness of countries such as the Philippines to promote highly capital-intensive projects. He particularly stresses the importance of developing the engineering industry as a precondition of effective industrialization, and notes that the methodology of modern engineering—while taken for granted in the West—requires an intellectual break with the traditional pattern of thought in South-east Asia, thereby introducing a complex but highly relevant consideration. Odaka believes that external assistance in the form of manuals and other educational devices can assist in overcoming this obstacle.

In his conclusion, Odaka is perhaps more optimistic than Glassburner about the future. He acknowledges that if developing countries merely follow the paths of the pioneers, a serious gap is likely to be permanent, but he holds that, with the advance of technology and the discovery of new industrial materials and processes, various shortcuts may be devised. He places a high premium upon mature, innovative leadership from the entrepreneurial sector, and he also regards as crucial the choice of industries to be promoted and the sequence in which they are advanced. Once again, this essay emphasizes the quality of the private sector and the nature of indigenous decisions.

The final contribution, by Jesus Estanislao and Alejandro Aquino, supplements and is in general conformity with the previous essays. Utilizing the theses expounded

by H. B. Chenery and other specialists on structural change and economic development, Estanislao and Aquino provide us with their evaluation of the economic development of five ASEAN countries, Singapore being included. Special attention is paid to the Philippines, a society and an economy with which the authors are intimately acquainted.

Their conclusions basically support those of previous writers, although they are more eclectic than some. A successful development strategy in their view depends strongly upon trade and a mix between “inward” and “outward” orientation, although the thrust must be away from import substitution. They believe that there is ample room for flexibility in the development paths taken by these states and others in a similar stage. Interdependence has not yet reached the point where different approaches have become impossible.

They acknowledge that much hinges upon domestic economic policies, especially price policies, and they assert that the programs allowing the market forces to determine prices have worked better than those permitting price distortions to coexist with the free market. Like Odaka, they are cautiously optimistic about the future, believing that the ASEAN countries will continue to grow, albeit perhaps not as rapidly as in the past, pushed by what they call the “four wheels of growth”: an active export drive, committed governments, rising levels of investment spending, and a rapidly expanding consumer mass market.

In these essays, drawn from authors of diverse cultural and educational backgrounds and living in societies in different stages of economic development, a few common themes and viewpoints reoccur.

If we are to summarize the conclusions reached by our workshop, these themes are the dominant ones:

Socialism as represented by the Soviet model and implemented by the Stalinist “big push” strategy has been the developmental path taken by the three principal socialist societies of Asia. This model provided for significant initial growth at least in North Korea and China where it could be effectively applied. Vietnam has always presented special problems due to continuous warfare. Built into the Soviet model, however, are complex “second stage” problems of inefficiency, sector incongruities, and technological gaps with the advanced world. These deficiencies, now apparent to the leadership of these societies, have induced reforms of varying intensity and scope. It remains to be seen whether genuine structural reform is in the offing, even in China. But changes—possibly profound changes—are in the air as these societies struggle to remedy the weaknesses of a command, autarkic economic order. Not surprisingly, in view of current circumstances, the Soviet model has very limited appeal to other Asian societies.

The Japanese model, on the other hand, has a strong appeal, and, in varying degree, other Asian states have either sought to emulate it, in part if not in whole, or have naturally gravitated in a similar direction. Meanwhile, the precise nature of this model together with the basic reasons for the Japanese success in economic development remain subject to debate. We would posit the following conclusions. The genius

of Japan has been its ability to develop an economic system that rests upon a dualism: strong, effective, honest government providing stability, a healthy infrastructure, and policies conducive to economic growth; and a vigorous private sector supported but not dominated by government, encouraged to pursue economically rational policies under conditions of substantial competition at home but significant protection from external competition—at least until strength difficult to challenge has been established.

Is this model exportable? Aspects of the Japanese experience—notably the movement toward an export-oriented strategy, together with some mix of liberal and protectionist policies—now constitute the policies or goals of most East Asian societies. Of course, the Japanese experience cannot be replicated in its entirety by societies different in culture, resources, and the timing of their development. Nor can it be implanted by government fiat; certain natural affinities and the cooperation of the private sector must be present. The question remains, moreover, whether global economic trends will continue to support the export-oriented strategy, now so universally being pursued.

Yet there are important lessons to be learned from the Japanese experience, and chief among these may be the importance of the proper political context: a government that is at once strong and limited, pursuing policies that encourage the private sector while avoiding actions that stifle initiatives. But given this context, it is equally important that the private sector behave in a rational economic manner rather than devoting its energies primarily to seeking protection from the consequences of mismanagement and erroneous policies by political manipulation.

Yet there are other aspects to the Japanese model, and one of these is its protectionist element. There is increasing agreement among economists that whatever its initial and short-term benefits, a continuing emphasis upon the import-substitution strategy and accompanying protectionist measures, as with the Stalinist strategy, exacts ever heavier costs. But for many reasons it is a tempting strategy, even when a society has evolved to the point where export orientation is crucial to further development. Protectionism—reality and threat—is clearly not a monopoly of the advanced industrial world today. It is widespread throughout Asia and other developing regions.

The age of *laissez-faireism*, if it ever existed, is past. Governments everywhere play a significant role in determining economic policies. The experiences of East Asia, however, indicate that while the variables—economic and noneconomic—are many, luck plays a part. Nonetheless, the economic systems that preserve and enhance a vigorous private sector and primarily rely on the market provide the greatest benefits to the greatest number of citizens over time.

Finally, can one predict the future of the East Asian economies? Flat predictions are foolish, but the time is appropriate to draw back somewhat from the euphoric pronouncements commonplace in discussing Asia's future. The likelihood remains strong that of the world's regions, East Asia will remain the most dynamic, at least to the end of this century. However, the problems signaled in these essays should give scholars and policy makers alike cause for concern. No matter what system or strategy is being pursued, success cannot be assumed, and old patterns of policy and attitude

will not necessarily suffice. We have outlined the formidable challenges confronting the Asian socialist economies. The coming decade will be truly critical for them. But the NICs also face some difficult decisions, made more complex by the political uncertainties in which they are encased. And the states comprising ASEAN now confront new and old problems demanding responses.

These circumstances underline the fact that leadership as well as system are of critical importance—leadership in both the public and private sectors. Nor is Japan, the one advanced industrial nation of the region, exempt from new challenges. Can structural changes be achieved to keep pace with the global revolution? Will protectionism recede or advance? Above all, can Japan achieve truly internationalist attitudes and policies that accord with its status as a global economic power?

One additional consideration imposes itself into any discussion of East Asia's economic future. Will separate domestic policies and bilateral agreements in the economic realm suffice in company with institutions such as the World Bank, the International Monetary Fund, and the Asian Development Bank to advance the international economic order, or do we need further institutional developments, regional or global in character? Given the relatively precarious and ad hoc nature of economic interactions at the international level at present, explorations regarding this matter must and will continue.

Berkeley, California
January 1985

1. The State-Planned, Centralized System: China, North Korea, Vietnam

Robert F. Dernberger

INTRODUCTION

A major theme of the discussion and analysis* presented in the contributions in this volume of our study *Development, Stability, and Security in the Pacific-Asian Region* is "a relatively simple one: in broad terms, what is the most promising economic system for the Pacific-Asian societies in the next several decades?"¹ Although the principal Pacific-Asian societies being studied are the nonsocialist countries in that region, any attempt to identify an optimum economic system for those societies will require the evaluation of the proper role for the state. In this regard, it may be useful to evaluate that role by looking at the past experience, present performance, and quests for change taking place in the People's Republic of China (PRC), North Korea, and Vietnam. This explains our objectives in the following discussion of these three socialist economies in the Pacific-Asian region (hereafter referred to collectively as PARSE). We have tried to derive general comparisons and arguments on the basis of the experiences in all three socialist economies so that those arguments will be more universal in their validity than would the conclusions derived on the basis of a single country case study.

Our rationale for the organization of the discussion in this essay requires a brief explanation. We begin by presenting a comparison of the quantitative dimensions of

* I want to express my appreciation to Robert Scalapino and Benjamin Ward, the discussants of earlier versions of this chapter at the meeting of Working Group I in Tokyo (September 1983), and the meeting of all working groups in the project on *Development, Stability, and Security in the Pacific-Asian Region* in Berkeley (March 1984). In revisions I have benefited from their critical comments and suggestions, as well as from those of the participants in both meetings. The remaining shortcomings are my responsibility.

¹ Quoted material is from Professor Scalapino to Professor Sato and Dr. Wanandi, November 10, 1982, expressing his interpretation of the "central issue" to be dealt with by Working Group I.

the PARSE, followed by our defense for treating each economy as an independent observation unit of equal importance in the sample, despite the inequalities in their quantitative dimensions. Next, their commonly shared economic system, policies, and experiences are briefly noted, along with a review of the general theories or arguments about reforms in, or evolution of, economies with similar characteristics. We then suggest our own hypothesis on this topic. The core section of the essay examines the past experiences, current problems, and evolving policies and institutional changes in each of the PARSE with the aim of determining the most probable economic system they will implement in the next few decades. The final section attempts to derive a few major conclusions from this analysis of policy and institutional evolution in the PARSE, along with some general observations of the relevance of these conclusions to the question of major concern to the working group on development.

THE SAMPLE OF SOCIALIST COUNTRIES

The *Asia 1983 Yearbook* covers the economic developments in thirty countries and territories as the constituent members of the Pacific Asian region. Eight—Afghanistan, Burma, Cambodia, China, Laos, Mongolia, North Korea, and Vietnam—can be properly labeled “socialist” countries. The population of these eight countries accounts for 44.5 percent of the 2.5 billion who live in the Pacific-Asian region. The sample of socialist countries to be studied here includes only three of the eight socialist countries. Afghanistan, Cambodia, and Laos are excluded because their recent history and current circumstances offer little evidence for determining the general laws of evolution for the socialist economies in Asia. We have excluded Burma’s experience because the economic policies and institutions in that country deviate from those of the more traditional socialist economies in the Pacific-Asian region. The People’s Republic of Mongolia is the second-oldest socialist country in the world, but the evolution of economic policy and institutional change in Mongolia has not been independently determined by the Mongolians themselves or by developments within their economy. Rather, Mongolia fits the mold of a satellite of the Soviet Union and can be excluded from our sample for that reason. The three remaining socialist economies share three basic and important characteristics—duration, acceptance and implementation of the traditional socialist economic model, and independence to experiment with economic policies and institutional changes in solving their economic problems. A Socialist government ruled by a Communist party has existed in each of these countries for at least two decades. Equally important, each of these governments initially sought to adopt and implement the economic policies and institutions of the traditional socialist economic model.² In addition, each has encountered economic problems during the past decade, as well as currently, and each has introduced, to a

² These economic policies and institutions of the “traditional socialist economic model” will be described in greater detail later in this presentation.

differing extent, reforms of the traditional socialist economic model in the attempt to solve those problems.

Is our sample of three socialist economies so dominated by a single country that our results are determined solely by China's experience—that is, are we really working with a sample of only one and, therefore, are our conclusions losing relevance to a wider number of cases? We would argue that this is not the case; our sample consists of three independent observations of the evolution of economic policy and institutional change. That one of these economies is several times larger than the other two is irrelevant *for our purposes*. Are we sure that the evolution of economic policy and institutional changes in these countries is not the result of a single decision coordinated in a uniform manner by the ruling Communist party of each of these three countries? The Soviets may fondly remember (dream of) a day when this was (will be) true, but this certainly was not the case during much of the past two decades in the PARSE. Any country is subject to outside pressures and influences, but even in Vietnam, where Soviet influence is highest, the Soviets have not been able to impose their own economic-policy-and-institution mix. There is no reason to believe that these three case studies are not independent.

Moreover, within their similarities, the economies of the PARSE exhibit striking differences, and the economic problems with which their leadership groups are trying to cope also differ in important features. All three would be considered examples of developing economies, but the per capita GNP of North Korea is more than three times that of China, which is half as much again as the per capita GNP of Vietnam. North Korea suffers from labor shortage, and the agricultural labor force per unit of cultivated land in China is more than half as much again as that of North Korea. Vietnam is just beginning to industrialize, industry accounting for one-fourth of the total GNP, which is growing at an annual rate of 2.4 percent; for China, industry's share of GNP is only slightly larger, but the rate of growth of GNP in China is almost twice as large. Industry's share of the GNP in North Korea is twice as large as that in China, and the rate of growth of the GNP in North Korea is 50 percent larger than that in China. In 1982, China's budget had a deficit of 1.5 billion U.S. dollars; North Korea's budget was balanced, and Vietnam's budget deficit amounted to more than one-fifth of total expenditures.

None of the three countries depended highly on foreign trade. China's exports accounted for 8.7 percent of GNP, and while enjoying a surplus in the balance of trade equal to 18 percent of total exports in 1981, China's foreign debt was the largest for the three countries, an outstanding debt of 4.4 billion U.S. dollars. After long isolation, North Korea now participates in foreign trade with the West, and its foreign-trade dependency ratio is greater than that for China. In absolute terms, North Korea's foreign debt was less than half that of China's; in terms of debt-to-export ratios, however, North Korea's foreign indebtedness was six times that of China's. Vietnam's foreign-trade dependency rates and accumulated foreign debt were similar to those for China, but this is misleading. In a more meaningful way, Vietnam was far more dependent on imports than the other PARSE. Vietnam's imports were two and a half times its exports, and the accumulated foreign debt was equal to 40 percent of

Table 1
Comparative Quantitative Dimensions of the Three Socialist Economies in the Pacific-Asia Region

	China	North Korea	Vietnam
Area (km ²)	9,567,000	122,300	329,600
Cultivated area (km ²) ^a (1983)	1,052,370	22,014	65,920
Population (1,000) (1983)	1,015,400	19,200	57,000
Population per km ² of cultivated area (1983)	964.9	872.2	864.7
Rate of population growth (%) (1976–82)	1.5	2.4	2.8
Labor force (1,000) (1983)	463,300	9,000	24,500
Share of labor force in agriculture (%) (1983)	75.8	49	71
Agricultural labor force per km ² of cultivated area (1983)	333.7	200.3	263.9
GNP (billion U.S.\$) (1982)	254.1	15.3	9.0
Per capita GNP (U.S.\$) (1982)	258	810	160
Rate of real growth of GNP (%) (1970–80) ^b	5.3	7.3	2.4
Industry as share of GNP (%) (1983)	30.1	76	26
Budget expenditures (billion U.S.\$) (1982)	61.1	10.5	5.6 ^b
Budget revenue (billion U.S.\$) (1982)	59.6	10.7	4.1 ^b
Balance (1982)	-1.5	-0.2	-1.5
Exports (1982) (billion U.S.\$)	22.1	1.6 ^c	0.4 ^c
Imports (1982) (billion U.S.\$)	16.1	2.1 ^c	1.0 ^c
Balance (1982) (billion U.S.\$)	6.0	-0.5 ^c	-0.6 ^c
Total foreign trade as share of GNP (%) (1982)	16.1	24.3 ^c	16.5 ^c
Exports per capita (1983)	21.8	85.3 ^c	7.1 ^c
Outstanding foreign debt (million U.S.\$) (1983)	4,400	1,900	3,471

SOURCE: "Regional Performance Figures," in *Asia 1984 Yearbook* (Hong Kong, 1984), pp. 6–9.

^a Figure in the *Asia 1984 Yearbook* is percentage; the figure presented here is derived by applying that percentage to the total area, which is given in the same source.

^b From *Asia 1983 Yearbook*, pp. 6–9.

^c 1981.

Vietnam's GNP. Moreover, much of Vietnam's military equipment and many of its development projects are supplied and financed by unilateral grants from the Soviet Union and East European bloc countries.

The stated arguments, we believe, are sufficient to show why we can derive conclusions with more general validity by including each of these three economies in our study, rather than just one. In fact, a better sample could scarcely be designed for our purposes.

THE SHARED ECONOMIC SYSTEM, POLICIES, AND EXPERIENCES

Upon gaining political control, the leaders of the Communist party in each of the three economies adopted the Soviet-model economic system. This system was accepted at the time when the ideologically prescribed economic institutions for a socialist country and its basic components consisted of the following:

The means of production in industry are nationalized, as are enterprises in the commerce, transportation, and banking sectors.

These enterprises have managers appointed by the state, who are assigned output and input targets. Their reward system is based on their exceeding their output targets and minimizing their use of inputs.

The output and input targets are determined centrally by the planners on the basis of material balance accounts (a T-account of sources and needs) for all major products.

The government's budget acquires profits of state enterprises as revenue, along with indirect taxes levied on commodities and agricultural land. Government expenditures are allocated to cover the losses of state enterprises, normal government operating costs, defense, and all major investment expenditures.

These budget expenditures are also determined centrally by the planners, who therefore control the rate and allocation of investment, as well as the product mix of current output in the economy. Investments are financed by unilateral budget grants to the enterprises.

The banking system holds cash deposits of the state enterprises, acts as a clearing house for transactions between state enterprises, finances approved budget expenditures, and makes loans for working capital of state enterprises.

The economic plan (output-and-input mix, investment, transfers among enterprises and sectors) is in physical terms. Both the economic plan in physical terms and its counterpart, the financial plan in money terms, are to be balanced, but the planners try to correct imbalances by rationing or reallocating scarce inputs, outputs, or money as bottlenecks arise.

Prices in the economy for most commodities are set by the state, as are wages for the various grades of labor.

Trade and transport of most commodities, including the distribution of consumer goods through state retail-trade stores, are included in the plan and carried out by state enterprises. All foreign trade is nationalized and carried out, according to plan, by state trading companies.

Agricultural production and capital, including land, are collectivized, peasants becoming members of the collective. They work on assigned tasks in exchange for work points, which represent a share of the collective's net income at the end of the production year. The collectives are assessed an agricultural tax and a fixed output quota that must be delivered to the state at a price that is below "a market price." Collectives can organize industrial and sideline activities, and the individual peasant household has a private plot and can engage in private production and trade in rural markets after fulfilling a minimum obligation for work to be done on the collective sector. State farms are operated as state enterprises, the peasants becoming wage earners.

The economic system described by this list of basic institutions of the Soviet model was adopted by China, North Korea, and Vietnam soon after the Communists gained power in those countries.³ In each case, the adoption of this system was preceded by a period of transition from the inherited economy to the necessary conditions for the new economic system, but by the late 1950s the economic system in all three countries can readily be identified as a Soviet-model economy.

For China, the transformation to state-owned industries and collectivized agriculture initially was believed to be a long-run process. Yet, the banking and modern transportation sectors were nationalized in 1950, and by 1955, when the first Five-Year Plan, covering the years 1953–57, was adopted, state trading companies had become monopolies, and prices of most important commodities were set by the state. In that year, the state became a dominant partner in the remaining private enterprises, buying

³ This list of the ten major characteristics of the Soviet model is derived from the economic institutions adopted in the socialist economies, including the PARSE, in the 1950s and 1960s. I do not believe that each of these characteristics must be retained for the economy to be identified as of the Soviet type. In fact, the basic features of such an economic system and those that I believe must be present to distinguish it from other types of economic systems are nationalization of the means of production; centralized allocation of resources and commodities according to an economic plan; and administered prices. For an argument that the capitalist market and the Soviet-type economic systems represent the only two basic alternatives exhibited in the economies of today, see Benjamin Ward, "The Chinese Approach to Economic Development," in Robert F. Dernberger, ed., *The Chinese Experience in Comparative Perspective* (Cambridge, Mass.: Harvard University Press, 1980). It is important to note three features of my use of the term "Soviet-model economic system" in this contribution: (a) it refers more to the Western economists' "textbook" interpretation of the basic elements of that economic system than to a description of the particular economic institutions in the Soviet Union or any other socialist country; (b) unlike a common practice in the literature, my use of the term "Soviet-model economic system" here refers to the economic system alone and does not include the specification of any particular economic development strategies and policies implemented by that economic system; and (c) my argument that the economic system described here was accepted as the ideologically prescribed economic system for a socialist country in the late 1940s and early 1950s does not imply that this economic system was developed and adopted in the Soviet Union in the late 1920s and early 1930s on the basis of ideological arguments. Space constraints required the deletion of an appendix in an earlier version of this contribution. The appendix attempted to summarize the conclusions of recent research, which argues that the development of the Soviet economic system was a cumulative process of many practical decisions to cope with real problems. Moreover, its development owed little to theoretical principles and ideological beliefs. Nonetheless, this economic system and development strategy later evolved to become part of the orthodox ideology of socialism. See James R. Millar, "Bureaucracy and Soviet Rural Development: The City Boys and the Countryside" (paper presented to the Conference on Chinese Bureaucracy and Rural Development, University of Chicago, 1982) and references cited in that paper.

out their capitalist owners. The collectivization of agriculture was also speeded up in 1955, the share of peasant households increasing from 14 percent in elementary cooperatives in 1955 to 88 percent in advanced cooperatives in 1956. By 1957, the listed features of the Soviet-model economic system described China's economic system accurately. Whether it will remain so over the next few decades is a question to be discussed in the concluding section of this paper.

The Democratic People's Republic of Korea was a creation of the Soviet occupation forces at the end of the Second World War; 90 percent of North Korea's industrial enterprises were nationalized in 1946, and central economic planning was initiated in the following year. The state's control over the economy and efforts at planning were largely concentrated in industry; the main goals of the first two One-Year Plans of 1947 and 1948 and the Two-Year Plan of 1949–50 were the restoration of the destroyed Japanese industrial facilities and the expansion of the state's control over the commercial and transport sectors. In agriculture, the new Communist leaders launched a land-reform campaign, as in China, to redistribute ownership from Japanese and Korean landlords to their tenants. Collectivization of agriculture, copied from the Chinese model, did not occur until after the Korean conflict was terminated in the fall of 1953, when less than 1 percent of the arable land was farmed by cooperatives. As part of the so-called Speed Battle campaign of competition among groups to achieve planned objectives ahead of schedule, half of the farm households and agricultural land were in advanced agricultural producers' cooperatives in 1956.⁴ Finally, by 1958, all farm households and farmlands were in cooperatives of the advanced type.

Thus, the creation of the Soviet model in North Korea's economy was essentially completed in 1957, the first year of North Korea's first Five-Year Plan, and North Korea's economy remains one of the classic examples of the Soviet model in the socialist world today. Furthermore, North Korea is one of the few socialist countries "which still maintain the centrally-planned economy of the Stalinist era" and it has even "been strengthening the role of the central planning."⁵

Although the Soviet model was created later in Vietnam than in China and North Korea, the story is much the same for the socialist portion of Vietnam before the collapse of the Saigon government in the civil war. The Geneva Agreement of July 1954 awarded the DRNV control over the territory north of the 17th parallel, and in the areas of North Vietnam the Communist party controlled it began to adopt the Soviet model in 1955. By the end of 1960, 99 percent of the enterprises in industry and commerce and 80 percent of all transportation were in state-owned enterprises. In addition, three-fourths of the large number of individual handicraft workers had been organized in state-owned and -operated cooperatives. Thus, the North Vietnamese leaders were able to introduce their first Five-Year plan for 1961–65 at the end of the

⁴ In advanced agricultural producers' cooperatives, the distribution of the cooperative's net income is solely based on the labor contribution by the household in the cooperative sector.

⁵ Ki Hyuk Pak, "Agricultural Policy and Development in North Korea" (unpublished paper, Yonsei University, Seoul), p. 1.

1950s—not much later than the introduction of the Soviet-model economy and central planning in China and North Korea.

In the agricultural sector, the Vietnamese Communist leaders followed the pattern of their colleagues in China and North Korea in launching a land-reform campaign immediately after coming to power. The Party's administrative control in the rural areas was poorly developed, however, and membership in the Party in many provinces was very small: 1–2 percent of the population in many provinces and less than 1 percent in some.⁶ Furthermore, the Vietnamese traditional economy was based on strong village-community economies that were largely self-sufficient and poorly integrated into a national economy. Thus, the transition to collectivized agriculture took more than a decade in Vietnam; but the outcome was the same—by 1968 more than 90 percent of the peasant households and farmlands were in twenty-three thousand cooperatives, three-fourths of which were of the advanced type.

In 1970, therefore, all three of these economies were representative cases of a Soviet-model economy and had the basic elements of that model in common. The Communist political leadership that had governed North Vietnam for two decades, however, gained control over all Vietnam when the Democratic Republic of Vietnam was created in 1976. The leaders' policies were as predictable as the results: impose the Soviet model they had adopted in North Vietnam on South Vietnam as quickly as possible and eliminate all “vestiges of capitalism,” put the non-Communist elite in South Vietnam into reeducation camps and release them only when they could be trusted, and physically transfer population from areas of greatest density and political risk to areas of lowest density—all with the result of economic near-disaster.

A lengthy discussion of how the Vietnamese reacted by backing off from the rapid incorporation of South Vietnam's economy into the Soviet-model economic system is not warranted here. The attempt to collectivize agriculture in South Vietnam is proceeding very slowly; the attempt at large-scale, state-managed migration has been relaxed, and considerable “open market” and private economic activity is allowed. This is not to be seen as an officially adopted rejection of the eventual process of transforming the citizenry and economy of Vietnam to socialism but as a matter of necessity. Even so, although the extent to which the Soviet model was established and controlling economic activity throughout Vietnam's economy was somewhat less than in China and North Korea after 1975, for almost two decades North Vietnam's economic institutions followed the Soviet model.

One reason that the Soviet model has proved so durable, despite its many shortcomings, has been its ability to facilitate a “big push” development strategy fairly successfully *during a period of extensive development*. Just as they had all adopted the Soviet model as an integral element of true socialism without regard to the needs of or its feasibility in their economies, so all three of these socialist economies shared a

⁶ David P. Elliot, “Political Integration in North Vietnam: The Cooperativization Period,” in Joseph J. Zasloff and MacAlister Brown, eds., *Communism in Indochina* (Lexington, Mass.: Lexington Books, 1975), p. 171.

second major characteristic, their adoption of the “big push,” or Stalinist development strategy.

The dramatic extent to which the political leaders of the three economies adopted the Stalinist development model—high rates of accumulation and the concentration of these savings in investments in fixed capital in the material product sectors, especially the producers’ goods industries—would be readily apparent in the targets of the economic plans they adopted to achieve the rapid economic development of their economies.⁷ With the exception of 1951–53, that is, during the Korean War, the North Korean economy has been operating within the framework of an economic plan since 1947.⁸ Since the mid-1950s, with the exception of 1963–65, during the period of recovery following the agricultural crisis of 1959–61, the Chinese economy also has been operating within the framework of a Five-Year Plan.⁹

Vietnam also has followed the pattern of adopting economic plans to express the political leadership’s priority targets for the allocation of resources and output mix. Soon after the Geneva Conference in 1954, the National Planning Board drew up a Three-Year Plan for 1958–60, and the first Five-Year Plan for 1961–65. A second Five-Year Plan was scheduled to begin in 1966, but the increased involvement of North Vietnam in the war in the South meant that the war effort gained a higher priority than economic development. Thus, the North Vietnamese economy operated on the basis of annual plans that were not very meaningful in an operational sense, especially when intensive bombing raids destroyed most of North Vietnam’s small industrial sector and transportation network. As soon as the country was unified under a single socialist government, the Democratic Republic of Vietnam, a new (second) Five-Year Plan was drawn up and adopted by the Fourth National People’s Congress (NPC) in December of 1976. This revised second Five-Year Plan covered the years 1976–80 and was followed by the present plan, the third Five-Year Plan, covering the years 1981–85.

The targets contained in these economic plans (six Five-Year Plans for China, six plans varying from two to seven years for North Korea, and one Three-Year and three Five-Year plans for Vietnam) should provide an illustration of the extent to which the leaders of these countries implemented the Stalinist “big push” development

⁷ As can be seen from the text, we define the Stalinist development strategy in terms of the rate of investment and the allocation of that investment—critical variables in any mathematical model of economic growth. Furthermore, the words “high rates” of accumulation and “concentration” in the producers’ goods sectors have a relative interpretation, namely, compared with the rate of accumulation and sectoral allocation of investment consistent with a “balanced growth” development strategy.

⁸ It appears from the list of plans in Table 2 that there was no plan in operation in North Korea during 1968–70 or in 1977. Unlike the Chinese and Vietnamese, however, the North Koreans did not introduce a new plan until the targets of the current plan were basically achieved, even though its terminal date might have passed. Thus, the first Seven-Year Plan began in 1961, the last year of the first Five-Year Plan, because the targets of the latter plan were achieved a year early. Because their targets had not yet been achieved, the first Seven-Year Plan remained in effect during 1968–70 and the first Six-Year Plan, in 1977.

⁹ In all three countries, the formal adoption of an economic plan, although expressing the economic policy priorities of the leadership and serving as a policy framework in that sense, does not always imply that the plan has been made operational, or is actually implemented; nor does adoption guarantee that its intended results will be realized.

Table 2

Stalinist Economic Development Strategy Plans:
China, North Korea, and Vietnam

People's Republic of China:	1953–57	First Five-Year Plan
	1958–62	Second Five-Year Plan
	1966–70	Third Five-Year Plan
	1971–75	Fourth Five-Year Plan
	1976–80	Fifth Five-Year Plan
	1981–85	Sixth Five-Year Plan
Democratic People's Republic of Korea:	1947	One-Year Plan
	1948	One-Year Plan
	1949–50	Two-Year Plan
	1954–56	Three-Year Plan
	1957–61	First Five-Year Plan
	1961–67	First Seven-Year Plan
	1971–76	First Six-Year Plan
1978–84	Second Seven-Year Plan	
Socialist Republic of Vietnam:	1958–60	Three-Year Plan
	1961–65	First Five-Year Plan
	1976–80	Second Five-Year Plan
	1981–85	Third Five-Year Plan

strategy. Given their level of development, that is, much more underdeveloped in the 1950s than the Soviet Union in the 1920s, one could easily argue that they pursued the Stalinist development strategy even more intensely than Stalin himself, by allowing for a smaller growth in per capita consumption from an already lower level. Unfortunately, the statistics to show this are not readily available. Recently, however, the Chinese State Statistical Bureau has published an extensive collection of post-1949 economic statistics.¹⁰ These observed statistical results of course are not the same as the ex ante plan targets, but they do reveal the results of the economic policies adopted by the political leaders and therefore can be used to provide the statistical picture of that leadership's development strategy.

In China these statistics illustrate a Stalinist development strategy: high rates of accumulation (25–30 percent), a large share of which is invested in fixed capital, mainly by allocating budget revenues (one-third of national income) to that purpose (40 percent of government expenditures), largely in heavy industry (more than 50 percent of basic construction investment and 90 percent of basic construction investment in industry), especially three sectors favored by planners in the Soviet-model

¹⁰ State Statistical Bureau, *Statistical Yearbook of China, 1981* (in Chinese) (Beijing: China Statistics Publishers, 1982), pp. 21 and 299–300.

economic system—metallurgy, energy, and machine building (two-thirds the basic construction in industry). These statistics support the statement that the Chinese have used the centralized control over the allocation of resources provided by the Soviet model to pursue the Stalinist development strategy for achieving the economic development of China.¹¹

The evidence of the adoption of the Stalinist strategy in North Korea and Vietnam is based on weaker statistical pictures. The shortage of labor, the desire to limit trade ties with the non-Communist countries, and the maintenance of a high rate of defense expenditures (23 percent of budget expenditures in the early 1960s, 30 percent in the late 1960s and early 1970s)¹² meant that the Korean pursuit of the Stalinist development strategy involved a slightly lower rate of accumulation than in China, increasing from 17 percent in the early 1960s to 26 percent at the end of the 1960s.¹³ Furthermore, because of a greater emphasis on mechanized and irrigated agriculture to alleviate the labor shortage, the North Koreans also invested a larger share of the government's total basic construction investment in agriculture (25.3 percent in the early 1970s)¹⁴ than the Chinese. Nonetheless, investment in heavy industry still accounted for more than three-fourths of the total investment in industry. The results were much the same as under any Stalinist strategy: rapid growth largely due to the rapid expansion of the producers' goods industries while the growth of agriculture lagged behind. For example, the share of gross value output in the producer's goods industries in total social product increased from 34 percent in 1956 to 74 percent in 1970.

Given the low level of development and the serious short-run economic problems and crises faced by the Vietnamese, it is hard to imagine their adopting any development strategy. Nonetheless, just as they had accepted the Soviet economic system as the model for a socialist economy, they accepted the Stalinist development strategy as the proper strategy for a socialist economy. In the first Five-Year Plan (1961–65), the priority task in the agricultural sector was the completion of the campaign to collectivize agricultural production. Even though the nonagricultural sector was dominated by small-scale private enterprises, the savings mobilized for investment were used for the development of state-owned heavy industry. Rather than development of self-sufficiency in food production, it was believed that the “panacea for North Vietnam's economic ills” was the development of industry and the purchase of food abroad with the foreign currency earned by exporting manufactured goods. Party Secretary Le Duan indicated the adoption of the Stalinist development strategy

¹¹ These same statistics show that this strategy was continued even after the early 1960s, when the Chinese leadership claimed that they had altered their development priorities to a policy of “agriculture first,” that is, a more balanced growth strategy. This failure of the post-agricultural crisis development policies to basically change the allocation of resources dictated by the Stalinist development strategy is now admitted by China's present leadership.

¹² Joseph S. Chung, “Economic Planning in North Korea: Shifting Goals, Management, and Performance” (unpublished paper, Illinois Institute of Technology, Chicago), p. 31.

¹³ Based on GNP data published by the Institute of National Unification, Republic of Korea.

¹⁴ Ki Hyuk Pak, “Agricultural Policy and Development,” pp. 19–20.

in his speech to the Party congress in 1960: "To lead our country from a system made up mainly of small production to a system of large-scale socialist production, we have no other way than that of socialist industrialization. The keypoint in socialist industrialization is the priority development of heavy industry."¹⁵ Thus, the first Five-Year Plan's growth target for industry was 20 percent per year, heavy industry accounting for a major portion of this increase. A second Five-Year Plan for reconstructing the economy of North Vietnam was drawn up after the Paris Agreement in January 1973. The unexpected collapse of the South Vietnamese forces, however, presented the Party leadership with a dilemma—whether to adopt the existing plan for 1976–80 or to draw up a new Five-Year Plan for the economy of the unified country as a whole. A compromise was reached and "it was decided to retain the plan and use it to promote the party's economic objectives in both zones of the country."¹⁶ Thus, the revised second Five-Year Plan called for the basic transformation to socialist ownership and collectivized agriculture in the South during the course of the plan, that is, by 1980. At the same time, heavy industry received the highest priority in the allocation of investment. In a speech to the United Nations Assembly in June of 1976, Party Secretary Le Duan still claimed "the most decisive task is to strive to build a network of key heavy industries like steel, machine-building, chemicals and metallurgy." Nguyen Duy Trinh, former head of planning, claimed in 1976 that between 1965 and 1975 industrial production had increased by 74 percent while agricultural output had grown only 4 percent. This persistent pursuit of the Stalinist development strategy in Vietnam, even with its serious economic crisis and growing food shortages, vividly shows the extent to which this strategy—as well as the Soviet-model economic system—had become accepted by the Communist leaders in socialist Asia as an essential element in their ideology for guiding their creation of a socialist economy.¹⁷

A third feature that these economies shared in the 1970s was their reaction to the economic problems that resulted from their efforts to achieve economic development by this system and strategy. During the 1970s, the leaders in all three countries—whether they also decided to reform the economic system and change the economic policy and development policy being pursued or not—decided to increase their dependence on imports, especially imports from the non-Communist countries. As a

¹⁵ "North Vietnam: Major Problems," in George Kahin, ed., *Governments and Politics of Southeast Asia* (Ithaca, N.Y.: Cornell University Press, 1964) p. 504.

¹⁶ William J. Duiker, *Vietnam: Nation in Revolution* (Boulder, Colo.: Westview Press, 1983), p. 108.

¹⁷ My argument here merely intends to show that each of the three Asian socialist countries included in this study adopted the Soviet-model economic system and used that system to implement the basic thrust of the Stalinist development strategy. That argument does not deny that they modified that model and strategy, so that their implementations differed from the model and strategy employed in the Soviet Union and Eastern Europe. For example, as agrarian/Sinic tradition societies, each of these countries—in words, if not in deeds—attempted to favor the peasants and the agricultural sector more than the socialist countries in the Soviet block in Europe did. In addition, the Chinese, as well as the North Koreans, have attempted to use the mobilization of the labor force in mass campaigns to solve particular economic development problems or, in the case of the Chinese, to adopt radical behavioral rules and objectives so as to achieve a premature transition to a higher stage of socialism. Nonetheless, these modifications or adaptations were still well within the context of, and did not replace, the Soviet-model economic system or basic thrust of the Stalinist development strategy.

result, by the end of the 1970s, all three countries were experiencing balance-of-payments problems.

In China, the debate over foreign-trade dependence versus autarky in economic development was an important issue in the two-line struggle between the radical followers of Mao and the coalition under Liu Shaoqi (Chen Yun, Deng Xiaoping, Xue Muchiao, and others). After Mao's death in September 1976 and the overthrow of the leadership of the radical wing of the Party shortly thereafter, the revival of a greater degree of dependence on complete plants and technology imports from abroad was to be expected. In the post-Mao period, however, this dependence on foreign trade was elevated to include not only obtaining loans from abroad but inviting direct foreign investment. As in earlier periods, the rapid growth of imports from abroad led to a large import surplus, more than 1.1 billion U.S. dollars in the first half of 1979 alone.

By reinstating and enforcing strong central control over foreign-trade transactions and foreign-exchange holdings, the Chinese were able to bring the balance of trade under control, achieving an export surplus in the last half of 1979 and in 1980. Although anxious to receive long-term, low-interest loans (IMF, World Bank, etc.) and encouraging direct foreign investment (joint ventures) in China, the Chinese now recognize that the growth of imports will be constrained by the growth of their exports, that is, the modernization of China's economy cannot be imported from abroad in the form of new plants grafted onto an existing industrial base. Rather, the modernization of the economy must take place within their existing factories by piece-meal replacement and updating of equipment.¹⁸

This story of China's problems in the foreign-trade sector serves as the background for the following argument or hypothesis:

Any economy that adopts and implements a Soviet-model economic system and the Stalinist economic-development strategy for a decade or more will encounter general economic problems of inefficiencies, bottlenecks, and a growing technology gap with the rest of the world.

Whether or not an attempt is made to solve these problems by reforms in the economic system or a change in the economic strategy, the attempt to alleviate these problems by imports creates further economic problems in the foreign-trade sector, problems that add to the pressures for systemic reform and policy change.

Although a Soviet-model economic system and Stalinist development strategy are compatible with limited foreign-trade dependence or autarkic development, they are not compatible with attempts to integrate the economy into the world economy with greater foreign-trade dependence—unless systemic reforms and strategy changes accompany this policy change.¹⁹

¹⁸ According to Premier Zhao Ziyang, "In the final analysis, the amount of foreign capital we can utilize is . . . determined . . . mainly by our ability to repay." Zhao Ziyang, "The Present Economic Situation and the Principles for Future Economic Construction" (Report on the work of the government delivered at the fourth session of the Fifth National People's Congress on November 30 and December 1, 1981); *Beijing Review*, No. 51, December 21, 1981. Quoted material from p. 24.

¹⁹ The desire and need to maintain somewhat high foreign-trade dependence involving trade with the non-Communist countries goes a long way in explaining the determined and continuous efforts at systemic reforms in the only socialist countries that so far have been successful in their reform efforts, Yugoslavia and Hungary.

The North Koreans, for example, also decided to increase their foreign-trade dependence on (or imports from) the non-Communist countries in the early 1970s, a policy change that was not accompanied by systemic reforms or changes in development strategy. Despite their highly publicized and dogmatic insistence upon the policy of *chuch'e* (self-reliance or autonomy), North Korea (like China in the 1950s) depended upon Soviet, Chinese, and East European aid, loans, and supplies of machinery and equipment. It is claimed, however, that the North Koreans became aware of how outdated the technology embodied in their capital stock was when they visited South Korea as part of the reunification negotiations in 1971. In any event, the North Koreans decided to modernize their plant and equipment by rapidly expanding their purchases of producers' goods in non-Communist countries.

By 1974, trade with Japan and the West accounted for more than 50 percent of North Korea's total trade, and the ratio of imports to GNP rose from 9.7 percent in 1961–67 to 17.6 percent in 1971–76. As a result of the increase in imports after 1970, North Korea accumulated an import surplus of more than 1 billion U.S. dollars, most of which was owed to Japanese exporters. Imports were cut in 1975 through 1977, and the size of the annual import surplus in absolute amount and as a share of export earnings declined; but by the end of 1976, North Korea had a hard-currency debt of about 1.4 billion U.S. dollars—six times its hard-currency exports. The North Koreans faced an economic crisis in their foreign sector and made things worse by partly defaulting on these hard-currency debts. Because of these defaults (partial payments are being made; that is, 20 percent of the interest payments due were met in 1982), North Korea's trade with most West European countries dwindled to almost nothing. This example shows how the contradictions and problems created by mixing the Soviet economic system and Stalinist development strategy with the policy of dependence on imports from the non-Communist countries creates pressures for systemic reform and change in strategy *or* a return to a policy of relative autarky and limited foreign-trade dependence.

The degree of foreign-trade dependence is not a matter of choice for the Vietnamese; their economic survival depends on a large and steady flow of aid, loans, arms, goods, and services from abroad. Between 1955 and 1965, North Vietnam had received commitments for 900 million U.S. dollars in economic aid (330 million in grants and 566 million in trade credits) from China, the Soviet Union, and Eastern Europe. With the escalation of the conflict in the South and the American bombing of the North after 1965, aid from the Soviet Union, China, and Eastern Europe increased to 4 billion U.S. dollars between 1965 and the end of the war in 1975. The Vietnamese hoped for considerable assistance for their ambitious postwar development plans both from their socialist allies and from the West.²⁰ These hopes, however, were not fulfilled.

²⁰ The United States alone had promised 3 billion U.S. dollars in reconstruction aid as part of the Paris Agreement.

Aid from the United States was not forthcoming, and the Soviet assistance (about 1 billion U.S. dollars per year) was smaller than anticipated. By 1977, Chinese aid to Vietnam had become a casualty of the growing tension between these two countries; the Chinese canceled all aid projects in Vietnam and withdrew all their technicians. Finally, a liberal investment code intended to stimulate private investment was unsuccessful, and the expectations of substantial offshore oil finds proved unfounded.²¹ Vietnam's international reserves are estimated to have been only 16 million U.S. dollars at the beginning of 1982, and the total debt service in 1981 was equal to 77 percent of total exports—218 percent of exports to the convertible exchange area. By the end of 1983, Vietnam's existence as a viable economy cost the Soviet Union an estimated 4 to 6 billion U.S. dollars a year. The desire to increase dependence on imports from any country is not a policy option for the Vietnamese; it is

Our discussion has illustrated three common features of the three PARSE. In the next section of the essay we will look more closely at their attempts at systemic reform, strategy modification, and policy innovation to remedy the domestic economic problems engendered by their economic system and development model. Before beginning that detailed analysis of recent changes in these economies, however, it is necessary to acknowledge the several theories or arguments suggested in the literature for the causes and inevitably of these reforms.

The first such argument can be called a Darwinian evolutionary thesis or the "convergence hypothesis." Some early twentieth-century economists (Alfred Marshall and Frank Knight) believed that the evolution of the capitalistic market economy was the result of the cumulative social evolution toward a more perfect economic system. The belief in this paradigm of cumulative social evolution was shaken after World War II (some would say it has become moribund); if man had been marching ever forward to a uniform and utopian political, social, and economic system, then the countries of the world had gone off the track during the middle of the twentieth century. Nonetheless, some economists saw a renewed hope in the adoption of reforms in both the capitalist market economies and the Soviet model, promoting the "convergence hypothesis."²²

According to this hypothesis, both economic systems had their positive and negative aspects, and each would be modified in the direction of a new, more perfect, economic system by adopting reforms to incorporate aspects of the other. Yet, although we have seen much discussion and debate in the East European and Soviet economies about reform and have seen repeated reform of the reforms, the ranks of

²¹ The efforts of Vietnam to seek commercial credit abroad initially did meet with some success—UNICEF, IMF, and World Bank grants and credits, as well as grants and credits from France, Sweden, and Japan. Eventually, however, the Vietnamese invasion of Kampuchea and a negative review of Vietnam's economic policies by the World Bank reduced even these limited sources of funds, and the Vietnamese were encountering difficulty in meeting debt and interest payments on Japanese loans and credits.

²² See Jan Tinbergen, "The Theory of the Optimum Regime," in Jan Tinbergen, *Selected Papers* (Amsterdam: North Holland Publishing Co., 1959), pp. 264–304.

those economies that are readily identified as following the Soviet model still include most socialist countries.²³

A second hypothesis can be derived from the "empirical evidence in favor of a uniform pattern of economic development." The collection of large-scale economic data banks and the sophisticated and rigorous analysis of these data by comparative statistics, input-output tables, or the multiple regression results among countries in different income-per-capita categories all yielded a consistent statistical picture of the process of economic development.²⁴ Obviously there was great diversity among countries within each income-per-capita category, but this diversity was purposefully subsumed by the statistical method of deriving averages for the large number of countries in each category or deriving correlation coefficients to apply to all countries in all categories to minimize the sum of the squares of their deviation from the norm. Nonetheless, the uniformities in the statistical results for the normal pattern of economic development were impressive.

Thus, on the basis of this evidence and inasmuch as this normal statistical picture of the process of economic development is associated with the experience of the non-Communist countries, it is argued that the Soviet-model economic system and Stalinist development strategy can lead to "exceptional" rates of accumulation and growth over a brief period of time, that is, several decades. On the other hand, this exceptional growth period generates problems that force the adoption of systemic reforms to regain the more traditional pattern of growth in order to sustain the process of growth itself.

The third hypothesis predicting long-run fundamental reform of the Soviet system can be called "the technological imperative."²⁵ The most efficient and productive technology was developed in the West and is a complementary or integrated part of the resource endowments, institutional organizations, and behavioral patterns of those cultures. Inasmuch as one of the Soviet model's weaknesses is its inability to create and utilize a steady flow of new technology, a gap occurs between the technology in these economic systems and that achieved by the capitalist market systems.

²³ The Yugoslav economy, a Soviet-model economic system only for a short time at the end of the 1940s and in the early 1950s, is basically a market socialist economy with worker-managed enterprises. The Hungarians have persisted in their attempts to create a market socialist economy ever since the initial reforms in the 1960s, and their economy can no longer be identified as a Soviet-model economy. Romania and Czechoslovakia have introduced reforms to modify their Soviet-model economic systems to some extent, but those economies retain the basic elements and functions of a Soviet-model economic system. All other economies in Eastern Europe, and even the Soviet Union, have introduced price reforms, changes in the financing of investment, that is, all sorts of piecemeal modifications to their economic systems, but remain Soviet-model economic systems.

²⁴ The study of the comparative statistics between countries in different income-per-capita categories is to be found in the works of Nobel Prize winner Simon Kuznets. See Simon Kuznets, "The Quantitative Aspects of the Economic Growth of Nations," published in more than ten supplements to *Economic Development and Cultural Change* between 1956 and 1966. For the use of input-output tables, see Hollis Chenery, "Patterns of Industrial Growth," *American Economic Review*, September 1960, pp. 124-154. For the use of regression analysis, see Hollis Chenery and Moises Syrquin, *Patterns of Development, 1950-1970* (New York: Oxford University Press, 1975).

²⁵ For an extensive discussion of the "technological imperative" and its impact on the socialist economies, see Fred Fleuron, ed., *Technology and Communist Culture* (New York: Praeger, 1977).

When this gap becomes a constraint on further development, the socialist economy increases its imports of capital and technology from the nonsocialist countries to catch up. These imports of foreign technology embody their “technological imperative,” that is, their acquisition, successful transfer and adoption, and “most efficient” operation require their associated organizational and functional economic system.

The fourth, most strongly worded hypothesis can be called the “deadweight loss” argument; the inefficiencies in the Soviet model are so large, it is argued, that the political leaders of these countries will be forced to engage in systemic reform in favor of an economic system with a more “acceptable” level of inefficiency. Statistical studies have been presented to show the enormous deadweight loss of the Soviet model.²⁶ These costs are increased when the economy graduates from the stage of “extensive growth” (growth by building new production facilities for standard products) to “intensive growth” (growth by modernizing existing production facilities and increasing the quality, sophistication, and variety of the product mix). Thus, the advocates of this “inefficiency” imperative believed that they had the explanation for the reform movement at the end of the 1950s and into the 1960s, when this shift from “extensive” to “intensive” growth was taking place in Eastern Europe and the Soviet Union. However, the observed declines in efficiency and increase in capital-output rates observed in these countries at the end of the 1950s and into the 1960s were later determined by Western economists to be more a trough in the cycle than a long-term secular phenomenon.

A fifth and a sixth hypothesis about the inevitable reform of the Soviet-model economic system can be mentioned to give the political scientists their due. A struggle in the socialist economies is posited between the revolutionary utopians, who incite, mobilize, and lead the revolution to victory and proceed to adopt policies to achieve their revolutionary utopian goals, and the more pragmatic developmentalists in their midst.²⁷ The utopian programs eventually encounter the harsh constraints of economic necessity, which eventually win out, and the revolutionary utopian generation loses its leadership of the revolution to the pragmatic developmentalists. The analysis captures the essence of the force for “revisionism” throughout the socialist world. The debate between the defenders of the Soviet model and the advocates of systemic reforms, however, is not restricted to revolutionary utopians and the pragmatic developmentalists; even pragmatic developmentalists can disagree over what constitutes the best strategy for the successful achievement of socialist development.

²⁶ See the articles by Bergson for the empirical research that implies this conclusion: Abram Bergson, “Development under Two Systems: Comparative Productivity Growth Since 1950,” in Morris Bornstein, ed., *Comparative Economic Systems: Models and Cases*, 3d. ed. (Homewood, Ill.: Irwin, 1974), pp. 429–455. Esvy Domar has ably stated and illustrated the flawed premises and reasoning involved in these arguments. See Esvy Domar’s comments on a paper by Bergson, “On the Measurement of Comparative Efficiency,” in Alexander Eckstein, ed., *Comparison of Economic Systems* (Berkeley, Calif.: University of California Press, 1971), pp. 219–240.

²⁷ See Richard Lowenthal, “Development vs. Utopia in Communist Policy,” in Chalmers Johnson, ed., *Change in Communist Systems* (Stanford, Calif.: Stanford University Press, 1970) pp. 33–116.

²⁸ See Alexander Gerschenkron, “Ideology as a System Determinant,” in Alexander Eckstein, ed., *Comparison of Economic Systems* (Berkeley, Calif.: University of California Press, 1971), pp. 269–299.

The sixth hypothesis is based on the intensive reliance on ideology for nonmaterial incentives in the Soviet-model economic system and Stalinist development strategy. Alexander Gerschenkron has argued that ideology is a symbolic language used to mobilize populations to work for objectives not directly serving their own interests.²⁸ In the socialist economies, this use of ideology is given institutional and functional form in the Soviet model and Stalinist development strategy. This mobilization of individuals to pursue the objectives of the planners and leadership while neglecting their own can only last for a certain time, after which reforms must be introduced to restore incentives for the purpose of economic development and to retain popular support for the political leadership.

Each of the cited hypotheses contributes insights into the process of economic reform in the socialist economies in the past decade or so, and they all call for the inevitability of such reforms. Yet, our concern in this essay is to discover whether these reforms will succeed in the next decade and what the specific nature of those successful reforms will be. None of the stated hypotheses help much in this regard. Inefficient economic systems and policies have been maintained throughout history for very long periods. The same is true of totalitarian governments. Furthermore, systemic reform is rare; societies accept the economic system they have and usually attempt to adopt piecemeal and patchwork remedies to problems rather than undertake systemic reforms. As for development strategy, this is more readily modified than the economic system. Nonetheless, the decision to pursue a consumer-oriented strategy within a Soviet-model economic system also generates powerful forces in favor of systemic reform.

Thus, the specific problem posed in this contribution is to determine if the cumulative pressures noted above for systemic economic reform and development-strategy policy change have reached or will reach an intensity sufficient to produce these reforms and changes in the PARSE in the near future. In addition, we pose the question whether these reforms and changes, if introduced, will last. Finally, we need to specify the nature of those future economic systems and development strategies if economic-system reforms and development-strategy policy changes are introduced and expected to be maintained in the future.

Our basic hypothesis is simple. These reforms and changes do not originate as a purposeful design based on ideology and theory; they are practical attempts to cope with problems. Only when the problems become serious enough is the leadership of a socialist country willing to consider systemic reforms and strategy changes. Societies introduce systemic reforms and strategy changes because they are forced to do so.²⁹

²⁹ Objections can be advanced to the above statements, even before we see how adequately they explain the contemporary economic reforms in the PARSE. These statements are more *ex post* rationalizations than *ex ante* predictions. Any failure to reform the economic system or modify development strategies can be explained on the grounds that conditions were not severe enough to force these changes, and the introduction of these reforms and changes can be used to determine that conditions *were* severe enough. The problem is that my arguments do not explain when the severity of conditions reaches a critical level in any *ex ante* sense. Nonetheless, I believe that my hypothesis will be useful in attempting to assess how far these systemic reforms and development strategy changes in the PARSE will go and how long they

ECONOMIC REFORM AND POLICY CHANGES: THE TEST OF OUR HYPOTHESIS

With the arrest of the Gang of Four shortly after Mao's death in the fall of 1976, Hua Guofeng, Mao's handpicked successor, was at the head of an unstable coalition leadership; yet they soon approved the sharing of power with many of those followers of Zhou Enlai and Liu Shaoqi who had been purged by the radicals during the Cultural Revolution. Then, in the spring of 1978, this new leadership announced their Ten-Year Plan for 1975–85, called the Four Modernizations.³⁰ The Four Modernizations were more slogan than substance. The plan, as described in Hua's speech, was a reiteration of the Stalinist development strategy, made no mention of systemic reform, and only hinted at reform of—did not directly challenge—the Maoist radical economic policies that had been advocated and implemented by Mao's more radical followers during the previous fifteen years. In other words, the existing Soviet model would be used to achieve high rates of accumulation (more investment in the eight years remaining in the plan period, 1978–85, than had been undertaken in the previous twenty-eight years), with the concentration of this investment in the further "extensive" development of the producers' goods industries (more than 120 projects, including large-scale steel mills, ten new Daqing oil fields, and so on), and a rate of industrial growth greater than 10 percent.

Following the first session of the Fifth NPC in early 1978, the attack on Mao's radical economic principle grew in strength.³¹ The tide in this battle between the pragmatic developmentalists and the Maoist utopian radicals was turned at the Third Plenum of the Eleventh Central Committee at the end of 1978. At this meeting the advocates of subjecting policies to empirical verification ("learning truth from practice") won out over the "whateverists" (whatever Mao said is to be believed and done). From this time on, the

will last. Yet, the wider relevance of the idea that necessity, or the need to solve particular, critical economic problems, is the source of systemic reforms and strategy changes can be supported by the various papers presented at a conference on the experience of the NICs (newly industrialized countries) in Asia, held at the East-West Center, Hawaii, in the summer of 1983. Hong Kong, South Korea, Singapore, and Taiwan have achieved remarkable growth following their implementation of the "open-economy model" and rejection of import substitution as a development strategy. The authors of the papers on each of these countries (except for Hong Kong, of course, which had always followed an open-economy model as an entrepot) argued that their countries were "forced" to adopt the open-economy model. Furthermore, they did so only after they had chosen and tried to pursue an import-substitution policy, which had led to serious economic problems.

³⁰ Hua Guofeng, "Unite and Strive to Build a Modern, Powerful Socialist Country!" (Report on the work of the government to the first session of the Fifth National People's Congress), *Beijing Review*, No. 10, March 10, 1978, pp. 7–40.

³¹ The radical Maoist economic principles include (a) local, regional, and national self-sufficiency, with limited dependence on foreign trade or assistance, that is, the reduction of specialization in the division of labor; (b) egalitarianism and normative incentives, including mass campaigns and a reduction in directly relating individual, small-group, or unit income to the quality and quantity of work they accomplish; (c) the elimination of private income-earning activities outside the socialist sector; (d) mass participation in decision making or the elimination of an explicit hierarchy of authority and responsibility based on skills or expertise and job assignment; and (e) the politicization of economic decision making, behavioral rules, and policy determination, and reduced emphasis on economic rationality, in the sense of economic cost and benefit calculations.

fortunes of the Maoist loyalists have declined, and Deng and his followers have risen to a position of power rarely equaled by any single faction since 1949. The post-Mao leadership discovered throughout the late 1970s, however, that the rejection and elimination of the Maoist economic principles was not enough to restore China's economy to the path of self-sustained growth: a more fundamental problem was the Soviet-model economic system and the Stalinist development strategy.

The adoption of the Soviet model and the Stalinist development strategy for twenty-five years in an economy at China's level of development had, by the end of the 1970s, created a situation where sustained economic growth was impossible. Furthermore, not only did the usual inefficiencies of the Soviet model exist, but these inefficiencies were of major proportions and the level of waste and inefficiency had steadily increased.³² What brought these problems to a critical impasse at this time were the imbalances in the economy caused by the Stalinist development strategy—imbalances that precluded further growth and even threatened an economic crisis. The energy sector had not developed fast enough to meet the demand for energy due to the rapid growth of the economy as a whole. The machine-building industry was largely producing multipurpose machine tools and other equipment for which there was little demand, and machines required for further economic growth had to be imported from abroad. Neglect of the transport sector led to delays and factory closures due to bottlenecks. Bottlenecks within and imbalances among all economic sectors in China were such that by the end of 1978 and in early 1979, not only was the Ten-Year Plan proved unfeasible, but it was unlikely that any sustained growth would have been possible without systemic reforms and a change in development strategy.

Thus, to pursue the modernization of China's economy at the end of the 1970s, the post-Mao leadership was "forced" to introduce systemic reforms and changes in development strategy. They began to introduce such a program in 1979 and added to, refined, and reorganized that program (known as the "eight-character program") continuously during the next three years. At the end of 1981, Premier Zhao Ziyang presented the ten principles that the State Council had drawn up on the basis of China's past experience—principles that were to serve as the framework for economic reform and development strategy in the future.³³ The eight-character program and the ten principles specifically identify systemic reform and a change in development strategy as two of the leadership's major objectives for the coming decade.

The eight characters refer to the four compounds of Chinese characters that stand for "readjusting," "restructuring," "consolidating," and "improving."³⁴ Read-

³² The Chinese themselves provide us with an excellent illustration of this problem. For a presentation and discussion of the examples cited in Chinese publications, see Robert F. Dernberger, "China's New Economic Development (Model): Problems and Prospects," in Norton Ginsburg and Bernard A. Lalor, eds., *China: The 80s Era* (Boulder Colo.: Westview Press, 1984), pp. 99–143.

³³ For a discussion of these ten principles, see Robert F. Dernberger, "The Domestic Economy and the Four Modernizations Program," in George R. Packard and Alfred D. Wilhelms, eds., *China Policy for the Next Decade* (Cambridge, Mass.: Oelgeschlager, Gunn & Hain, 1984), pp. 139–179.

³⁴ The last two compounds refer to, respectively, the closing down or reorganization of enterprises that are inefficient, clearly wasting scarce resources, and the introduction and spread throughout the economy of a more sophisticated level of technology. These aspects are rational policy programs, but do not necessarily imply the need for concomitant systemic reform and a change in development strategy.

justing calls for the large-scale reordering of investment priorities so as to restore balance throughout the economy—a clear and straightforward change in development strategy. The rate of accumulation has been lowered and agriculture, consumer goods industries, energy, building materials, transportation, urban overhead capital—in short, all previously neglected sectors—have been given higher priority in the claims for scarce investment funds. This attempt to achieve a more balanced growth by readjusting is given the highest priority among the four targets of the eight-character program.

Since Stalin's death, critics in Eastern Europe and the Soviet Union have written volumes about the shortcomings of the Soviet economic system. Thus, the Chinese advocates of systemic reform, in advancing proposals for reform, rediscovered the wheel in a flood of articles pointing out various flaws in the Soviet-model economic system. These authors often advocated complete systemic reform. Those in charge of economic administration, however, although carrying out a wide variety of experiments, stayed within the constraints of the traditional Soviet model. These experimental reforms, the "restructuring" of the economy, can be summarized as follows:³⁵

Investment: Increasing the share of profits retained by the enterprise or the share of budget revenue retained by the local unit of government; allowing them to use these retained funds for investment purposes. Encouraging local enterprises and units of local government to borrow funds from the banks for their investment needs.

Output: Allowing production units to organize their resources to produce goods that serve to meet market demand, *after* their plan output targets have been met. Allowing them to sell those products and services at negotiated prices directly to users without going through the state trading network.

Labor: In principle, allowing for the release of unproductive workers and the direct hiring of workers by the enterprise. Creation of bonus, piece rate, and above-quota rewards. Admitting the state could not guarantee everyone a job and encouraging them to become self-employed or organize collective-service units to earn income in the nonstate sector.

Foreign trade: Encouraging enterprises to make direct contacts with foreign buyers and suppliers; allowing those who promoted nonplanned exports to retain a share of the foreign exchange for their own use.

It would be possible to add more examples and spell out the details of the Chinese experiments with economic reform at the end of the 1970s, but that is not our purpose here. We merely need to point out that the *intention* of these reforms was to create the incentives for decentralized initiative and decision making that would fill in the cracks of or add on to the dominant economic activity that was planned and in the

³⁵ For a detailed description of these experimental reforms, see Robert F. Dernberger, "The Chinese Search for the Path of Self-Sustained Growth in the 1980s: An Assessment," in U.S. Congress, Joint Economic Committee, *China Under the Four Modernizations* (Washington, D.C.: Government Printing Office, 1982), pp. 19–76.

stressed that the central control and planned allocation of resources will remain a key feature of China's economy.³⁶

Despite these setbacks, however, the idea of systemic reform remains alive for several reasons:

a. Advocates of reforming China's economic system continue to stress the need for such reforms, and some of these advocates have become advisers to the leadership.

b. These reforms introducing changes on the margin of the system have introduced expectations among the groups that have benefited from the reforms, and they will oppose the abandonment of the reform movement.

c. The Chinese leadership itself states that they have not abandoned economic reforms.

d. Most important, the above summary of the ebb and flow of economic reform and policy changes in the post-Mao period in China has not mentioned two of the more dramatic institutional changes that have been adopted and, some would claim, have already modified China's economic system.

Following successful results from experimental test cases, the Chinese leadership at the end of 1983 decided to adopt nationwide a significant change in the way enterprise losses and profits were to be handled. Previously, all profits were transferred to the state budget as revenue (the largest source of revenue), and losses were subsidized by unilateral grants from the state budget. In this manner, despite the threat of being closed down for continued losses as part of the new program of consolidation, there is limited pressure on enterprises to eliminate their losses, and these losses have not only continued, but have grown in the past few years.³⁷ To remedy this situation and to both put pressure on enterprises to eliminate losses and reward them for doing so, henceforth all state enterprises are to be responsible for their own profits and losses, remitting to the state a share of their depreciation charges and a profits tax and retaining their after-tax profit.

Although this change alters enterprise-management incentives and rewards, it does not remove the basic system of plan targets, unified supply systems, and administered prices. Rather, because profit rates and losses depend on the circumstances of the individual enterprise, the economic administrators must calculate

³⁶ A typical argument in this regard is the statement made by Premier Zhao Ziyang in a speech given in March 1982: "Ours is a unified socialist nation. We must have a unified plan and a unified domestic market. . . . In order to strengthen centralization and unification in economic work, we must adhere to the overall plan on major issues while allowing freedom on minor issues. We must advocate centralism on major issues while allowing decentralism on minor issues. The commodity price and revenue system must be centralized and unified. . . . No matter what reform is to be carried out, the general guideline is to combine the strengthening of centralization and unification with the activation of the economy and to bring into full play the initiative of localities, departments and the principle of taking the whole country into account." Zhao Ziyang, "Zhao Ziyang's Speech at Industry Conference," *Foreign Bureau Information Service*. Quoted material from pp. K6-8.

³⁷ In his report on the final state accounts for 1982 to the first session of the Sixth National People's Congress, Finance Minister Wang Bingqian stated that receipts from enterprises were 86.2 percent of the budgeted figure. These "unsatisfactory results . . . were due to the poor economic effectiveness of industrial and commercial enterprises and failure to meet their plans for reducing costs of production and eliminating losses." See Wang Bingqian, "Report on the Final State Accounts for 1982 (Excerpts)" *Beijing Review*, Vol. 26, No. 28, July 11, 1983, Documents. Quoted section on p. vi.

profit-tax rates and loss norms for each enterprise. When fully implemented, it is hoped that eventually the enterprise specific profit-tax rates can be reduced to industry and location specific profit-tax rates, and finally, to a few standard sectors and regionwide profit-tax rates. If that ultimate objective is achieved and enterprises suffering losses are allowed to fail and commodity prices are rationalized, China's economy will still be a Soviet-model economic system as far as institutional organization is concerned, but a significantly different economy as far as efficiency-based decision making is concerned—a Soviet-model economic system the world has yet to see.

The second major reform referred to in reason *d*, above, comes even closer to true reform of the economic system—the introduction of the contract-responsibility system in agriculture. It is doubtful that this reform was planned by the leadership, who always appeared to be several months behind actual developments in the rural areas. Moreover, inasmuch as these contract-responsibility systems were introduced on the basis of the local units' initiatives, their particular features vary widely. Nonetheless, the form that makes the household the basic decision-making, production, and income-distribution unit in agriculture, that is, the basic accounting unit, is widespread.

Observing the rapid increases in agricultural production, the new leadership has not only acquiesced in this institutional change but has now adopted it as the major means for achieving the solution to the agricultural problem. Despite this dramatic change in the Chinese countryside, however, China's agricultural production is still planned, with output, yield targets, and delivery quotas assigned to the collectives, which break them down into the quotas allocated in the contracts signed with the households. A few Soviet-model economic systems also have abandoned collectivized agriculture, while retaining other features of that system. At the present time, however, it is too early to say that China has adopted private farming, although the form and functions of the collective have been extensively modified.

Our discussion of the program of economic reform and policy changes in post-Mao China has been somewhat lengthy because it represents the most thorough publicized such program attempting to cope with the many problems created by the three economic features shared by all three PARSE: the Soviet-model economic system, the Stalinist development strategy, and an attempt to increase trade with the non-Communist industrial countries. Against the background of our discussion of this program, therefore, our analysis of contemporary economic reforms and policy changes in North Korea and Vietnam can be presented more briefly.

The North Korean economy suffers from the many inefficiencies and imbalances associated with the Soviet-model economic system and Stalinist development strategy; in addition, the attempt to alleviate those problems by a rapid increase in foreign-trade dependence, or imports from Western industrial countries and Japan, created a balance-of-payments problem. Yet the similarities with China's economic circumstances end there: the population-to-resource ratio is different from that in China, the North Korean drive for economic development encountering a constraint from labor shortage. Furthermore, the Communists inherited a substantial heavy-

state sector, not to replace that dominant Soviet system by market socialism or any other system.

The problem was that once central control over the local units of production and government was relaxed and those units were encouraged to use their awareness of local conditions to foster growth, the local units did use their new freedom *and* financial resources to stimulate the economy, but not according to plan (that is, the expectations of the planners). As a result of these experiments, the central planners were losing control over the economy, and their confidence. Furthermore, largely because of the reform experiments in 1980, China had a large budget deficit, inflationary price rises, unemployment problems, and a large import surplus.

The new leadership reacted decisively to these problems by reasserting central control over investment, foreign trade, prices, wages, and the budget. They also repeatedly stressed the priority of central needs over local and individual needs. Restructuring the economy was to be postponed until readjusting had restored balance to the economy. Thus, despite the many modifications introduced on the margin, China's economic system basically remains a Soviet system, and the leadership has industry base in North Korea that had been developed by the Japanese. Although South Korea contained the country's agricultural region, the land-to-labor ratio meant that the North Koreans could develop large-scale farming that relied on capital-intensive means for increasing yields—technologies that were well known and had proven results.

Thus, North Korean agriculture is more capital intensive than that in the other PARSE: the rural areas are 100 percent electrified, 92 percent of the paddy fields are irrigated, there is an average of one tractor per twenty hectares of arable land and two tons of chemical fertilizer per hectare of arable land, one-fourth of the budget for basic construction investment goes to the agricultural sector, and there are two hectares of cultivated land per farm household. Grain output increased by 5.2 percent a year in 1959–77, and North Korea became self-sufficient in grain by 1974. Most visitors verify the claim that material indicators for the standard of living in North Korea compare favorably with other Asian developing countries—even those at similar levels of per capita income.

If our argument that necessity is the cause of economic reform is valid, one could predict that the introduction of economic reform and changes in development strategy may be a long way off in North Korea. Although the North Koreans introduced a reform of the management system in 1981, the apparent motive was more political than economic. Planning and technical guidance were to remain in the hands of the technocrats in the central economic ministries, but they lost their responsibility for the day-to-day supervision of factory management to province-based, politically oriented economic committees. The theoretical reason given for this change was to place supervision in the hands of a less bureaucratic network, closer to the daily realities of the enterprise; but a more obvious reason was to place the supervision over factory management in the hands of Kim Jong Il, handpicked heir apparent to Kim Il

Sung.³⁸ Given the standard of living of the population and rate of growth of the economy, as well as public statements by North Korean leaders, there is no hint of any reform of the economic system or change of the present development strategy.

This does not mean that the North Koreans have no economic problems. One major problem is the large share of national income the North Korean leadership allocates for military expenditures. These military expenditures, however, are to be found in many economies with Soviet-model economic systems pursuing a Stalinist development strategy; they are a problem that would not lead to the necessity for systemic reform and economic-strategy change.

A second major problem is the inability to achieve the export capacity for earning the hard currency to finance imports from the nonsocialist industrial countries—imports which are necessary to close the technological gap between North Korea's economy and the West. As argued earlier, this decision to significantly increase dependence on imports from the non-Communist countries does appear to create strong pressures for systemic reform and a modification of the Stalinist development strategy. At the present time, however, this problem does not appear to be sufficiently critical, given the relatively satisfactory condition of North Korea's economy and the prospects for its future development, to force the North Korean leadership to adopt those reforms and policy changes in the near future.

Vietnam, however, is a socialist economy with few, if any, options. The old and longtime leaders of the Party are firm believers in their ideology and have dedicated a lifetime of struggle against great odds to realize the creation of socialist Vietnam, adopting the Soviet model and the Stalinist development strategy for the development of Vietnam's socialist economy. As long as they ruled the area of Vietnam north of the 17th parallel, receiving large-scale economic and military support from *both* the Soviet Union and the PRC and mobilizing the population in a popular war of independence and liberation against the major imperialist power in the world, the socialist transformation of the economy was progressing on schedule and the economy was functioning as well as could be expected under the circumstances. Their unexpected and rapid victory over the South Vietnamese forces led to the unification of the two parts of the country under a single government a year later (1976) and generated a series of decisions and events that created serious economic problems, problems so serious that the orthodox leadership was forced to accept—not without misgivings—economic reforms and policy changes.

By 1978, the Vietnamese leadership had decided to carry out rapidly the transition to socialism in the South by nationalizing and collectivizing small handicraft

³⁸ The attempt of Kim Jong Il to rule after his father's death could create serious economic problems. On the one hand, it is hoped that as a member of the "technocratic" generation who will take over from the "revolutionary" generation, Kim Jong Il will keep alive the goals of the revolution, while pursuing effective and efficient economic development. On the other hand, Kim Jong Il is not his father, and although he must have some administrative and leadership qualities, he lacks experience and, on the basis of the published record, appears primarily talented in creating, or propagating, slogans and launching mass campaigns.

industries and traders as well as large-scale enterprises. Markets and private trade were outlawed. The Vietnamese leaders also attempted to complete the collectivization of agriculture. In short, they tried to implement in the South the pattern of their Soviet model of the North, with little concern for the feasibility of this policy. The attempt to nationalize or collectivize small businesses and traders was interpreted as a move against the Chinese entrepreneurial class in Vietnam, and the Chinese began to flee the country. Although the collectivization campaign in the agricultural sector was designed to proceed slowly so as not to alienate the peasants, zealous cadres resorted to compulsion in the face of strong resistance.

By late 1979, the flood of refugees (now including non-Chinese Vietnamese as well as Chinese), bad weather, and passive resistance to and evasion of the production quotas assigned to agriculture collectives in the South led to serious deterioration in the standard of living and increasing malnutrition and hunger. The Chinese had withdrawn their financial assistance in 1977, and the flow of United States economic and military aid to the South had ended with the North's victory over the South. Thus, the Soviet Union was, in effect, forced to finance Vietnam's failing economy and large military expenditures. As the domestic economic situation in Vietnam progressively deteriorated, and rations of necessities were steadily cut, a second economy—illegal trade and smuggled goods—began to thrive. Saigon's black markets were becoming the major source of consumer goods in the economy.

These conditions would, as argued in our hypothesis, be sufficient to "force" the introduction of systemic reforms and changes in development strategy, and indeed they did. At the Sixth Plenum of the Central Committee in November 1979, the seriousness of the economic crisis was recognized, and many changes in policy were introduced. In agriculture, the contract-responsibility system was allowed, and by the end of 1980 was encouraged, by the Party. As in China, the purchase price of grain was raised and farmers were allowed, then encouraged, to grow crops on private land for sale in free markets. Not only were these private markets now officially approved, but also private commerce and even private industrial production were encouraged. The decision to relax their attempts to duplicate the Soviet model and the implementation of the Stalinist strategy and even to draw back from what had already been accomplished was an uneasy compromise reached at the Sixth Plenum in the face of the force for reform.³⁹

The possible fate of these reforms in Vietnam will be discussed in the conclusion, but an important aspect of reforms can be noted here. The current delays and backtracking in applying the traditional, orthodox socialist economic system and development strategy have been accepted by most elements in the leadership as necessary for the time being, especially in the South, but neither the Soviet model nor the Stalinist strategy has as yet been replaced or rejected in Vietnam's economy. There

³⁹ The older hard-liners in the leadership have continued to oppose these reforms and to allow them to continue only as long as they achieve the desired results, that is, economic recovery. The reforms are supported by a younger generation of technocrats, including some Western-trained economists, and their position has been strengthened by the favorable results of the 1982 harvest and an increase in government procurements.

is a major difference between the Vietnamese and Chinese economic reforms: the Chinese are searching for a new economic model to solve their long-run economic problems; the Vietnamese are merely delaying the transition to the traditional socialist economic model in order to cope with their short-run immediate problems.

CONCLUSION

The questions we desired to answer in this essay are What are the main features of the economic model that will evolve from the current period of economic reforms and policy changes in the socialist economies in the PARSE? and What are the implications of that new model for the nonsocialist economies in the Pacific-Asian region? Our focus has been an analysis of current developments and prospects for the near future, essentially the next decade, with respect to the economic model of the three PARSE. Our basic thesis stressed the critical factor of necessity. In each of the three cases, the fact that an urgent need was perceived by the leadership of these countries would appear to be verified. In effect, circumstances had forced them to introduce systemic reforms and economic policy changes.

There is every reason to believe that the inefficiencies, wastes, and imbalances associated with the Soviet model and Stalinist strategy occur in North Korea as elsewhere in the socialist world, and that the growing technological gap between the North Korean economy and the industrial nations, including South Korea, is recognized by the North Korean leadership. Yet, North Korea's economic growth, standard of living, and ability to rely on Chinese and Soviet economic and military assistance means that there is little "force" being exerted for economic reform and policy change in North Korea. As a result, none is taking place, and there is no prospect of a major change in that regard in the foreseeable future.

At the opposite extreme is Vietnam. The inefficiencies, wastes, and imbalances of the Soviet-model economy and Stalinist development strategy have been so compounded by a host of other economic problems that even though the leadership has not challenged or discarded its belief in what is ideologically necessary in the long run, it has been forced to draw back on implementation of the Soviet system and Stalinist strategy. Thus, the Vietnamese economy today is a hybrid of an orthodox socialist economic model and private farming, enterprise, and trade. It will remain a centrally planned economy with a large share of economic activities falling outside the plan and outside the socialist sector. The continued socialist transformation of the economy toward the orthodox model will not be able to be resumed for a long time, not until many of their current problems are alleviated.

Finally, the most difficult case to interpret within the framework of our hypothesis is that of China. Throughout the leadership group within the government and Party are representatives of a wide range of opinions. Hardliners view the 1950s, when the Chinese were adopting the Soviet model and the Stalinist strategy, especially during the period 1953–57, as China's golden age of development. They hope to recapture that period of growth with stronger central control than ever. Another group argues that the 1953–57 period was a golden age, but refers to the reforms adopted at

the end of that period (that is, in 1957), when authority was decentralized within the political administration of the economy to the provinces (some as large as European countries). This group believes that there should be a return to that process of decentralization at the present time. Then there are those who cite the reforms of the early 1960s (another peak period in which necessity was the mother of reform), with decentralization of decision making to the units of production themselves and the adoption of a balanced-growth development strategy, as the proper policy for the present as well. Finally, an important group among the intellectuals openly advocates a market socialist system with a balanced-growth development strategy, namely, the Hungarian model. In terms of the actual changes adopted in the economy, the advocates of option three appeared to have had the support, or at least approval, of the top leadership during the year immediately after 1978, but the tide has since turned and now runs more in favor of the advocates of option two.

In keeping with the argument we have advanced as the economy revived and the growth of agricultural production, light-industry production, personal incomes, and so on, reached new heights, the pressure for reform or the necessity for reform became reduced and therefore the basic support for the traditional system was able to reassert itself once again. Xue Muqiao—a leader among the economic reformers in China—could not have presented a greater support for our hypothesis than he did in saying that the advocates of what we have specified as option-three reforms had a much easier time in introducing those reforms in the early 1960s *because* economic conditions were so bad in the early 1960s that everyone accepted the need for reforms. At present, however, economic conditions are not too bad and are improving; therefore, it is harder to convince people of the need for the economic reforms.⁴⁰ As economic conditions improve in China, I expect the major struggle over economic policy to become centered on debates between the hard-liners advocating a return to the traditional or orthodox economic system and development strategy and those advocating a decentralized Soviet-model economic system (that is, to lower administrative levels) and a modified Stalinist development strategy somewhat more compatible with a pattern of balanced growth.

Our conclusion about the development model to be pursued by the PARSE can be brief. In North Korea, the absence of the need for reforms and policy changes means that the future North Korean development model will be basically the same as in the past: a Soviet system and a Stalinist strategy. In China during the late 1970s, as in Eastern Europe in the late 1950s, economic conditions generated pressures for economic reform and policy change, and many reforms and policy changes were adopted and implemented; as the economic conditions improved, however, these pressures (again as in Eastern Europe) were reduced, and China returned to the more traditional economic system and development strategy. Although this process of revision is likely to continue, the pressures for reform and policy change will also continue and, therefore, the future development model in China will probably be a modified

⁴⁰ See Xue Muqiao, "Adjust the National Economy and Promote Overall Balance," *Jingji Yanjiu*, No. 2, February 20, 1981, pp. 25–31.

Soviet-model economic system and a modified Stalinist development strategy.⁴¹ Finally, the economic crisis faced by the Vietnamese has created powerful forces to delay the adoption of the traditional socialist development model, and because these economic problems are likely to persist far into the future, so too is the delay in implementing the full socialist model in Vietnam.

Two variables discussed in this presentation but not yet mentioned in our conclusion are important and could change the predictions: results of the political succession in each of the three PARSE, and their growing trade dependence by increased imports and capital flow from the West. The aging, revolutionary generation of leaders will die out in the next decade, and it is unlikely that their successors will be ideologically as devoted to the development model of more than a generation ago. Despite two decades of arguments about the weaknesses of that model and experiments with reform, only a few countries have abandoned that model. Nonetheless, each succeeding generation of leaders should have greater freedom, both ideologically and politically, to adopt different models.

A second force in the direction of a new model is the growing trade between these countries and the West. If these socialist economies are to participate in world trade and profit from the economic benefits available from doing so, economic reform and policy changes would be required, straining the maintenance of the traditional socialist model. In this regard, the other economies in the Pacific-Asian region have a major role to play. The nonsocialist economies in this region have much to learn from the three socialist economies in their search for optimal development models, but the lessons are mainly negative: the Soviet-model economic system and Stalinist development strategy provide a once-and-for-all shift in the mobilization of resources that achieves remarkably successful growth in a statistical sense. That one-time gain, however, is soon dissipated as the wastes, inefficiencies, and imbalances of that system and strategy become serious. Yet, because control over resource and goods allocation is in the hands of the political leadership, reform and policy change are hard to introduce and sustain, except when the economic problems have become so great that they force the political leaders to do so.⁴²

⁴¹ My use of the term "modified" here is somewhat inappropriate. This is because I interpret the Chinese use of the Soviet economic system and Stalinist development strategy in the past three decades as an extreme case among those countries that have adopted this economic system and pursued that development strategy. In other words, I believe that the Chinese leadership will, in the future, allow a significantly larger share of economic activities and resource/income flows to take place outside the unified plan, budget, and supply system. In their development strategy, the rate of accumulation will be somewhat lower than in the past and the allocation of investment more balanced among the sectors so as to better maintain equilibrium between supply and demand throughout the economy. Nonetheless, although significantly modifying China's past economic system and development strategy, these changes will merely make that system and strategy more similar to the Soviet economic system and to development strategy in the Soviet Union and other countries of Eastern Europe.

⁴² My concluding argument stresses "immovable objects" represented by the inherited economic system and past development strategy, while admitting these immovable objects may well give way to true systemic reform and strategy change if economic necessity generates an irresistible force for accomplishing that result. Although I agree with many participants in the Tokyo workshop that the present Chinese leadership has created popular expectations and significant interest groups that will oppose and block any retreat from reforms and policy changes already introduced, I do not agree with those participants who argue that these expectations and interest groups will force the present leadership to continue implementing reform and policy changes until true system reform and development strategy changes are finally achieved.

The non-Communist countries of the Pacific-Asian region have established a more impressive record of growth in the past few decades, mainly by adopting economic policies that open the domestic economy to increased foreign trade and investment. As these countries have grown by increasing their foreign-trade participation, their economies have undergone structural change, and in many cases their present economic structures complement that of the PARSE; that is, both the non-Communist and the socialist countries in the Pacific-Asian region would gain from increasing their trade with each other. Increased trade with non-Communist countries would generate pressures for reform and policy changes within the socialist countries to make their products more competitive in world markets— make them better trading partners of the non-Communist countries and enhance their prospects for economic development. Thus, although increased intersystemic trade may be pursued by the non-Communist countries in the Pacific-Asian region merely out of strict materialist self-interest, that selfish pursuit may well add to the critical margin of forces that will ultimately achieve those systemic reforms and strategy changes that could significantly improve the economic well-being of the people living in the three PARSE.

2. Economic Development in Japan: A Reconsideration

Yutaka Kosai and Yutaka Harada

Measured against the records of other nations, the Japanese economy has shown an extraordinary pattern of sustained growth.* Figure 1 shows the trends of economic growth of major countries in the period of so-called modern economic growth (from the Industrial Revolution to recent years). Japan's economic growth was remarkable in that it lasted a very long time, although the growth rate was not outstandingly high by international standards. The per capita income in Japan when it embarked upon modernization was extremely low. A poor country has become a rich country only after a lengthy period of high rates of economic growth. In the course of economic development, the Japanese economy experienced depressions, inflations, wars, and political instabilities. Only after 1960 did the Japanese per capita income reach the British level, when Japan started modernization.

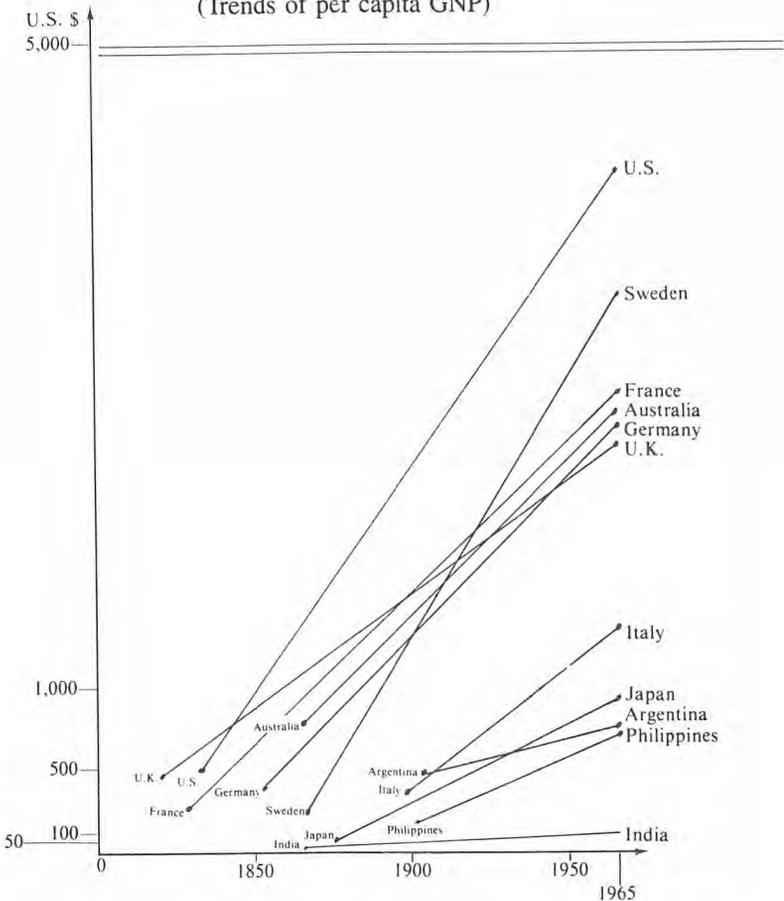
The purpose of this contribution is to explain the growth phenomenon. We will seek to understand Japan's economy and provide guides for future Japanese economic policies. In addition, we will offer some suggestions for the economic policies of less developed countries (LDCs) today.

An explanation for the phenomenon, popular in Japan as well as abroad, is the "Japan, Inc." hypothesis. This hypothesis points out the success of centrally controlled economic policies where government and private business enterprises cooperate intimately to pursue maximum economic growth on the initiative of a powerful government. However, in our view the Japan, Inc. hypothesis exaggerates the role of government.

We offer an alternative hypothesis, in which the roles of government and the market are reversed. This may be done by referring to the concept of "rent-seeking"

* We have benefited from the assistance of Hiroyuki Inoue in the preparation of the tables and figures. We are indebted to Stephen Anderson for improving our English, and to Kayo Sasaki for her typing.

Figure 1: International Comparison of Economic Growth
(Trends of per capita GNP)



SOURCE: Y. Ando, ed., *Kindai Nihon Keizai-shi Yōran* (Statistics in Modern Japanese Economic History), 2nd ed., Tokoyo: University of Tokyo Press, 1978, p. 24, Table 36.

activities versus “profit-seeking” activities, as developed by Tullock and others.¹ We will first explain our framework of analysis. We will then evaluate economic policies from the Meiji Restoration to World War II, and from World War II to the present, applying our hypothesis. We will further discuss the conditions that encourage or discourage economic development, and also appraise Japanese economic policies by comparing them with those of other countries. Finally, we will present conclusions and state the problems remaining for future analysis.

¹ Their main works are reprinted in J. Buchanan, D. Tollison, and G. Tullock, eds., *Toward a Theory of the Rent-seeking Society* (College Station, Texas: Texas A & M University Press, 1980).

ANALYTICAL FRAMEWORK

Rent-Seeking Activities versus Profit-Seeking Activities

Until the eighteenth century, human beings were unable to improve their living standards. D. C. North explains this phenomenon by citing the difference between social and private returns of human activities.² He emphasizes the role of property rights in economic development. Without stable treatment of property rights, people cannot invest their resources for productive uses.

This essay will emphasize the difference between “rent-seeking” activities and “profit-seeking” activities in explaining the difference between social and private returns of human activities. Adam Smith has stated that the behavior of economic agents to maximize their interests often yields desirable results to the whole economy—for example, when business enterprises try to minimize costs and improve productivity through competition. We call these endeavors “profit-seeking” activities. But not all behavior for self-interest is socially beneficial.

Let us consider domestic producers who obtain tariffs to protect their production by political means. In this case, consumers, and the whole society, have to bear costs greater than the producers’ gain. The producers benefit from tariffs and therefore will pursue political activities to gain these benefits. Following Tullock, we will call activities that seek to gain privileges by political means, instead of pursuing profit opportunities, “rent-seeking” activities. Protectionist tariffs, subsidies, and low-interest-rate financing of some industries are examples.

Rent-seeking activities usually reduce economic efficiency by distorting relative prices. The losses from these activities are not only the losses of the consumers’ surplus or deadweight losses, but also, because producers will try to use resources for political campaigns, bribes, and lobbying to get such privileges, loss of the resources mobilized for these activities, which are not used for other, socially beneficial activities.

If all producers can freely participate in rent-seeking activities, they will readily bear the costs until the marginal costs equal the marginal benefits they can get by such activities. As Krueger pointed out, an increase of rent-seeking activities may destroy belief in the workings and legitimacy of industrial society.³ If people’s incomes reflect their productivity and the opulence of a society is based on productivity, the resulting inequality in income distribution will have a greater chance of acceptance by society. However, if people think that the high income of an individual does not reflect high productivity by that individual but is based on special privilege given by the government, the resulting income inequality is less likely to be socially accepted. Such social

² D. North and R. Thomas, *The Rise of the Western World* (Cambridge: Cambridge University Press, 1973).

³ A. Krueger, “The Political Economy of the Rent-seeking Society,” *American Economic Review*, June 1974. Reprinted in Buchanan, Tollison, and Tullock, *Toward a Theory*.

loss of confidence is also likely to induce economic inefficiency and political instability.

Our hypothesis is that the above reasoning applies to Japan. Contrary to the Japan, Inc. hypothesis, Japan limited rent-seeking activities and encouraged profit-seeking activities. Economic incentives were provided to individuals to improve economic efficiency. For this reason Japan has long sustained its economic development. This reasoning does not contradict other arguments such as that Japan was able to absorb technologies of advanced countries because, even at the beginning of modern economic growth, it had a better educated work force. Our point is that the economic development of Japan would not have occurred if these better-educated workers had engaged in rent-seeking activities. In order to explain Japan's economic development in this framework, we must first show how rent-seeking activities have been restricted in Japan.

The Role of Government

We will start by using our analytical framework to discuss the role of government. In general, the role of government is to equalize two kinds of returns—social and private returns—to human activities.

North emphasizes stable and efficient property-right systems that equalize the two kinds of returns. In this view, the role of government for economic development is to give stable and efficient property-right systems.

We emphasize the difference between profit-seeking activities and rent-seeking activities because rent-seeking activities enlarge the difference between the two kinds of returns. In this view, the role of government is to provide conditions encouraging profit-seeking activities and discouraging rent-seeking activities. The two views are not inconsistent. However, we choose to emphasize human behavior that increases economic productivity.

According to a third view, the role of government is to provide appropriate support to those activities that produce external economies. One example is research and development in agricultural technology. Even if an individual invests in improvements of agricultural technology, the benefit is absorbed by the whole society, and the individual gets only a small part of the benefit. It is almost impossible for innovators to get innovators' profits because it is easy to imitate new cultivation methods or improvement of seeds. In other words, external economies of improvement in agricultural technology are large but the private economies are small. In addition to agricultural technologies, public assistance promotes such economic activities as technologies that are closer to pure science and cannot be patented. Another example is primary education. Government subsidies of such activities seek to encourage economic development.

A fourth view of the role of government in expanding economic development is that policies by which government protects some strategic industries encourage economic development, but we doubt the effectiveness of such policies for four reasons.

First, to protect some industries is to hurt other industries. If tariffs are imposed on imported goods to protect an industry, other industries have to purchase products of the protected industry at higher prices. And if government subsidizes the industry, other industries have to bear the subsidy in the form of additional taxes.

Second, if the expected growth rate of an industry is higher than that of other industries, productive resources will be attracted to the industry with the higher expected growth rate, without any protective measures by government.

Third, protection induces efforts and resources to be committed to protect an industry by rent-seeking activities rather than by profit-seeking activities. If an industry can enjoy higher profits by being protected as a strategic industry, all industries will seek protective measures by asserting that they are strategic industries. Besides, other industries, damaged by protected strategic industries, will also seek compensation. These political activities themselves are not productive, and they also weaken the function of the signals that market mechanisms convey.

Finally, although it is often argued that protective tariffs are rational for infant industry, this argument is questionable. As Kemp has pointed out, if an infant industry can be profitable in five or ten years, thereby compensating for the initial losses, why is it that private enterprises do not venture into that industry?⁴ If the infant industry cannot become an adult on its own, there is no reason for the government to bear the initial loss.

The purpose of the following sections is to use this analytical framework in discussing the roles of economic policies in Japan's economic development.

ECONOMIC DEVELOPMENT AND ECONOMIC POLICIES IN JAPAN

Economic Policies before World War II

Often it is asserted that the Meiji government adopted and vigorously pursued a centrally controlled government policy. We regard this assertion as exaggerated and its emphasis as misplaced.

The Meiji government was a so-called small government. From 1891 to 1935, the ratio of budgetary expenditure of central government to GNP was 7 percent to 14 percent as shown in Table 1. The ratio was higher than that of the United States in the period, but was roughly equal to those of most European countries and lower than that of France in some years.

The expenditures of the Japanese government (government consumption plus government investment) in terms of the system of national accounts were not particularly high compared with those of Britain and Australia, as shown in Table 2. This table also shows that Japanese government expenditures in capital formation were remarkably high, but expenditures in consumption were lower than those of Britain (a

⁴ M. Kemp, "The Mill-Bastable Infant Industry Dogma," *Journal of Political Economy*, February 1960.

Table 1
The Size of Central Governments
(Budget figure and percentage of GNP)

Year	Japan		U.S.		U.K.		Germany		France	
	¥ billions	%	\$ billions	%	£ billions	%	DM billions	%	Fr billions	%
1871-75			1872-76							
			0.282	4.1	0.0722	13.7			2.48	12.4
1881-85			1882-86							
			0.254	2.5	0.0873	7.6	0.776	3.6	3.07	12.3
1891-95	0.0817	7.1	1892-96							
			0.361	3.1	0.0993	7.2	1.553	5.6	3.40	11.3
1901-05	0.301	12.0	1902-06							
			0.545	2.5	0.170	9.7	2.253	6.5	3.68	12.7
1911-13	0.584	13.0	1912-14							
			0.729	2.0	0.183	8.2	3.104	6.1	4.77	12.7
1921-25	1.518	10.5	1922-26							
			3.175	4.2	0.832	20.2	8.325	11.7	36.29	28.7
1931-35	2.010	14.1								
			5.215	9.0	0.807	20.6	6.982	12.1	49.35	23.3

SOURCE: Y. Ando, ed., *Kindai Nihon Keizai-shi Yōran* (Statistics in Modern Japanese Economic History), 2d ed., Tokyo: University of Tokyo Press, 1978, p. 44, Table 44.

Table 2
The Size of Government (in System of National Accounts Base)
(Percentages)

Year	Japan					Year	U.K.			Australia		
	$\frac{GC}{GNE}$	$\frac{GCF}{GNE}$	$\frac{GC+GCF}{GNE}$	$\frac{T}{GNE}$	$\frac{GC+GCF+T}{GNE}$		$\frac{GC}{GNE}$	$\frac{GCF}{GNE}$	$\frac{GC+GCF}{GNE}$	$\frac{GC}{GNE}$	$\frac{GCF}{GNE}$	$\frac{GC+GCF}{GNE}$
1888	6.7	2.4	9.1	1.9	11.0	1861-80	6.3	1.0	7.3	6.4	5.0	11.4
1900	7.3	5.3	12.6	1.6	14.2	1881-1900	7.3	1.3	8.6	8.1	7.6	15.7
1910	8.2	6.1	14.3	2.4	16.7	1901-20	17.7	1.4	19.1	8.6	7.2	15.8
1920	6.6	6.2	12.8	1.1	13.9							
1930	11.0	7.2	18.2	1.7	19.9	1921-39	11.5 ^a	3.1 ^a	14.6 ^a	10.5	8.8	19.3
1938	11.8	13.0	24.8	1.7	26.5							

SOURCE: Ryoshin Minami, *Nihon no Keizai Hatten* (Economic Development of Japan), Toyo Keizai, 1981, p. 278.

NOTE: GC = Government Consumption; GCF = Government Capital Formation; T = Government Transfer; GNE = Gross National Expenditure.

^a 1921-38.

characteristic that postwar Japan inherited from the Meiji era). This suggests that much of the fiscal activity in Japan has been assigned to improvement of the infrastructure or economic activities with external economies.

An examination of government expenditures, classified according to purposes of outlays, shows that expenditures to promote and protect industries were limited. According to the statistics compiled by Ando, the expenditures in this category were 5.1 percent in 1900 and 2.8 percent in 1930.⁵

Furthermore, the Japanese government could not adopt protective tariffs, which are typical measures for protecting industries, because of “unequal” treaties signed at the end of the Tokugawa era. Only after 1900 did Japan recover the autonomous authority to levy tariffs. The tariff rate in terms of tariff revenue to import value was about 5 percent until 1900, definitely lower than international standards.⁶

The Meiji government tried to transplant Western technologies and to directly operate government-owned factories in the name of *shokusan-kogyo* (planting and developing industries) in the 1870s. But the endeavor was short-lived. During the Matsukata deflation (the 1880s), the government sold its factories to private businessmen.

Professor Thomas Smith argues that these factories were sold at extremely low prices and the transaction meant a large subsidy for those who bought them, but the factories were sold because they ran deficits.⁷ Even if it is granted that the sales were a subsidy to some businessmen, those were one-shot transactions and did not induce further rent-seeking activities.

As already discussed, improvement of human capital by public education, introduction of banking systems and joint-stock corporation systems, and investment in infrastructure rather than direct promotion of industries by government, all appear to have played a much larger role in Japan, in stimulating and sustaining the Japanese model of economic growth, than in the United States and Europe. For example, joint-stock corporation systems spread more rapidly in Japan than in other advanced countries.⁸ Many modern transportation, mining, railroad, and banking companies were established in the form of joint-stock companies when domestic savings were mobilized. Japan could start its takeoff toward modern growth with little foreign-capital inflow. These joint-stock companies led industrialization. The introduction of “systems” by government institutionally limited rent-seeking activities and, as a result, encouraged profit-seeking activities.

⁵ Y. Ando, ed., *Kindai Nihon keizai shi yōran* [Statistics in Modern Japanese Economic History], 2nd ed. (Tokyo: University of Tokyo Press, 1978), p. 18, Table 27.

⁶ T. Takeda, T. Hayashi, and K. Imai, *Nihon zaisei yōran* [Statistics of the Japanese Budget], (Tokyo: University of Tokyo Press, 1977), p. 42, Figure 18.

⁷ T. Smith, *Political Change and Industrial Development in Japan: Government Enterprise, 1868–1880*, (Stanford: Stanford University Press, 1955), chap. 8, section IV.

⁸ K. Ōshima, *Nihon kyōkō shi ron* [Essays on Great Depressions in Japan], vol. 1 (Tokyo: University of Tokyo Press).

Economic Policies after World War II

Japanese economic development after World War II is generally considered to be remarkable. Many think that it was a result of the guidance of the Japanese government. For example, Katzenstein points out that Japanese policy authorities pursued growth objectives by using "a formidable set of policy instruments which directly influenced individual industries and firms."⁹ But his view is questionable because the degree of government intervention is often overestimated, and because it is doubtful that such interventions as occurred are the main causes of economic development.

Japanese fiscal policies followed strict "rules of the game" through the period of high economic growth. These rules required, in the first place, a balanced budget: Article 4 of the budgetary law prohibits the issue of national bonds for purposes other than public construction; until 1965 construction bonds were not issued, and in 1965 bonds to finance the government deficit were issued in an emergency, with further issues following each year after 1975. In the second place, in the early 1960s the Government Tax Council set an officially declared policy target in the ratio of tax revenue to GNP. These rules kept the size of the participation of the Japanese government small (less than 20 percent of GNP); for comparison with other countries, see Table 3. Categories of government expenditures show that the weight of government investment is as high as it was before World War II. However, the weight of expenditure for the promotion of industry, excluding agriculture, was 0.3 percent of GNP in 1950, 0.3 percent in 1960, 0.9 percent in 1970, and 1.0 percent in 1980.¹⁰ In the period of high economic growth, the greater part of resources was allocated through market forces rather than political forces. This suggests that the weight of profit-seeking activities was greater than that of rent-seeking activities.

The above view could be criticized in the following ways: Japanese policy authorities had power to intervene in the economy by means of (1) *zaito* (Fiscal Loan Program); (2) credit rationing by the Bank of Japan; (3) regulations in international transactions, such as import quotas, control of capital inflow, and technology transfers; (4) *gyosei-shido* (administrative guidance). The power of the government appears much stronger if one takes these policy measures into consideration rather than simply considering what is inferred from the budget. However, the power of these instruments must be evaluated carefully. *Zaito* is indeed large in comparison with other countries. The figures of *zaito* equivalent are 26.5 billion dollars for the United States (1.5 percent of GNP) in 1976, 27 billion pounds for the United Kingdom (2.6 percent of GNP) in 1975, and 8.6 billion francs for France (0.6 percent of GNP) in 1975; the figure for Japan is 17 trillion yen (7.8 percent of GNP) in 1979.¹¹ At the same

⁹ P. Katzenstein, "Introduction: Domestic and International Forces and Strategies of Foreign Economic Policy," in P. Katzenstein, ed., *Between Power and Plenty* (Madison, Wis.: University of Wisconsin Press, 1978).

¹⁰ Economic Planning Agency, *Keizai yōran* [Economic Statistics], 1983 and selected issues. *Ippan kaikei mokuteki betsu shuyō saishutsu yosan* [Components of the Budget by Purposes for Expenditure].

¹¹ A. Ishikawa and T. Gyoten, eds., *Zaisei tōyūshi* [Fiscal Loan Program]. (Kinyū-Zaisei-Jijo-Kenkyū-Kai, 1977).

Table 3
The Size of Government after World War II (in System of National Accounts Base)
(Percentages)

Year	Japan					U.S.					U.K.				
	GC+T +GCF +Others GNP	GC	T	GCF	Others	GC+T +GCF +Others GNP	GC	T	GCF	Others	GC+T +GCF +Others GNP	GC	T	GCF	Others
1960						28.2	17.2	5.3	2.5	3.2	33.2	16.5	6.9	3.3	6.4
1965	18.6	8.2	4.7	4.5	1.3	28.5	17.1	5.4	2.8	3.2	35.2	16.9	7.6	4.2	6.5
1970	19.1	7.4	4.6	4.5	2.5	33.0	19.2	7.9	2.5	3.4	38.0	17.7	8.7	4.9	6.8
1975	26.9	10.1	7.8	5.3	3.8	36.0	18.9	11.5	2.3	3.3	45.8	22.0	10.0	4.8	9.0
1980	32.7	10.0	10.3	6.3	6.1	33.3	17.4	10.5	1.8	3.6	44.7	21.5	11.7	2.5	8.9

Table 3 continued
 The Size of Government after World War II (in System of National Accounts Base)
 (Percentages)

Year	W. Germany					France				
	GC + T + GCF + Others GNP	GC	T	GCF	Others	GC + T + GCF + Others GNP	GC	T	GCF	Others
1960	30.9	13.5	12.1	3.1	2.3					
1965	32.9	19.4	11.6	4.1	2.9	37.8	13.0	16.3	4.1	4.3
1970	36.1	15.9	12.2	4.3	3.7	38.6	13.4	17.0	3.8	4.3
1975	45.5	20.8	16.3	3.7	4.7	43.1	14.4	20.4	3.8	4.5
1980	45.1	20.4	15.4	3.8	5.6	46.0	15.3	23.1	2.9	4.8

SOURCE: OECD, *National Accounts*, selected issues.

NOTE: GC = Government Consumption; T = Government Transfer; GCF = Government Capital Formation.

time, the uses of *zaito* changed in the period of high economic growth rather significantly. After 1960, investments and loans to local governments, Japan National Railways, Nippon Telegraph and Telephone Public Corporation, and the Government Housing Loan Corporation became more important. The share of investments for industries in fiscal investment and loan programs declined while the shares of electricity and transportation remained high.¹²

It is true that the Japanese economy maintained a closed system in the early years after World War II. In 1959, 74 percent of Japan's total imports were subject to quotas. However, by 1963, 92 percent of all Japanese imports were liberalized.¹³ Thus, imports in the 1950s were restricted, but in the 1960s liberalization progressed, increasing considerably the Japanese growth rate. This suggests that import restriction was not a cause of Japan's high economic growth.

Until recently, Japan severely restricted foreign-capital inflow. This implies that Japan succeeded in mobilizing domestic savings to finance its capital formation. Also, it implies that foreign-capital domination of Japanese industries was overly feared. In several industries in which foreign direct investment was allowed, Japanese-owned companies competed well with foreign-owned firms, as in the electronics industry after Japan IBM was established. Since many countries encouraged foreign-capital inflow to promote economic growth, it is difficult to maintain that the conservative attitude toward foreign-capital inflow in Japan enhanced the economic growth rate.

Almost the same assertion can be made with respect to government intervention in technology transfer from advanced countries. It is paradoxical to believe that a country grows more rapidly by restricting imports of foreign technology. Government intervention sometimes appeared to strengthen the bargaining position of Japanese firms. At the same time, government policy on some occasions delayed introduction of new foreign technology by private enterprises. Uekusa and Caves cite a case where a MITI bureaucrat did not understand the importance of foreign technology and held up the introduction of technology by the Sony Company.¹⁴ Laws concerning Japanese industries are mainly directed to the regulation of public utilities and adjustment of declining industries; regulation of growing industries is rare.¹⁵

Industrialization concentrating on heavy and chemical industries after World War II is interpreted by many authorities to result from artificial policies and to be contrary to comparative-cost theory.¹⁶ However, the structure of the comparative

¹² Ministry of Finance, *Zaisei kinyū tōkei geppō* [Monthly Bulletin of Fiscal and Monetary Statistics], 1983 and selected issues. *Mokuteki-betsu zaisei-tōyūshi* [Components of Fiscal Loan Programs by Purposes].

¹³ Economic Planning Agency, *Gendai Nihon keizai no tenkai* [History of the Modern Japanese Economy], 1976, p. 146, Table 2-12.

¹⁴ R. Caves, "Industrial Organization," in H. Patrick and H. Rosovsky eds., *Asia's New Giant* (Washington, D.C.: Brookings Institution, 1976).

¹⁵ H. Ueno, *Nihon no keizai seido* [The Economic System of Japan], (Nihon Keizai Shimbun Co.), pp. 227 and 237.

¹⁶ M. Shinohara, *Keizai taikoku no seisui* [The Prosperity and Decline of the Economic Powers], (Tōyō Keizai Shimposha, 1982), chap. 11.

costs changes over time, as pointed out by Balassa.¹⁷ Japan needed to concentrate on light industries because natural resources were scarce, labor was abundant, and capital was scarce immediately after World War II. But consider the situation more closely from a comparative advantage standpoint. In the modern world, where technologies develop rapidly, resources are land sites, vintage of capital, and quality of labor. Japan has a long coastline, and industrial sites along the sea could make use of abundant foreign resources at low cost through technological innovations in marine transportation. The rate of savings was high and the vintage of capital was young, which enabled Japanese industries to realize “embodied” technological progress rapidly. Labor was well motivated, educated, and trained.

In the above senses, Japan was rich in resources, both physical and human. The development of the postwar Japanese economy can be interpreted as following and adapting the changing comparative-cost structure. And this development was realized by market forces, not by government interventions. Government has good relations with business in Japan, but *gyosei-shido* is not always correctly directed or effective. For example, plans to concentrate Japanese automobile companies into a few firms or a single firm, as repeatedly initiated by MITI, have not been realized because they were rejected by Japanese automobile companies. Continuing competition in the automobile industry meanwhile has contributed to the increased competitiveness of the industry through overall reduction of costs. Japanese economic policies have not been monolithic, concentrated, and effective, as the Japan, Inc. hypothesis suggests. In agriculture, the textile industry, and petroleum refining—to take three separate cases—Japan, Inc. failed to create strong industries despite subsidies and efforts to combine the smaller firms. We must conclude that profit-seeking activities through keen competition contributed much to the development of the postwar Japanese economy.

CONDITIONS OF LIMITING RENT-SEEKING ACTIVITIES

As we explained, the limits on rent-seeking activities contributed to the Japanese economic development before and after World War II. Furthermore, this development has been due to a lower individual rate of return on rent-seeking activities than on profit-seeking activities. Why is the rate of return on the rent-seeking activities lower? We will propose two hypotheses: the “big game” hypothesis and the “large country and small country” hypothesis.

¹⁷ B. Balassa, “A Stage Approach to Comparative Advantage,” Fifth World Congress of the International Economic Association, Tokyo, August 29–September 3, 1977, reprinted in B. Balassa, *The New Industrializing Countries in the World Economy* (New York: Pergamon Press, 1981).

The Big Game Hypothesis

This hypothesis follows from Hirschliefer, who argues that market mechanisms are effective only when the participants obey the rules of the game.¹⁸ If the rules of the game are accepted as legitimate, profit-seeking activities in the market will be encouraged. However, before an agreement on the working of the market (and the rules of the game) is reached, all participants will engage in rent-seeking activities to modify the rules of the game in favor of their own position by political means. We will name this type of rent-seeking activity, following Hirschliefer, the “big game.”

How the big game is concluded affects the relative importance of profit- and rent-seeking activities hereafter. Japan experienced two big games in the process of her economic development. One is the Meiji Restoration and the other the postwar reforms. These two big games had characteristics that lessened the relative importance of rent-seeking activities after the games. The two reforms caused big changes in the distribution of income, wealth, rank, and prestige. The Meiji Restoration caused the decline of many of the upper and middle *samurai* (military) class. The postwar reforms also caused the decline of owners of *zaibatsu* enterprises and land proprietors. If this had been a revolution from below, the old upper and middle classes, not easily accepting the decline of their status, might have become active in counterrevolution, thereby creating social instability. However, this revolution was, in Yonosuke Nagai's words, a “revolution from the outside.”¹⁹ In the Meiji Restoration, the old upper military classes became inactive in the face of modern technology, especially military technology. In the postwar reforms, the old upper classes were accused of having lost the war and were deprived of their political privileges. No important counterrevolution reversing the results of these big games occurred.

This outcome partly depended on the wise policies of the new government, but it is also true that external stimuli, the “revolution from the outside,” lessened the burden of new governments. Because the legitimacy of the martial class came from military power, their failure to defend Japan against European intrusions at the beginning of the Meiji era seriously affected their political position. Although the Meiji government experienced several crises, the revolts of the old military class were successfully suppressed quickly.

In postwar reforms, a similar situation prevailed. Land reform, the dissolution of the *zaibatsu*, and the effective default of government bonds by inflation caused major changes in the distribution of income and wealth. The counterrevolutionary movement against these changes was weak. As the old wealthy and powerful classes were blamed for the defeat in the war and psychologically castrated, they could not move toward counterrevolution. The new government could wash its hands of developments, maintaining that the revolution was the direct consequence of the defeat in the war, and was initiated by the occupation army.

¹⁸ J. Hirschliefer, “Comment,” *Journal of Law and Economics*, August 1976.

¹⁹ Y. Nagai outlined his theory of “revolution from the outside” in a personal conversation with one of the authors.

Thus, the outcome, as well as the unique process of the two big games, resulted in strict limits to rent-seeking activities after the games had concluded. It is not easy to limit such activities (even if their decline leads to the efficiency of the economy) when many members of the society feel frustrated about the existing income distribution. However, in the case of Japan, the two big games caused income distribution to be more equal. The resentment of the old upper classes was ineffectual. On the other hand, talented lower classes were fairly satisfied with the results of the games. Thus, the big games prepared the way for the people's concentrated efforts in profit-seeking activities.

The Large Country and Small Country Hypothesis

The big games played by Japan in the Meiji Restoration and during the occupation were dominated by international conditions. That Japan was a small and weak country in the international environment also contributed to restriction of rent-seeking activities. Because Japan was weak, the government was not able to protect domestic industries in every case. Small countries face demands to be price-takers in the world market. Industries of a small country cannot enjoy large domestic markets protected by tariffs and quotas. After World War II, Japan tried to promote exports by several measures. But in the final analysis, the effectiveness of such measures depends on the exporters' efforts to reduce costs and to improve product quality to compete in world markets. Government can restrict the volume of imports to protect domestic industries, but it cannot increase the competitiveness of those industries in the international market directly.

The big game is an initial investment, whose effect diminishes in time, according to Buchanan.²⁰ When a small country succeeds in economic development and becomes an economically advanced country, it can afford to protect its industries. Rapid rises in export will bring about the fear of foreign domination in overseas markets, and frictions and resistance may arise. As we have been discussing, in the Meiji and the postwar eras, the rent-seeking activities, in relative terms, were limited. However, rent-seeking activities were apparently increasing from the end of the Meiji era to the 1920s and from the 1970s to the 1980s.

As Japan moved toward becoming a big power, pressures for protective measures increased (as exemplified by the increase in tariffs in the 1900s and 1930s). Corruption of political parties became widespread (as was shown in the allocation of public works and subsidies in the Taisho democracy as well as the Tanaka plutocracy). The public became more concerned with income redistribution through social-security systems than with profit-seeking activities. Unfortunately, in the 1930s and 1940s Japan launched the largest enterprise in rent-seeking activities—overseas wars.

²⁰ J. Buchanan, *The Limits of Liberty: Between Anarchy and Leviathan* Chicago: University of Chicago Press, 1975).

Ideology as a Determinant of Economic Policy

It is widely held that the predominant ideology in prewar Japan was nationalistic, paternalistic, and authoritarian. This is not to be denied. Still, one should not overlook a stream of liberal thought that influenced economic policy. *Gokajo no goseimon* (The Five Oaths) declared by Emperor Meiji at the beginning of the Meiji Restoration implied that common men should be encouraged to pursue happiness, discuss public policies, and participate in decision making. The Oaths were often cited by liberal constitutionalist politicians and journalists before the war to support the legitimacy of their positions.

Yukichi Fukuzawa, through his writings such as *Gakumon no susume* (Promotion of Knowledge and Science) and Naomichi Nakamura, by his translation of Samuel Smiles' *Self-Help* (*Saikoku risshiden*), emphasized more concretely the individual dignity and personal efforts important for self-improvement. Their books were among the most widely read in the early years of the Meiji era. Ukichi Taguchi supported the cause of free trade and laissez-faire in his many essays that appeared in journals. He was often called the Adam Smith of Japan.

Some scholars emphasize the influence of the "Prussian" model on the formation of economic policy in Meiji Japan, through such aristocratic bureaucrats as Tsuyoshi Inoue and Tosuke Hirata. But Great Britain, the wealthiest and most powerful nation in the world at that time and an ally of Japan since 1902, also attracted the admiration and attention of the Japanese policymakers. Some examples of pro-British thinking can be found in the writings of Masayoshi Matsukata, Korekiyo Takahashi, and Junnosuke Inoue. For instance, Junnosuke Inoue compared Japan with Great Britain in the mid-nineteenth century and expressed his hope that Japan could be "Britain in Asia" in due time.²¹ This way of thinking fitted well with his orthodox management of monetary and fiscal policies.

Meiji Japan did not pursue socialist planning or state control of the economy. In spite of the authoritarian government, the dominance of the zaibatsu, and the social and economic backwardness, there was room for profit-seeking activities that eventually worked as a prime mover of sustained prewar economic growth.

Postwar Japan, however, started with the economy heavily controlled, with a huge bureaucratic apparatus as well as an intricate network of cartel-like interfirm organizations. Socialist influence became pronounced, moreover, particularly among intellectuals. Nonetheless, a free-enterprise economy gradually returned.

The Liberal (later, Liberal Democratic) party made the restoration and maintenance of a free-enterprise system the core of their program, opposing socialist claims for a planned economy. They were helped by the public's opposition to economic controls, an opposition based on memories of wartime experiences.

Return to a free-enterprise system was, in a sense, a necessity for Japan if it was to reenter the world market. Shigeru Yoshida wrote that "ninety million people on the

²¹ J. Inoue, "Tōyō ni okeru Nihon no keizaijō oyobi kinyujō no chii" [Japan's Economic and Financial Position in the Orient], a speech delivered in 1918. Reprinted in Y. Cho, *Nihon keizai shisō shi kenkyū* [Studies in the History of Japanese Economic Thought], (Miraisha, 1963), pp. 153–156.

narrow islands must live on foreign trade." Separation from resources abroad meant a low level of living, close to subsistence, for the Japanese people during and immediately after the war. This lesson was learned and taken seriously.

In the early 1950s there was a controversy among the representative Japanese economists such as Ichiro Nakayama, Shigeto Tsuru, and Hiromi Arisawa as to what extent Japan should rely on external trade and to what extent on internal development. Promotion of Japan's internal resource development (*kaihatsushugi*) was generally associated with the assertion that the economy should be directed and controlled by a government plan. Although Ichiro Nakayama made the conciliatory comment that promotion of foreign trade (*boekishugi*) could be pursued in parallel with domestic economic control, the victory of the Nakayama school in fact supported further decontrol and liberalization.²²

International Comparisons

We believe that our analysis is consistent with the experience of Europe, the United States, Latin America, and today's LDCs. In general, it is difficult to find evidence that interventionist policies have encouraged the economic development of these countries. Very briefly, let us review the experiences of the key countries and regions.

Europe and the United States

Economic developments in the United Kingdom and the United States are consistent with our thesis. It is true that, in the United States, protectionist movements emphasizing tariffs emerged in the late nineteenth century, but they were unsuccessful. After World War I the tariff rate was raised.²³ High tariff rates in the United States were a source of instability in the world economy after World War II; also it is frequently argued that high tariff rates adopted after the Great Depression delayed economic recovery and spread depression throughout the world.²⁴

The experiences of France and Spain support our thesis from the opposite side. The guilds were strong and private property rights were unstable. Free economic activities were restrained. Economic development of both countries was slower than in the United Kingdom. For France this scenario is correct until the middle of the nineteenth century. Although government intervention in traditional industries occurred with the rule of Louis XIII, the French industrial revolution did not take place in

²² I. Nakayama, *Nihon keizai no kao* [Aspects of the Japanese Economy], (Nihon Hyōronsha, 1953), p. 126.

²³ S. Miyazaki, S. Okumura, and K. Morita, eds., *Kindai kokusai keizai yōran* [Statistics of Modern International Economy], (Tokyo: University of Tokyo Press, 1981), p. 117, Table 16; and Takeda, Hayashi, and Imai [Japanese Budget], p. 42, Figure 18.

²⁴ C. P. Kindleberger, *The World in Depression, 1929–1939* (Berkeley: University of California Press, 1973), chap. 14.

those industries. After France was defeated in the Napoleonic Wars, Britain prohibited high tariff rates. Napoleon III (1848–70) adopted free-trade policies and a liberal economic program, at least by French standards.²⁵ Under his rule, the French economy developed rapidly.

If we search for examples not supporting our hypothesis, we may consider the experiences of Germany and Russia. Germany provided a new model for economic-development policy. The central idea of this policy was for the state to lead the economy. Russia provided a more radical model of economic-development policy—a centrally planned economy. Germany became a leading economic power in the late nineteenth century. Soviet Russia succeeded in economic development during the Great Depression while other countries in the free world faced difficult conditions.

The Kaiser's Germany, however, was a decentralized county in which small feudal lords still had some power. The power of the central government was weak measured in terms of the size of the budget (see Table 1). The success of the German chemical industry can be interpreted as a result of creating property rights for knowledge. We do not have to interpret its success as a result of government intervention. The success in Russia is also questionable. Russia had commenced economic development before the Russian Revolution. If we extrapolate the economic growth rate before the revolution, the economic development sponsored by the Communist party cannot be pronounced as successful.²⁶

Latin America

Until the early twentieth century, the Latin American economies developed rapidly, although the development mainly took place in agriculture. Under British pressure, which made Latin American countries adopt free trade and liberal economic policies, these countries continued to ship grain and beef to Europe. Although industries were underdeveloped, Latin Americans were not as poor as Europeans—especially South and Central Europeans—as is suggested by the large outflows of migrants from South and Central Europe to Latin America. At least in Argentina, Brazil, and Mexico, living standards were not lower than those in Europe. Per capita GNP of Argentina was much higher than that of Italy (see Figure 1).

The Great Depression, which started in 1929, changed the situation. Latin American countries were troubled by the depreciation in the terms of trade because the prices of agricultural products fell faster than those of industrial products. In response, these countries abandoned free trade and adopted protective tariffs to protect their manufacturing industry. The results were largely negative. Economic development was adversely affected, with performances much weaker than those of South European countries.

²⁵ G. Tullock, "Rento shiikingu shakai o koete" [Beyond a Rent-seeking Society], *ESP*, February 1982.

²⁶ Y. Murakami, H. Kumagai, and S. Kumon, *Keizai taisei* [Economic Systems], (Tokyo: Iwanami Shoten, 1973), p. 344, Figure 8–2.

Asia

Because we have more detailed data on Asian countries, we can conduct a more sophisticated analysis.

By comparing Burma, India, the Philippines, Thailand, Malaysia, and other countries, Myint and Balassa assert that interventionist policies discouraged economic development.²⁷ Balassa and Ryu point out that Korea and Taiwan succeeded in developing their economies after stopping their interventionist policies in the early 1960s and 1950s, respectively.²⁸

Table 4 shows the effects of economic policies on economic development. South Korea, Thailand, Malaysia, Taiwan, Hong Kong, and Singapore are, respectively, similar to North Korea, Burma, Indonesia, and China in ethnicity, tradition, and culture. However, as will be seen, the economic performances of these countries have been very different.

Table 4
Growth Rate of Per Capita GNP in Asian LDCs
(Annual rates, in percentages)

	1960-70	1970-78
S. Korea	6.1	7.8
N. Korea	5.0	4.6
Thailand	5.2	4.9
Burma	0.4	1.8
Malaysia	3.6	5.1
Indonesia	1.3	6.0
Taiwan	6.6	6.0
Hong Kong	7.5	6.2 (1970-77)
Singapore	6.4	7.4
China	2.9	4.4

SOURCE: Y. Harada, "Jiyu boeki no yogo" [In Defence of Free Trade], *ESP*, October 1981.

We believe the evidence strongly supports the thesis that good performance was achieved through liberal economic policies and, conversely, that poor performance is a result of interventionist policies.

²⁷ H. Myint, "The Inward and Outward-looking Countries in Southeast Asia," *The Malayan Economic Review*, April 1967. Reprinted in H. Myint, *Economic Theory and the Underdeveloped Countries* (Oxford: Oxford University Press, 1971).

²⁸ B. Balassa, "Industrial Policies in Taiwan and Korea," *Weltwirtschaftliches Archiv*, Band 106, Heft 1, 1971. B. Ryu "Taiwan no 'Eaharut' seisaku" ["Erhard's" Economic Policies in Taiwan], *ESP*, May 1981.

CONCLUSIONS

We have tried to explain Japanese economic development by saying that rent-seeking activities were contained so as not to suffocate profit-seeking activities at the grass-roots level. The "big" changes assured the legitimacy and stability of the social framework in which competition should take place. The status of Japan as an open small country in the world market necessitated reliance on foreign trade, and this prevented government intervention from dominating the scene. In spite of the strong tradition of paternalism, there was still a current of liberal thought that Japan should be molded after modern Britain.

So much for the past. What can we say about the future? Japan is now an economically advanced country, which has succeeded in economic development. It is imperative for Japan to open the domestic market for imports from abroad in order for its exports to be accepted abroad. To promote exports is no longer Pareto-preferred, in the sense that Japan needs positive adjustments on its own domestic front. To liberalize agriculture and other heretofore protected industries may cause internal tensions. Direct confrontation with vested interests in rent-seeking activities may arise. The long-standing rule of the Liberal Democratic party gave rise to a growing machinery for vote mobilization, in which the ruling party exchanged subsidies and public works for the support of various pressure groups. At present, no new big game is in sight. As a result of the success of economic development, Japan is now in danger of increasing her rent-seeking activities.

The trend may be reversible, however. Japan is a fragile country in the world power structure. Yet, revival of militarism is unlikely to occur. In order to live in the international competitive market, Japan still needs the energy of a free-enterprise system. Public support for the existing social framework can also be expected because of its successful performance. Moreover, technological innovations that are underway in many branches of industry will provide chances for profit-seeking activities by raising profit seekers' rewards.

Japan is now entering a period when, as a big nation and without recourse to a third big game, it should be able to suppress rent-seeking activities successfully.

3. Political Institutions and Economic Performance: The Government-Business Relationship in Japan, South Korea, and Taiwan

Chalmers Johnson

The facts are not in serious dispute, even if their explanation and interpretation are among the most controversial issues in the field of comparative political economy today. In 1950, measured in 1974 United States dollars, South Korea had a per capita income of \$146; equivalent figures were \$150 for Nigeria, \$129 for Kenya, and \$203 for Egypt. Taiwan was then slightly ahead of Korea at \$224, but lagged far behind Brazil at \$373, let alone Mexico at \$562 or Argentina at \$907. Thirty years later, the Republic of Korea's (ROK) per capita GNP had risen to \$1,553; Nigeria's was \$670 (even with oil), Kenya's \$380, and Egypt's \$480. In 1980, the Republic of China's (ROC) per capita income was \$2,720; Brazil's was \$1,780, Mexico's \$1,640, and Argentina's \$2,230.¹ To take only the two decades of high-speed growth in Korea (1962–1980), GNP (expressed in 1980 prices) increased 452 percent, from \$12.7 billion to \$57.4 billion, achieving an average growth rate of 8.5 percent per year.² With regard to Taiwan, during 1983 the London *Economist* noted ruefully: "The 130 million Brazilians export only about as much as the 18 million people of Taiwan, and (outside oil) the 75 million Mexicans—though they sit on America's doorstep—export only a quarter as much as the Taiwanese."³ And Taiwan and Korea were only the fourth and fifth richest countries in East Asia; the leaders were Japan, with a 1980 per capita GNP of \$8,870, Hong Kong with \$4,432, and Singapore with \$4,298.⁴

¹ G.L. Hicks and S.G. Redding, "Industrial East Asia and the Post-Confucian Hypothesis: A Challenge to Economics" (University of Hong Kong, December 1982), pp. 3–4.

² Citibank, *Executive Guide: Korea* (Seoul: Citibank, 1982), p. 7.

³ *The Economist*, April 30, 1983, p. 7.

⁴ Keizai Koho Center, *Japan 1982: An International Comparison* (Tokyo: Keizai Koho Center, 1982), pp. 6, 8.

Such figures are commonplaces of contemporary Asian economic journalism. The hidden issues behind them are the roles the government of South Korea and Taiwan played in contributing to their economies' extraordinary growth rates and the relevance of these recent economic "miracles" to the earlier and widely acknowledged one achieved by Japan. But why should the issue of governmental activities come up at all? There are several reasons, each of them highly controversial and even ideological. One is what might be called "Taira's enigma." Writing in 1982, Professor Taira Koji observed: "Japan's modern economic growth is believed to have begun in the late 1880s, curiously coinciding with the preparation and promulgation of the Meiji Constitution which defined the character of the Japanese state. . . . The combination of an absolutist state with a capitalist economy from 1889 to 1947 has been an enigma, far from fully unraveled, among scholars interested in Japanese economic history."⁵

Since 1947, despite its adoption of a formally democratic constitution and the subsequent development of a genuinely open political culture, Japan seems to have retained many "soft authoritarian" features in its governmental institutions: an extremely strong and comparatively unsupervised state administration, single-party rule for more than three decades, and a set of economic priorities that seems unattainable under true political pluralism during such a long period.⁶ Because the post-1947 period also witnessed even greater rates of Japanese economic growth, it has seemed to some that the coincidence of soft authoritarianism in politics and capitalism in economics had something to do with economic performance.

Japan's achievement of the status of the second most productive economy that ever existed is no longer simply an enigma; it is a challenge to the main political and economic doctrines that currently dominate global thinking about human social organization. Japan's performance challenges the Leninist command economies because it calls into question their theory that capitalism leads to class antagonisms and political instability, and it also suggests that their resort to explicit absolutism without capitalism is misplaced and doomed to failure. Japan's performance also challenges the Anglo-American "free enterprise" economies because it calls into question their theory that governmental intervention in the economy is inevitably inefficient and distorting, and it also suggests that their faith in the market mechanism without explicit political direction is misplaced.

Needless to say, these implications of the Japanese challenge are nowhere fully accepted and are only recently even being debated in either the Communist or the English-speaking capitalist worlds. Most foreign observers, whether Communist or Western capitalist, seem to prefer theories of Japan's economic achievements that deflect attention from the connection between soft authoritarian politics and capitalist economics; and the Japanese themselves, for their own good and sufficient reasons, are among the leading creators and purveyors of such conceptual alternatives to a

⁵ Koji Taira, "Japan's Modern Economic Growth: Capitalist Development under Absolutism," in Harry Wray and Hilary Conroy, eds., *Japan Examined: Perspectives on Modern Japanese History* (Honolulu: University of Hawaii Press, 1983), p. 34.

⁶ See Chalmers Johnson, *MITI and the Japanese Miracle* (Stanford, Calif.: Stanford University Press, 1982).

political theory of their achievements. The most common theme in the alternative view is that Japan's economic achievements are to be explained by Japan's unique culture, often traced back to sociological changes during the Kamakura military government of the thirteenth century or even earlier. Of course, if that were true then the culture is also responsible for the two-and-a-half centuries of *sakoku* (closed country) during the Tokugawa era, for the militarism and imperialism of the 1930s, and for the defeat of 1945. But no matter. The cases of the ROK and the ROC inevitably draw the analyst's attention back to the political nexus.

If postwar Japan has arguably displayed a degree of soft authoritarianism in its political system and if this has had something to do with its economic performance, then Korea and Taiwan are "hard states" (in the words of Leroy Jones and Il SaKong) and in economic affairs, "Government, at least in Korea, is the senior partner."⁷ These new cases of absolutist states and capitalist economics suggest that there may indeed be a Japanese "model" that the Koreans and Taiwanese have been refining and perfecting. In fact, the study of the new cases may reveal to us what is intrinsic and what is superficial in the older, Japanese example, particularly because the Japanese always prefer to stress the superficial in their own case, shielding the intrinsic from foreign gaze. Thus, for example, it may turn out that the real Japanese contribution lies in the method of operating the soft authoritarian side of the capitalist developmental state—the Japanese have been much more effective on this score than either the Koreans or the Taiwanese—whereas Japan's "unique" labor relations and innovative managerial techniques, staples of Western journalism on the Japanese economy, may actually be insignificant and even counterproductive because they are missing from Korea and Taiwan with no noticeable effect on their economic performances.

Writing for the World Bank, Parvez Hasan notes "the apparent paradox that the Korean economy depends in large measure on private enterprise operating under highly centralized government guidance. In Korea the government's role is considerably more direct than that of merely setting the broad rules of the game and influencing the economy indirectly through market forces. In fact, the government seems to be a participant and often the determining influence in nearly all business decisions."⁸ Hasan suggests that part of the answer to this paradox is the existence of mass nationalism in Korea and a widespread public-private agreement on economic goals, thus eclipsing the class or pluralist pressures on governments that are commonly encountered in less mobilized societies. I agree, and I also believe that the issue of the national mobilization of a united people for economic goals is an important challenge to economic theories based on class analysis, which have proved to be particularly

⁷ Leroy P. Jones and Il SaKong, *Government, Business, and Entrepreneurship in Economic Development: The Korean Case* (Cambridge, Mass.: Council on East Asian Studies, Harvard University, 1980), pp. 132ff.; and Edward S. Mason, Mahn Je Kim, Dwight H. Perkins, Kwang Suk Kim, and David C. Cole, *The Economic and Social Modernization of the Republic of Korea* (Cambridge, Mass.: Harvard University Press, 1980), p. 255.

⁸ Parvez Hasan, *Korea: Problems and Issues in a Rapidly Growing Economy* (Baltimore: Johns Hopkins University Press, 1976), p. 29.

sterile in postwar East Asia when used as a guide to policy formulation (notably in mainland China). But what is the “apparent paradox” that Hasan sees in an intrusive government and high-speed economic growth?

Here we encounter the first serious challenge to the authoritarianism-capitalism nexus—namely, the thought that although the high-growth Asian economies are strongly influenced by their governments, their successes are to be explained not because of this influence but in spite of it. The poorly informed simply ignore the role of government in the capitalist developmental cases. Thus, for example, Milton and Rose Friedman: “Malaysia, Singapore, Korea, Taiwan, Hong Kong, and Japan—all relying extensively on private markets—are thriving. . . . By contrast, India, Indonesia, and Communist China, all relying heavily on central planning, have experienced economic stagnation.”⁹ That is all very well, but it ignores President Park Chung Hee’s intent to attain economic self-sufficiency for Korea through the “establishment of a planned economy,” Taiwan’s repeated justification of its policies in terms of Sun Yat-sen’s semisocialist principle of “people’s livelihood,” and Singapore’s single-party “socialism that works.”¹⁰

The tendency (or the desire) to downplay the role of government has been most pronounced in the Japanese case, particularly after the onset of so-called economic liberalization in the late 1970s.¹¹ In Japan today it is commonly argued that, even if the government once performed important roles in the economy, it no longer does so (thereby dichotomizing the issue of governmental intervention instead of stressing the government’s changing role in light of new economic challenges). Many wish passionately to argue that Japanese entrepreneurship always was more important to economic growth than any policies or practices of the government. The *Economist*’s survey of Japan for 1983 is typical: “Foreign competitors exaggerate the importance of MITI [Ministry of International Trade and Industry] in shaping Japan’s industrial future. . . . Japan’s major manufacturers are laws largely unto themselves—especially when it comes to investment. . . . It is this, rather than any carefully aimed ‘industrial targeting’ policy on MITI’s part, that has been largely responsible for the surge in Japanese exports that has been sweeping across America and Europe lately.”¹²

⁹ Milton and Rose Friedman, *Free to Choose* (New York: Harcourt Brace Jovanovich, 1980), p. 57.

¹⁰ Park Chung Hee, *People’s Path to the Fulfillment of Revolutionary Tasks* (Seoul: ROK Ministry of Public Information, n.d. [c. 1962]), 12 pp.; quoted by John P. Lovell, “The Military and Politics in Postwar Korea,” in Edward R. Wright, ed., *Korean Politics in Transition* (Seattle: University of Washington Press, 1975), p. 177. On Taiwan, see Tillman Durdin, “Chiang Ching-kuo’s Taiwan,” *Pacific Community* vol. 7, no. 1 (October 1975), pp. 92–117. (Durdin’s is the best available source on Chiang Ching-kuo’s twelve years spent in the USSR, a subject taboo in the Taiwanese press.) On Singapore, and on the American tendency generally to interpret Southeast Asian economic growth in American terms, see Donald K. Emmerson, “Pacific Optimism, Part I, America after Vietnam: Confidence Regained”; and “Part II, Explaining Economic Growth: How Magic Is the Marketplace?” *UFSI Reports*, nos. 4 and 5 (1982).

¹¹ On Japanese economic liberalization and the extent to which it has been carried out, see Chalmers Johnson, “The ‘Internationalization’ of the Japanese Economy,” *California Management Review*, vol. 25, no. 3 (Spring 1983), pp. 5–26.

¹² “What Makes Yoshio Run?” *The Economist*, July 9, 1983, p. 18. For an unambiguous example of

Ever since the catchphrase “Japan, Inc.” was invented to refer to the Japanese government-business relationship, writers on the subject have found it *de rigueur* to misinterpret it to mean Japanese government domination of the economy and then to demolish it. But Taira’s enigma, with regard to Japan or the role of government in Korea and Taiwan, does not imply domination; it refers explicitly to the *coexistence* of authoritarianism and capitalism—and that must be explained.

For the sake of discussion, the logic of the capitalist developmental state can best be understood if it is approached from the point of view of socialist theory. If one posits the existence of a developmentally oriented political elite for whom economic growth is a fundamental goal, such an elite must then develop a concrete strategy for attempting to reach that goal. If one further posits two or more points, that such an elite is not committed first and foremost to the enhancement and perpetuation of its own elite privileges (something that cannot be assumed in Leninist systems or, for that matter, in the Philippines) and that the elite appreciates that the socialist displacement of the market threatens its goals by generating bureaucratism, corruption, loss of incentives, and an inefficient allocation of resources, then its primary leadership task is to discover how, organizationally, to make its own developmental goals compatible with the market mechanism (that is, with such things as prices that are real measures of value, private property in theory and in practice, and decentralized decision making).

Developmental elites are generated and come to the fore because of the desire to break out of the stagnation of dependency and underdevelopment; the truly successful ones understand that they need the market to maintain efficiency, motivate the people over the long term, and serve as a check on institutionalized corruption while they are battling against underdevelopment. The Republic of Korea is an excellent example:

The rapid economic growth that began in South Korea in the early 1960s and has accelerated since then has been a government-directed development in which the principal engine has been private enterprise. The relationship between a government committed to a central direction of economic development and a highly dynamic private sector that confronts the planning machinery with a continually changing structure of economic activities presents a set of interconnections difficult to penetrate and describe. Planning in South Korea, if it is interpreted to include not only policy formulation but also the techniques of policy implementation, is substantially more than “indicative.” The hand of government reaches down rather far into the activities of individual firms with its manipulation of incentives and disincentives. At the same time, the situation can in no sense be described in terms of a command economy.¹³

contemporary industrial targeting and nurturing by MITI, see Edward A. Feigenbaum and Pamela McCorduck, *The Fifth Generation: Artificial Intelligence and Japan’s Computer Challenge to the World* (Reading, Mass.: Addison-Wesley, 1983). For a study of the role of government in Japanese and Korean growth, see Miyohai Shinohara, Toru Yanagihara, and Kwang Suk Kim, *The Japanese and Korean Experiences in Managing Development* (Washington, D.C.: World Bank Staff Working Paper No. 574, 1983).

¹³ Mason et al., *Economic and Social Modernization*, p. 254.

In previous writing on the Japanese and Taiwanese examples, I have listed as an indispensable element in any model of the capitalist developmental state the commitment by the political elite to "market-conforming" methods of intervention in the economy.¹⁴ Lim Youngil is even more explicit with regard to Korea. He argues that Korean governmental planning, target setting, and incentive measures have been "market sustaining rather than market repressing" and that it is necessary to distinguish "between market-augmenting planning (reducing risks and uncertainties) and market-repressing planning (increasing fragmentation of the market or rent-seeking opportunities). The former accelerates development while the latter hinders it." Lim further makes the point that markets do not necessarily come into being naturally, that "one of the most common characteristics of underdeveloped countries is underdevelopment of the market system." One of the things a state committed to development must do is develop a market system, and it does this to the extent that its policies reduce the uncertainties or risks faced by entrepreneurs, generate and disseminate information about investment and sales opportunities, and instill an expansionist psychology in the people.¹⁵ Once a market system has begun to function, the state must then be prepared to be surprised by the opportunities that open up to it, ones that it never imagined but that entrepreneurs have discovered. The East Asian wig export industry is the classic example; no state bureaucrat ever thought of it or imagined the profits to be made by switching from human to synthetic hair. East Asia had a comparative advantage in the wig trade, but it was never seen or seized upon until the state had set up the capitalist development system.¹⁶

The logic of such a system derives from the *interaction* of two subsystems, one public and geared to developmental goals and the other private and geared to profit maximization. The interaction between the two affects the nature of the decisions made in both systems.¹⁷ The intent of the public system is to manipulate the inputs into the decision-making processes of privately owned and managed enterprises in order to achieve developmental goals, but the content of its inputs is continuously affected by feedback on profit-and-loss conditions, export prospects, raw materials costs, and tax receipts. The intent of the private system is to maximize profits, limit risks, and achieve stable growth given the political-economical environment in which it must operate, but its decisions on products, markets, and investments are continuously affected by changing costs and availability of capital, export incentives, licensing requirements, and all the other things the government manipulates.

Governmental planning in such a context is thus not merely indicative, nor is it

¹⁴ Cf. Johnson, *MITI*, pp. 315–20; and Johnson, "The Taiwan Model," in James C. Hsiung, ed., *The Taiwan Experience, 1950–1980* (New York: Praeger, 1981), pp. 9–18.

¹⁵ Youngil Lim, *Government Policy and Private Enterprise: Korean Experience in Industrialization*. Korea Research Monograph No. 6 (Berkeley, Calif.: Institute of East Asian Studies, University of California, 1981), pp. 4, 8.

¹⁶ B. Balassa, *The Newly Industrializing Countries in the World Economy* (New York: Pergamon Press, 1981); cited in Hicks and Redding, "Industrial East Asia," p. 10.

¹⁷ Cf. Ian Inkster, "'Modelling Japan' for the Third World," in *East Asia: International Review of Economic, Political, and Social Development* (Frankfurt: Campus Verlag, 1983), Vol. I, p. 180.

part of a state-command allocation system. Planning has indicative functions—to lay out clearly what the elite's fixed-term goals are so that private enterprises and households can adjust to them with precision and over a definite period—but planning also sets criteria through which the operational state bureaucracy can change incentives and disincentives, or intervene directly at the enterprise level, as required. Precise fulfillment of an indicative plan is not necessarily a good measure of its effectiveness. Normally the plan should be overfulfilled, indicating that the synergisms of the system are carrying it toward unanticipated growth. Plans should be underfulfilled when changed circumstances require shakeouts and reorganization—as after the oil crisis of 1973. Korea and Taiwan both have employed explicit planning: five five-year plans (1962–1986) in Korea, the first three overfulfilled, the fourth underfulfilled; and six four-year plans (1953–1975), one six-year plan (1976–1981), and one ten-year plan (1980–1989) in Taiwan, four overfulfilled, two underfulfilled, and one without a target.¹⁸

A developmental elite creates political stability over the long term, maintains sufficient equality in distribution to prevent class or sectoral exploitation (land reform is critical), sets national goals and standards that are internationally oriented and based on nonideological external referents, creates (or, at least, recognizes) a bureaucratic elite capable of administering the system, and insulates its bureaucrats from direct political influence so that they can function technocratically. It does *not* monopolize economic management or decision making, guarantee full employment, allow ideology to confuse its thinking, permit the development of political pluralism that might challenge its goals, or waste valuable resources by suppressing noncritical sectors (it discriminates against them with disincentives and then ignores them).

Why are such political systems normally authoritarian? The first and most obvious reason is in order to achieve political stability and long-term predictability of the system. Continuity of the government may be achieved by explicit authoritarianism or by a rigged system that nonetheless achieves a monopolization of political power. Such quasi-authoritarian political monopolies are disappointing to liberals, but it should be understood that they are ultimately legitimated not by their ideological pretensions, as in Leninist systems, but by their results. Also, the criterion here is stability, for which authoritarianism is only a means. "Assured political stability [in Korea]," write Mason et al., "tended to lengthen time horizons and made manufacturing a much more feasible alternative to commerce as a field of entrepreneurial activity."¹⁹

Authoritarianism can carry with it exceedingly damaging side effects such as the suppression of human rights. (It should at the same time not be forgotten that authoritarianism is the most common form of political regime on earth but one that is only rarely accompanied by the trade-off of very high-speed, equitably distributed

¹⁸ For the plans and their results, see Citibank, *Executive Guide*, pp. 13–14; and K. T. Li and W. A. Yeh, "Economic Planning in the Republic of China," *Industry of Free China*, vol. 57, no. 2 (February 1982), p. 5.

¹⁹ Mason et al., *Economic and Social Modernization*, p. 267.

economic growth.) For Japan since 1955 we must drop the term and substitute for it one of the common Japanese euphemisms—the distinction between *tatema* (formal principles) and *honne* (actual social reality). For purposes of this discussion, I use the shorthand term “soft authoritarianism,” meaning in Japan’s case the prewar authoritarianism of the Meiji and early Shōwa eras and the postwar pattern of the monopolization of political power by a single party. The issue under analysis here is not primarily the nature of the Japanese political system but rather the significance for economic management of Japan’s having inhibited the coming into being of an effective two-party system, regardless of the possibilities inherent in the constitution of 1947.

In general, the Japanese have been masters at using the least amount of political authoritarianism needed to achieve stability for economic growth; but even they, during the 1930s and 1940s, succumbed to the potential trap of all authoritarianism: assumption by the elite of all powers, ideologization, and the displacement of developmental goals. Normally the Japanese disguise and ameliorate their soft authoritarian system through many common, as well as some unusual, political devices: monarchical or democratic constitutions; formal and informal institutional barriers against dictatorship, such as indirect elections, party factionalism, and an implicit balance of power among political, bureaucratic, and economic elites (Japan was the only belligerent power during World War II to change its head of state in a processual manner); gerontological supervision of reigning politicians (*genrō*, *sempai-kōhai* relationships); a marked separation between reigning and ruling in the Japanese system; and the systematic nurturing of a meritocratic elite. Japan has been beset by serious political instability on many occasions since the Meiji era, including assassinations, corruption scandals, and massive protest demonstrations, but it has avoided the particular instabilities associated with mass-based political parties and their platforms.²⁰

Korea is ostensibly a democratic country but is actually a militarily dominated single-party regime—close in form, if not in ideology, to Japan during the 1930s and 1940s. It would be irrelevant here to either attack or defend the regimes of generals Park Chung Hee or Chun Doo Hwan. My point is that, although the military coup of May 16, 1961, brought to power the kind of developmental elite and political stability that was necessary for economic development, the personal rule of President Park, particularly after promulgation of the Yushin constitution, made the system more vulnerable to political disruption than it need have been. This was demonstrated by the turmoil and incoherence following the assassination of Park on October 26, 1979. Had Park, in the early 1970s, retired to Taegu and assumed the role of senior statesman supervising his carefully chosen successors (that is, had he become a Korean *genrō*, not on the Meiji model but on that of Yoshida Shigeru in Ōiso), he would be hailed today as the greatest Korean leader of modern times—and would probably still be alive (he was only forty-four at the time of the coup in 1961).

²⁰ For an insightful discussion of the Japanese political system during wartime, see Ben-Ami Shillony, *Politics and Culture in Wartime Japan* (Oxford: Clarendon Press, 1981), p. 67 *et passim*.

Taiwan differs from both Japan and Korea in that Taiwan does not even claim to be a democracy. Publicly, Taiwan justifies the single-party rule of the Kuomintang in terms of the sixty-to-seventy-year-old theories of Sun Yat-sen. Privately, it justifies single-party rule in terms of the threat from Communist China, the political crisis caused by its international isolation, and the need to maintain stability on the island so long as mainlander carpetbagging (that is, rule by exiles) is still tolerated. These private justifications have been acknowledged and even to a growing degree accepted by the Taiwanese for several reasons. First, the threat from mainland China is real, just as the threat from North Korea is real and gives added legitimacy to a military government in Seoul. Second, the high-growth equitable-distribution economy legitimates the Taiwanese government, just as economic performance has built support for the Japanese and Korean governments. Third, the Chinese mainland government is more authoritarian and less capable in either policy or execution than the Taiwan government, and comparison is an inherent element in legitimacy. Fourth, the actual administration of single-party rule in Taiwan has been ameliorative over time and these moderating trends continue (large Taiwanese membership in the Kuomintang, multiple centers of power in the party, weakening of martial law).

Nonetheless, Taiwan is the most explicitly authoritarian of the three countries and has relied for its one instance (through 1984) of leadership succession not on an electoral struggle or assassination, but on the most ancient method of all, lineal descent from father to son. It would be easy to say that Taiwan and Korea would have done better with less authoritarianism, but there are no examples to support such a view. It seems more likely that they would have done better with more of the Japanese style of authoritarianism. Here the *deshi* have not yet equaled the *sensei*, even if on some other measures they have improved on their teacher.

I shall return to the topic of soft authoritarianism and other political features of the capitalist development state. First, however, I would like to summarize the discussion thus far in terms of a brief, fourfold structural model of the East Asian high-growth systems. The model's elements are stable rule by a political-bureaucratic elite not acceding to political demands that would undermine economic growth; cooperation between public and private sectors under the overall guidance of a pilot planning agency; heavy and continuing investment in education for everyone, combined with policies to ensure the equitable distribution of the wealth created by high-speed growth; and a government that understands the need to use and respect methods of economic intervention based on the price mechanism.

Each of these elements exists in the Japanese, Korean, and Taiwanese systems, although with differing weights, patterns of historical evolution, and trade-offs that arise from stressing one more than the others. Moreover, each case is a moving target: the model itself remains constant but the actual degree of bureaucratic autonomy from politics, of public-private cooperation, of investment in education and equality, and of emphasis on incentives rather than commands varies over time. It varies in response to how far down the learning curve of the capitalist developmental state a people is and in response to exogenous and endogenous shocks to the system.

In general, the role of the government and its degrees of reliance on authoritarian intervention are enlarged by actual or anticipated crisis conditions in the environment. By crisis conditions I mean not just obvious crises such as the oil-price hikes of 1973 and 1979, but also such events as succession struggles, ruptured alliances (for example, between Taiwan and the United States), rising economic protectionism, shifts of industrial structure from labor-intensive to capital-intensive or knowledge-intensive industries, balance-of-payments squeezes, serious exchange-rate fluctuations, and so forth. When crisis conditions abate, the balance of initiatives in the systems may once again shift from the public sector toward the private sector, as we saw in Japan during the late 1970s and early 1980s. Sometimes such a shift toward greater private initiative will reflect a governmental *policy* to forestall foreign criticism or quiet domestic unrest or shift responsibility, and it will be understood by insiders as cosmetic. The changing relations between the public and private sectors are, in my view, cyclical and not linear; the *logic* of the systems remains unaltered even though their particular structures have considerable flexibility. It is possible that all three systems under discussion here will evolve from capitalist development states into capitalist regulatory states, but the evidence is equally strong that instead many regulatory states are evolving toward greater developmental and industrial-policy commitments.²¹

I am aware that models of this sort—or even questions such as “To what extent was the government of Park Chung Hee in some sense ‘responsible’ for the decade-and-a-half of 10 percent real growth in Korea?”—are not, in the words of Leroy Jones and Il SaKong, “the sort of questions with which economists are comfortable.”²² And the economists are not alone. There are serious methodological problems with any theory or model that posits intentional governmental intervention as an independent variable. These include a historical problem (there may be causal factors other than policy intervention), a span-of-time problem (the failure to recognize long-term time trends inherent in the data), the problem of perspective (mistaking random fluctuations for intentional results), and so forth.²³ There are, however, also serious problems with theories, often highly quantified, that filter out the factors of politics, strategy, and leadership.

In a short presentation it is impossible to discuss all the influences that have affected the growth of three different economies in some thirty years (for example, cheap energy until 1973, United States aid until the mid-1960s, a stable system of international commerce until the mid-1970s, land reform in all three countries). It

²¹ For the distinction between regulatory and developmental states, see Johnson, *MITI*, pp. 19–23. For evidence that mature regulatory states may be tending in a developmental direction, see John Zysman and Stephen S. Cohen, “Double or Nothing: Open Trade and Competitive Industry,” *Foreign Affairs*, vol. 61, no. 5 (Summer 1983), pp. 1113–1139.

²² Leroy Jones and Il SaKong, *Government, Business, and Entrepreneurship*, p. 286.

²³ For a quantitative analysis of industrial policy that is aimed at overcoming these kinds of objections, see Yakushiji Taizo (Saitama University), “Government in Spiral Dilemma: Dynamic Policy Interventions vis-à-vis Japanese Auto Firms, c. 1900–c. 1960,” in Aoki Masahiko, ed., *An Economic Analysis of Japanese Firms* (Amsterdam: North Holland Publishing Co., 1984).

seems to me, however, that sufficient time has passed, sufficient comparative data are in, and a sufficient number of alternative theories have been explored in depth to reject the views that the high-speed growth of the Japanese, Korean, and Taiwanese economies was a purely contingent phenomenon, or one dependent primarily on a favorable international environment, or one in which the role of government has been exaggerated. Most factors cited in nonpolitical theories as favoring the growth of the three East Asian economies have been equally or even more favorable for numerous other economies, with great differences in results (for example, Mexico with its own oil, or NATO members such as Greece or Portugal or Italy).

My contention is that the Japanese, Koreans, and Taiwanese have put together the political economy of capitalism in ways unprecedented in the West and with quite different trade-offs (greater performance but less political participation). To give further substance to this proposition, I shall explore some of the similarities and differences among the three cases in terms of seven major issues of the theory of the capitalist developmental state: (1) financial control over the economy; (2) labor relations; (3) the degree of autonomy of the economic bureaucracy; (4) the degree to which the state has been captured by its main economic clients; (5) the balance between incentive and command in economic guidance; (6) special private-sector organizations, particularly general trading companies and governmentally favored industrial conglomerates, known in Japanese pejoratively as *zaibatsu* (financial cliques) and more accurately as *keiretsu* (industrial groups) or in Korean as *chaebol* or in Chinese as *caifa*; and (7) the role of foreign capital.

FINANCIAL CONTROL

In no area have the East Asian high-growth economies shown more creativity than on the front of ingenious, utterly nonideological, easily manipulated public incentives for private savings and investment. Examples range from Japan's banana-import link system of the 1950s to Taiwan's annual gold-medal awards for companies whose exports exceed U.S. \$100 million a year.²⁴ It would be impossible to discuss here all the different kinds of incentives—Lim alone lists some thirty-eight different “export promotion policy tools” used in Korea down to 1976—or to take fully into account how new incentives are invented when old ones must be abandoned for various reasons (negative side effects, international agreements against nontariff trade barriers, and so on).²⁵

However, one enduring characteristic of all three economies is governmental reliance on financial and monetary means to guide and control private activities. These financial measures are often unorthodox by Anglo-American standards, particularly in their emphasis on the supply of capital to industry primarily through the banking system. In Korea, for example:

²⁴ For the banana-link system, see Johnson, *MITI*, p. 232; for Taiwan's gold medals, see *Free China Weekly*, vol. 24, no. 22 (June 5, 1983), p. 1.

²⁵ Lim, *Government Policy*, pp. 19–20.

Around 80 percent, on the average, of assets comes from loans from the banking system and other money markets, including the curb market, [whereas] the Korean stock market is just beginning to serve as a means of raising substantial capital. The remaining 20 percent comes from an internal source (equity); this compares with more than 50 percent internal financing among firms in the United States.²⁶

The corollaries of such debt-based industrial financing are powerful governmental incentives for householders to save through the banking system (or through a governmental “bank,” such as a postal savings system), restrictions to prevent easy foreign acquisitions of very highly leveraged firms, freedom of entrepreneurs from the influence of stockholders or securities analysts, governmental underwriting of the “overloans” of designated national banks, governmental ability to ration capital by manipulating its cost, and utter dependence of private managers on their banks in order to operate at all.²⁷ In Korea, “The most potent instruments for implementing economic policy have undoubtedly been control of bank credit and access to foreign borrowers.”²⁸

Japan today might be thought to fit this pattern no longer, because most of its growth-promoting incentives and controls have had to be or are in the process of being dismantled because of protests from foreign competitors. However, although some measures of financial “internationalization” have taken place, the government’s postal savings system and its unconsolidated “investment budget” (the Fiscal Investment and Loan Plan, *zaisei tōyūshi keikaku*) are still intact and functioning as two of Japan’s most important institutional inventions. During 1982, the Japanese postal savings system controlled assets about four times those of the world’s largest commercial bank, the Bank of America, and that is a very considerable financial institution to be totally in the hands of the bureaucracy for public investment and which is generally beyond the influence of pork-barrel politics. Deposits in postal savings and postal life-insurance accounts in February 1982 amounted to ¥86,290 billion, or \$359.5 billion at ¥240 = U.S. \$1; deposits of the Bank of America on December 31, 1981, were \$96 billion.²⁹ (Of course the Japanese invest so heavily in postal savings accounts because, by law, these accounts offer the highest rate of interest available to small investors.)

Equally important, bank-based financing is still one of the most distinctive features of the Japanese system. The sources of funds for large Japanese companies showed almost no change during the period 1972–1981: in 1972, companies obtained 75 percent of their funds through loans from banks and only 19 percent from shares, and the figures for 1981 were 68 percent and 21 percent.³⁰ Indirect financing remains an intrinsic feature not just of new developmental states such as Taiwan and Korea but also of mature developmental states such as Japan. Although such a system un-

²⁶ *Ibid.*, p. 26.

²⁷ The classic work on this subject is Suzuki Yukio, *Money and Banking in Contemporary Japan* (New Haven, Conn.: Yale University Press, 1980).

²⁸ Mason et al., *Economic and Social Modernization*, p. 267

²⁹ Keizai Koho Center, *Japan 1982*, p. 21.

³⁰ “Survey of International Banking,” *The Economist*, March 26, 1983, p. 76.

doubtedly restricts international capital flows, it remains in place because of the power, combined with low political visibility, it gives to Ministry of Finance bureaucrats. With regard to Korea, for example:

The Korean government has viewed control over the allocation of credit, both domestic and foreign, as an important element of economic and political policy. It has resisted repeated advice (mainly foreign) to let interest rates and competition among independent financial institutions determine the allocation of credit. (Few Korean businessmen have ever advocated such a policy.) Instead, the government has kept loan interest rates below equilibrium levels and has intervened pervasively—although generally unofficially—in allocation decisions. The reasons for this appear to have been both economic and political: the credit instruments could be used to mobilize businessmen for major economic programs such as export promotion or development of the machinery and petrochemical industries, while on the political side they served to maintain control over, and cooperation from, the business community. All Korean businessmen, including the most powerful, have been aware of the need to stay on good terms with the government to assure continuing access to credit and to avoid harassment from the tax officials.³¹

In Taiwan, financial control and loan allocation have been as real and as crucial to economic growth as in Korea, but the form is different. The government in Taiwan tends to rely on monetary rather than fiscal policies—tax breaks and high-depreciation allowances rather than outright loans to encourage investment in particular sectors. Moreover, most Taiwanese loans go to state-owned enterprises rather than to big businesses. The state sector is much bigger in Taiwan than in Korea. In 1976, public enterprises accounted for 22 percent of Taiwan's gross domestic product, but for only 9 percent in Korea.

LABOR RELATIONS

Foreign analysts have often credited Japan's "unique" labor relations with being the key to Japan's economic success. The virtual absence of economically significant strikes in Japan (except in the public enterprises), a labor force that does not object to technological changes even of a labor-saving type (for example, robotics), and federations of unions devoid of all but token political power are real comparative advantages in international economic competition. It has also often been supposed that the institutions that give Japan these advantages—enterprise unionism, semilifetime employment, and seniority wage scales—rest to a significant extent on Japanese cultural predispositions. However, the causes of the exceptional weakness of Japan's trade-union movement may lie as much in social engineering by government and management as in cultural factors.

³¹ Mason et al., *Economic and Social Modernization*, pp. 336–337.

Korea and Taiwan resemble Japan in their tranquil labor relations but they have achieved this goal through more direct authoritarian means. "In Korea," writes Lim, "the practice of permanent employment or company loyalty does not exist."³² There are no Korean minimum-wage standards, and strikes and closed shops are outlawed. Of an industrialized work force estimated at 8,000,000 in Korea, only 850,000 are members of a union, a unionization rate of 10.6 percent compared with Japan's 30.8 percent, the United States's 23.6 percent, Germany's 41.5 percent, and Great Britain's 59.4 percent.³³

Taiwan resembles Korea: it still applies the basic labor legislation enacted by the Kuomintang on the mainland from the 1920s to the 1940s, and although the Legislative Yuan has discussed a new labor-standards law for a decade, it has yet to pass it. Strikes and collective bargaining are prohibited under martial law; the unions that do exist are under strong Kuomintang supervision, including party controls over the selection of the union leaders and all union activities.³⁴

Taiwan and Korea have much higher labor turnover rates than Japan, but this has not posed a serious obstacle to high-speed growth. End-of-year bonuses in Taiwan and, in Korea, two or four bonuses a year, each equal to a month's salary, are part of standard wage packages, just as semiannual bonuses are in Japan; but these are more important to household savings than to labor peace. Large lump-sum severance payments at retirement are more common in all three countries than genuine pensions. It seems that through a combination of authoritarianism, free labor markets, and paternalism, Korea and Taiwan achieve roughly similar labor relations to Japan's, but without Japan's sacrifice of a labor market external to the firm or the rigidities of the semilifetime employment system.

There is, however, more soft authoritarianism in Japan's labor-relations system than is commonly appreciated abroad. According to Totsuka Hideo of Tokyo University, during the period 1955–1970, "Japanese management developed a sophisticated labor management style which encouraged workers' loyalty to their supervisors and competition among the workers themselves."³⁵ Management's two main achievements during this period were, first, a very hard line against militant unions leading to the Mitsui Miike coal-mine dispute of 1960, when militants were fired and when the more radical federation, Sōhyō (General Council of Trade Unions of Japan), began to lose ground in the private sector to the more moderate federation, Dōmei (the Japan Confederation of Labor); and, second, the setting up of the Japan Productivity Center in 1955 (opposed by Sōhyō but supported by Dōmei), which institutionalized Japan's system of consultations (*jizen kyōgikai*) between management and labor, the ZD (zero

³² Lim, *Government Policy*, p. 56.

³³ Citibank, *Executive Guide*, pp. 31–34; Keizai Koho Center, *Japan 1982*, p. 64.

³⁴ "Taiwan's Workforce Stirs," *Far Eastern Economic Review*, February 26, 1982, pp. 78–79; and A. P. Coldrick and Philip Jones, eds., *The International Directory of the Trade Union Movement* (New York: Facts on File, 1979), pp. 449–451.

³⁵ Totsuka Hideo, "Japanese Trade Union Attitudes Toward Rationalization," in *East Asia: International Review of Economic, Political, and Social Development* (Frankfurt: Campus Verlag, 1983), vol. I, p. 29.

defect) movement, and the QC (quality circles) movement.³⁶ During the 1970s Japanese management was able to hold the annual average rate of real wage increases to less than 2 percent; it had been 5 percent during the 1960s.

Totsuka writes, "The 'success' of Japanese management in the 1970s has very much depended on the full-scale cooperation of the enterprise unions which have followed the Dōmei line."³⁷ This is not to say that this achievement was negligible or that foreigners have nothing to learn from Japan's labor relations, where wages must be "reconciled with the national economy."³⁸ It is, rather, to stress that Japan's labor relations are neither as mysterious nor as culture-bound as some Anglo-American writers allege. It would also seem that all three East Asian high-growth economies inhibit political influence by the trade-union movement because developmentally oriented forces have preempted the political scene—but Japan has to be more creative than the other two because it is less authoritarian. All three nations compensate labor for its decreased political role through policies of comparatively equitable distribution and automatic wage increases tied to increases in productivity.

BUREAUCRATIC AUTONOMY

Serious industrial policy must be long-run in focus, consistent in its various aspects (monetary, regulatory, environmental, and so forth), and operated through mutually supportive policy instruments. It must also be externally oriented (based on cost and price competitiveness in world markets, not just the domestic market); and because it will direct some resources to high-priority sectors cheaply, it must have the power to require these high-priority sectors to meet performance goals.³⁹ Each of these things is difficult to do politically. Politicians tend to seek popular support in the short run; and there will never be a shortage of private claimants on the government, regardless of their economic performances and prospects.

Political leaders attempting to implement a long-term industrial policy must therefore have the capacity to partly depoliticize their key economic decisions. This is normally done by entrusting such decisions to a "nonpolitical elite," sheltered to some degree from direct political pressures and able to justify its decisions in terms of the good of all (for example, the Federal Reserve Board and its control of monetary policy in the United States). In the capitalist developmental states, this depoliticization is achieved through a covert separation between reigning and ruling: the politicians set broad goals, protect the technocratic bureaucracy from political pressures, perform "safety valve" functions when the bureaucracy makes mistakes, and take the heat when corruption scandals are uncovered (such scandals are unavoidable when govern-

³⁶ On the Japan Productivity Center, see Chalmers Johnson, *Japan's Public Policy Companies* (Washington, D.C.: American Enterprise Institute, 1978), pp. 52–53.

³⁷ Totsuka, *Japanese Trade Union Attitudes*, p. 37.

³⁸ *Ibid.*, p. 33.

³⁹ Hugh Patrick, "Japanese Industrial Policy and Its Relevance for United States Industrial Policy" (testimony before the Joint Economic Committee, U.S. Congress, July 13, 1983).

ment plays *any* role in economic affairs); the official bureaucracy does the actual planning, intervening, and guiding of the economy.

Where does such a bureaucracy come from? It must first of all be created and recruited from among the technically most highly qualified people in the system. And this is why the commitment to education up to the highest levels is so important in Japan, Korea, and Taiwan. Perhaps the greatest contrast between these three nations and the Communist states of Asia lies in the emphasis on and nurturing of a rigorously educated elite.⁴⁰

Once the bureaucracy is in place, the greater issue becomes achieving bureaucratic independence from the political leadership. Politicians do not want to give up any of their powers, and bureaucrats usually believe that they themselves should have greater powers. The relationship between the two is *always* unstable, and the greatest task of political leadership in such systems is to maintain a balance between the main wings of the elite. Reigning and ruling are never perfectly separated, but they must be to some degree in order to impose long-term strategic goals on a society that may have strong authoritarian elements but that also has a strong private sector. All three East Asian systems have achieved a workable degree of bureaucratic expertise and independence in their state structures through a combination of historical accident, learning, and astute leadership at the top.

Japan's economic bureaucracy began its rise to power during the 1930s and 1940s in response to the crises of the depression, the war in China, and World War II. It achieved its greatest power during the Allied occupation and the early 1950s when its chief rivals, the military and the prewar zaibatsu, were weakened or destroyed and when the issues of economic recovery and independence commanded universal attention. Since the creation of the Liberal Democratic party in 1955 (and in light of the democratic constitution of 1947), the bureaucracy has had to share its power with a political elite. From 1955 to about 1972 (the end of the Satō era) a stable pattern of tacit separation between reigning and ruling prevailed in Japan. This was also the period of Japan's unprecedentedly high-speed growth. Since 1972 the politicians have been gaining in strength. The process has been slowed by new crises that again called for nonpolitical policies (for example, energy conservation, trade liberalization), and it has been mitigated by an extensive cross-penetration of political and administrative elites. But the Japanese economic bureaucracy had considerably less independence during the early 1980s than it did during the 1950s and 1960s. Nonetheless, as long as the Liberal Democratic party continues to control the Diet, the bureaucracy of Japan will enjoy more power and more autonomy than state officials in any other advanced industrial democracy.

The Korean case was decisively altered by the military coup d'état of 1961. In a broad sociological sense, the coup was caused by the extensive military influence on Korean society during the previous decade (somewhat analogous to the case of Japan during the 1930s). The Korean military had become an intrinsic elite, and the coup

⁴⁰ Cf. "China's Educated Class Struggles for End to Harassment," *Christian Science Monitor*, July 21, 1983.

merely served to make it an extrinsic, socially recognized one. "It is difficult fully to comprehend and impossible fully to document," writes John Lovell, "the cumulative impact of the process by which millions of Koreans have been exposed to military institutions and military ideas. One may safely suggest, however, that quite apart from the institutional changes effected by the 1961 coup, the social, economic, and political changes stimulated directly or indirectly by the military have been more far-reaching and significant than those generated by any other single group within the society."⁴¹ Concretely, Cho Suk-choon argues, "Especially since the advent of the military rule in 1961, advanced techniques of military management have been extensively adopted in the civil bureaucracy."⁴² And Lee Hahn-been adds, "The most general contribution of the military to the development of administration in Korea was its introduction and vigorous application of a 'managerial approach.'"⁴³ Needless to add, many military officers transferred to and directly managed new civilian enterprises, particularly the public corporations set up in high-risk, strategic sectors (for example, Korean Oil, which in 1980 was headed by Yu Chae-hung, a graduate of the Japanese military academy and the United States Army's General Staff College and a former head of the ROK Joint Chiefs of Staff).⁴⁴

The problem in Korea, then, was not a rising political elite challenging an already installed bureaucratic elite, as in Japan. It was rather the problem of a military-bureaucratic elite—President Park's Blue House—assuming political powers and then sharing its bureaucratic functions with an educated, nonpolitical elite capable of working with civilian entrepreneurs. President Park's first economic problem was the decision by the United States to end foreign aid to Korea (the ROK has been the third-highest per capita recipient of United States aid in the postwar period; first and second are South Vietnam and Israel).⁴⁵ Park solved this crisis by concentrating all Korean governmental economic powers in a newly created agency, the Economic Planning Board (EPB). The EPB, placed under a deputy prime minister, took over all planning responsibilities from the Ministry of Reconstruction and absorbed the Bureau of the Budget from the Ministry of Finance and the Bureau of Statistics from the Ministry of Home Affairs. The EPB in turn set up the Korean Development Institute, manned by a cadre of professional economists who held advanced degrees from domestic and foreign universities.

The EPB quickly gained some autonomy from the Blue House, but not primarily because Park intended for it to do so. As Lim explains:

⁴¹ Lovell, "The Military and Politics in Postwar Korea," in Wright, *Korean Politics*, p. 189.

⁴² Cho Suk-choon, "The Bureaucracy," in Wright, *Korean Politics*, p. 79.

⁴³ Lee Hahn-been, *Korea: Time, Change, and Public Administration* (Honolulu: University of Hawaii Press, 1968), p. 23.

⁴⁴ Inoue Ryūichirō, "Daehan Sukyu Gongsa," *Ekonomisuto*, vol. 58, no. 25 (June 17, 1980), pp. 96–97.

⁴⁵ David C. Cole, "Foreign Assistance and Korean Development," in David C. Cole, Lim Youngil, and Paul W. Kuznets, *The Korean Economy: Issues of Development*, Korea Research Monograph No. 1, (Berkeley, Calif.: Institute of East Asian Studies, University of California, 1980), p. 1.

The First Five-Year Economic Plan (1962–1966) document reveals that the government initially did not clearly envisage adopting export-led growth based on unskilled, labor-intensive manufactures. The primary concern then was to improve the chronic balance of payments deficits that foreign aid had permitted. . . . However, this is not what occurred. The composition of actual exports differed drastically from the government's projections, or targets. It was the private exporters who played a major role in identifying and taking risks, exporting unskilled-labor-intensive products in which Korea had a comparative advantage.⁴⁶

The EPB gained its independence as it assumed responsibilities for managing the civilian sector—rewarding the clever and aggressive, and penalizing the costly and slow.

Even so, the Korean economic bureaucracy never gained the kind of autonomy from Blue House politics that its Japanese equivalent once enjoyed. This was reflected most obviously in the chaotic state of the Korean economy during 1981, when a new military leader came to power and tried to dictate economic policy to the governmental and private sectors. However, General Chun was soon forced to recognize that he needed the EPB's expertise even more than the EPB needed his political authority, particularly since foreign investors in the Korean economy made it clear they did not intend to finance a military leader who took very long to learn the same lessons that President Park had learned in the mid-1960s.

Taiwan's case is similar to Korea's in the pervasive influence of the military—China Air Lines, for example, is a direct descendant of the ROC Air Force—and in the existence of an even more firmly entrenched political elite, the Kuomintang, that had a long history of concentrating all power in ideological and political hands.⁴⁷ In breaking this monopoly, the influence of the United States was decisive, even though at the time it did not have a comprehensive understanding of what it was doing. Taiwan's economic pilot agency, the Council on International Economic Cooperation and Development (CIECD), founded in 1963, traces its ancestry back to the Council on United States Aid (CUSA), which was set up in 1948 under the United States China Aid Act as an interministerial council to supervise aid expenditures. As Neil Jacoby explains:

Although [CUSA's] chairman was the president of the Executive Yuan and it contained other ministries of the Chinese government, financially the Council was semi-autonomous in nature and functioned outside of the regular ministries. . . . Being free of the need to obtain legislative approval of its expenditures, the Council was able to act speedily on developmental projects. Not being subject to all Chinese civil service regulations, it was also able to pay higher salaries that enabled it to recruit and retain a highly competent staff.⁴⁸

With the 1963 announcement that American aid would end in 1965, CUSA became CIECD and took on developmental planning and coordination functions.

⁴⁶ Lim, *Government Policy*, pp. 16–17.

⁴⁷ "China Air Lines," *Ekonomisuto*, vol. 59, no. 12 (March 1981), pp. 100–101.

⁴⁸ Neil H. Jacoby, *U.S. Aid to Taiwan* (New York: Praeger, 1966), pp. 60–61.

General Chen Cheng, who had been responsible (together with C. Y. Yin) for Taiwan's successful land reform and import-substitution policies of the late 1950s, was the leader, until his death in 1965, of the group concentrated in the CIECD. His main factional rival in the Kuomintang was Chiang Ching-kuo, whose chief experience until the 1960s had been in the secret police and in eliminating subversive influences on the island. With the ending of American aid, President Chiang Kai-shek quietly shifted his priorities from a military campaign against the mainland to the economic independence of Taiwan—and he also began to shift his son into the groups Chen had fostered (by 1969 Chiang Ching-kuo was deputy premier and chairman of CIECD). The two Chiangs also appear to have been influenced by the Korean model and by its EPB. With political support and sanction for the work of the economic bureaucracy finally secured at the top, the Kuomintang slowly began to lose some of its ideological rigidity. Somewhat surprisingly, Chiang Ching-kuo proved to be the most capable political sponsor of economic development the ROC has yet seen. The degree of autonomy permitted to expert elites by Chiang Kai-shek rested on personal factors—Chiang's full trust in Chen Cheng and C. Y. Yin; Chiang Ching-kuo enlarged and institutionalized it. Nonetheless, without the initial American pressure and Chiang Ching-kuo's adroit use of his own authority, it is hard to see how the Kuomintang would ever have invented the capitalist developmental state on its own.

AUTONOMY OF THE STATE

Any particular political arrangement generates its own special political problems—for example, the powers and influence of the United States Congress generate the extensive lobbying and political action committees that surround it, things unknown to the Japanese Diet. However, one problem of the capitalist developmental state is for the political elite to avoid becoming the captive of its major clients, who are the representatives of big, privately owned businesses. Some, particularly the Marxists, would answer that the problem is unavoidable. The whole theory of "state monopoly capitalism" in Japan is devoted to this proposition. But there is clearly a distinction between systems of public-private cooperation in which the state independently develops national goals (the East Asian capitalist cases) and systems of public-private cooperation in which the state's goals are reducible to private interests (Mexico, and the so-called bureaucratic authoritarian regimes of the cone of South America). It may be true that even in the Asian cases the state cannot directly contradict the interests of big business, but it is also true that the politicians have maintained their independence to a greater degree than in other quasi-authoritarian capitalist nations. How do they do it?

In Taiwan the politicians appear to rely on authoritarian means: the ideological pretensions of the Kuomintang justify its ultimate reliance on military-police powers to put down any challenges to its authority. The party itself also owns and manages numerous enterprises and thus is independent of big business for its own funds. Moreover, thanks to land reform, the party's electoral strength in the rural areas

remains solid. At the same time it must be said that so little is known about the latter-day Kuomintang (an extremely difficult subject on which to do political research) that it would be best to pass over this case. In Japan and Korea, however, election contests and the maintenance of large, expensive political parties require that the reigning politicians raise enormous sums of money, and this certainly makes them vulnerable to private interests.

Big business in Japan supplies money to the Liberal Democratic party (LDP) to keep it in power, but it does not thereby gain a dominant influence over governmental policy. The LDP supports big business but it also relies on an electorally over-represented farming population to remain in power. The party does pay off the farmers, even though it does not give them a political voice on any subject other than agricultural affairs. During 1983, for example, when the Japanese government was imposing cuts of 5 to 10 percent on all budgetary requests (with the exceptions of defense, foreign aid, salaries, and science and technology) and had frozen public works expenditures for the previous four years, it nonetheless agreed to raise the governmental purchase price of rice by 1.75 percent over the previous year's level.

This Japanese pattern of relying on a powerful but uninfluential agricultural sector while accepting support from an influential but not all-powerful industrial sector is a creative solution to a major problem of the capitalist developmental system. It also suggests the consequences that are likely to follow from any determined foreign or domestic effort to break up the protected and privileged position of Japan's admittedly inefficient agricultural sector. The LDP would either lose its majority in Parliament and with it the single-party rule on which capitalist developmentalism is predicated or the LDP would remain in power but only as the captive of big-business interests, with an attendant rise in corruption and loss of national direction.

In Korea, with its more authoritarian government, the pattern has included support for agriculture, but more with the intent of equalizing incomes among sectors than as a basis of political support. More important, the government has developed sources of income for the political system other than contributions from big business. Korean politicians have had some big expenses. Park's first and perhaps most important (although for him personally, an ultimately fatal) act was to create by decree (June 10, 1961) the Korean Central Intelligence Agency (KCIA) as an independent political support apparatus. Originally built on a 3,000-man cadre from the existing Army Counter-Intelligence Corps, the KCIA expanded to some 370,000 employees by 1964 and became, without question, the most cohesive political organization in South Korean society. The problem was how to finance it.

Park obtained funds in two ways. First was the ratification on August 14, 1965, of the treaty normalizing relations with Japan, and second was the authorization on August 18, 1965, of the dispatch of some twenty thousand troops to South Vietnam. Both of these decisions had wide popular support in principle but were heatedly and sometimes violently opposed in context because they supplied the funds with which the military government could consolidate its rule. Jungwon Kim explains:

The Japan-Korea Treaty and the commitment of troops to Vietnam were to provide important new resources to the Park government, both directly and indirectly. The new financial resources would provide funds not only for the carrying out of the government's economic plans, but new resources for political funding as well. During the period from 1965 to 1967, in addition to the claims payments from Japan (\$12.08 million in grants and \$14.07 million in loans in 1966, the first year of payment, \$37 million in grants and \$25 million in loans in 1967), the treaty agreement with Japan opened the way to commercial loans from that country. During 1966 and 1967, South Korea received a total of \$108.5 million in private loans from Japan. Since private loans required government approval and repayment guarantees, the Korean party receiving foreign loans was required to pay a percentage (popularly believed to be 10–15 percent and sometimes as much as 20 percent of the loan amount) in payoffs to obtain the necessary government guarantees. The system, of course, applied to foreign loans from other nations as well. The decision to send troops to Vietnam in 1965 and 1966 bolstered confidence abroad in the American willingness to defend South Korea, and helped to induce commercial loans from other nations. During 1966 and 1967, South Korea received \$19.9 million in commercial loans from the United States, \$53.1 million from West Germany, \$30.9 million from Italy and France, \$2.5 million from Great Britain, and \$41.2 million from other nations, making a total of \$256.1 million in private commercial loans during those two years alone. Assuming a kickback-ratio as low as 10 percent, this would mean political fund resources of \$25.6 million from this source.⁴⁹

Needless to say, the money received in this manner was not used exclusively to fund the regime and the KCIA; some of it also helped replace American aid and finance the first five-year plan. But the monies also made the regime independent of domestic financial backers, which further meant that the regime's needs were not a drain on the investment funds of enterprises. A pattern similar to that of President Park's first few years emerged in the period 1981–1983 under the so-called Fifth Republic of President Chun Doo Hwan, when Korea sought some \$6 billion in aid from Japan and, after a year-and-a-half fight, punctuated by the textbook controversy, received some \$4 billion.

The principle that emerges from this analysis is that the political independence of the "economic general staff" is not easily achieved but that, without it, the setting of long-term economic goals and industrial policy is unlikely to produce the results envisaged by theorists of public policy. If, of course, the politicians and their economic bureaucrats are themselves hopelessly corrupt (viz., innumerable African states) then no amount of foreign aid or independent funding will free them from their business sector: the money will simply be siphoned off or otherwise misspent.

⁴⁹ Jungwon Alexander Kim, *Divided Korea: The Politics of Development, 1945–1972* (Cambridge, Mass.: Harvard University Press, 1975), pp. 263–264. On the Korean party system, KCIA, Vietnam, and political funding, also see Hahn Bae-ho and Kim Ha-ryong, "Party Bureaucrats and Party Development," in Suh Dae-sook and Lee Chae-jin, eds., *Political Leadership in Korea* (Seattle: University of Washington Press, 1976), pp. 67–88; Hahn Ki-shik, "Underlying Factors in Political Party Organization and Elections," in Wright, *Korean Politics*, pp. 85–103; and Lovell, "The Military and Politics in Postwar Korea," in Wright, p. 191.

ADMINISTRATIVE GUIDANCE

All democratic governments have general macrolevel economic policies designed to influence private economic decisions in ways that these governments deem desirable. One of the characteristics that distinguishes industrial policy from general economic policy is its penetration to the microlevel, meaning governmental attempts to influence economic sectors (agriculture, high technology), whole industries (advanced electronics), and individual enterprises within industries (Lockheed, Chrysler). Many democratic governments also implement industrial policies in this sense, such as the American government's long-standing policy of supporting agriculture and the defense industries. But general Western theory and practice concerning either macro or micro interventions hold that they should take the form of incentives, equitably applied and available and not specific commands directed at individual firms. The Western emphasis is on the rule of law and the use of nondiscretionary controls to the maximum extent possible.

One lesson from the East Asian capitalist developmental states is that this concern for nondiscretion may be misplaced. The Japanese economic bureaucracy has long found that its most effective powers are tailor-made, verbal, ad hoc agreements implemented through "administrative guidance." And the Korean case is even clearer:

A firm that does not respond as expected to particular incentives may find that its tax returns are subject to careful examination, or that its application for bank credit is studiously ignored, or that its outstanding bank loans are not renewed. If incentive procedures do not work, government agencies show no hesitation in resorting to command backed by compulsion. In general, it does not take a Korean firm long to learn that it will "get along" best by "going along." Obviously, such a system of implementation requires not only cooperation among the various government agencies that administer compliance procedures but continuous consultation between firms and public officials. Such a system could well be subject to corruption, and there is some evidence that payments are, in fact, made and received for services rendered, but again it must be emphasized that there is very little evidence that such corruption as exists interferes in any serious way with production processes.⁵⁰

Evidence on the balance between incentives and commands in Taiwan is lacking and must await further research.

The relative importance of incentives and commands in industrial policy pinpoints an often unnoticed trade-off. It is true that, in terms of economic theory, the nondiscretionary manipulation of incentives is to be preferred because it retains to the maximum extent the motives of and information provided by the market. But it is often overlooked that such a system also inevitably increases reliance on laws, lawyers, litigation, and excessively codified procedures. Administrative guidance (a euphemism for governmental orders) is obviously open to abuse and has been abused on occasion, but it is also much faster than the rule of law and avoids the unpredictable impact of new legislation and court decisions on sectors that do not require adjustment

⁵⁰ Mason et al., *Economic and Social Modernization*, p. 265.

but that are affected anyway because of the universal scope of laws. One of the marked differences between the regulatory and the developmental capitalist states is the pervasive influence of lawyers in the former and their minimal role in the latter. This is not simply a cultural difference but above all a result of having different political economies.

ZAIBATSU

Just as the public sectors of the capitalist developmental states have contributed several institutional innovations that are unusual from the point of view of Western capitalist theory, the private sectors have been no less creative. Perhaps the best known private innovations are the general-trading companies—that is, enterprises that specialize in the import of raw materials for domestic industries and in the export of their manufactured goods. They also maximize cost and price margins through global intelligence networks concerning all available markets, and they perform important functions in the short-term financing of foreign trade. The effectiveness of these organizations is today so widely recognized that legislation has been enacted in the United States authorizing versions of them for the American economy and exempting them from some provisions of the American antitrust laws.⁵¹

Much more controversial are what are known pejoratively as “financial cliques,” or, both in the Japanese language and today generically, as zaibatsu. These are vertically and horizontally integrated “industrial groups” or conglomerates, usually including their own trading company and in Japan only, their own bank. Over the years, since their first appearance during the Meiji era, zaibatsu have been heavily criticized by both domestic and foreign writers for, among other things, putting their own interests before those of the nation, contributing to a marked “dualism” in the economy (that is, extensive, poorly paid subcontracting firms totally dependent upon and often exploited by the groups), and caving in to irresponsible national leaders (as in the Japanese military-industrial complex of the 1930s and 1940s). During the Allied occupation of Japan, direct measures were taken to dissolve the zaibatsu—measures that had the unintended effect of modernizing rather than eliminating them.

Today, with thirty more years of global experience and knowledge of intentional development programs, ranging from Stalinism to the Alliance for Progress, it seems that the zaibatsu may have been underappreciated. They function as powerful institutions for concentrating scarce capital for developmental projects in underdeveloped countries, and they constitute a compromise between the inefficiencies of purely state enterprise and the indifference to developmental goals of purely private enterprise. Lim adds:

Vertical and horizontal integration allow an enterprise to alleviate risks and the uncertainties of market instability and rapid structural change. Vertical integration eliminates the need to depend on monopolistic suppliers of input materials or assures steady

⁵¹ See Michael D. Erony, *The Export Trading Company Act of 1981: A Legislative Analysis and Review* (Los Angeles: Coro Foundation, 1981).

flows of needed inputs in adequate amounts . . . Horizontal integration (participation in many different activities not related to input linkages) increases information flows and consequently reduces the uncertainty surrounding investment and production decisions . . . These are some of the important reasons for the birth of the so-called general trading companies and enterprise groups, started in Japan and recently copied in Korea . . . Such groups internalize uncertainty, information, and factor-market flows, and substitute for a perfect market as a way of coping with market imperfections in less developed countries.⁵²

In addition, in advanced capitalist developmental states they still perform international competitive functions by making capital available more cheaply for companies in the group and by freeing new ventures from the need to make a profit in the short term.

The three leading Korean zaibatsu are Samsung (twenty-seven companies), which produces primarily consumer goods, Hyundai (11 companies), which concentrates on producers' goods and automobiles (the "Pony"), and Daewoo (seventeen companies), which is spread among trade, finance, machinery, electronics, and engineering.⁵³ A fourth, the Lucky Group (the 134th largest firm in the world according to *Fortune's* 1978 ranking) includes Bando Trading Company, Honam oil refinery, Yochun petrochemicals, plus electronics, nonferrous metals, insurance, and securities.⁵⁴ These organizations are similar to Japanese zaibatsu except that in the prewar period the Japanese zaibatsu groups included their own bank and in the postwar period rebuilt around their own bank. Korean *chaebol*, on the other hand, "must rely on government-controlled credit institutions. This is a central fact in government-business relations in Korea and has an important bearing on the extent of private economic power."⁵⁵

In Taiwan, large-scale enterprises, if not true zaibatsu, are very important, although there is some evidence that the culture of business in China resists conglomerate integration more than in either Japan or Korea.⁵⁶ The Tatung Group, however, would appear to be a true zaibatsu. During 1977 it was by far the largest of some eight hundred Taiwanese home electric-appliance manufacturers, and it has since branched out into electronics, communications, construction, building materials, and publishing. The chairman of the Tatung Group, Dr. T. S. Lin, began his enterprise in 1942 under Japanese rule. A graduate of the engineering department of Taiwan Imperial University, Lin founded the Tatung High School for Engineering and the Tatung Institute of Engineering. He has allowed small amounts of outside capital into his group in order to obtain new technologies (8 percent from Tōshiba) and has entered into joint ventures with Nippon Electric and Fujitsu. In 1972 Lin expanded to

⁵² Lim, *Government Policy*, p. 46.

⁵³ See "Chaebol Case Studies," in Leroy Jones and Il SaKong, *Government, Business, and Entrepreneurship*, pp. 343-364.

⁵⁴ "Lucky Ltd.," *Ekonomisuto*, vol. 58, no. 14 (April 1980), pp. 124-125.

⁵⁵ Mason et al., *Economic and Social Modernization*, p. 286.

⁵⁶ See S. G. Redding and G. L. Hicks, "Culture, Causation, and Chinese Management" (University of Hong Kong, February 1983), p. 5.

the United States, and in 1980 his plant in Los Angeles was the largest electric-fan manufacturer in the country. Companies similar to Tatung include Formosa Plastics (headed by Wang Yung-ching, allegedly the biggest capitalist in Taiwan), Yue Loong Motors (in 1983 Yue Loong exported the first of its "Sunny" cars to the Middle East), Far Eastern Textiles, and Taiwan Cement.⁵⁷

Are zaibatsu, of either the Japanese or the more attenuated Korean and Taiwanese types, an inherent feature of capitalist developmental states? More research on this subject is indicated, but it seems that zaibatsu are important for unleashing entrepreneurship—and it was entrepreneurship that provided the dynamic growth element in all of these economies. By permitting the growth of zaibatsu in Japan and Korea and encouraging their growth in Taiwan, the government helped reduce risks, encouraged greater investment than would have occurred without the zaibatsu, and ensured that private activities would be aimed unintentionally toward developmental goals. The reliance on zaibatsu as the locomotives of an entire economy meant that antitrust concerns were relegated to a lesser priority or, more accurately, that capitalist development states took as their standard for antitrust intervention the size and degree of oligopoly of their international competitors. There are undoubtedly trade-offs involved in adopting such a standard, but then there are also trade-offs in antitrust intervention that is oriented exclusively to domestic competition.

FOREIGN CAPITAL

One element of the Japanese model that appears to be contradicted by the Korean and Taiwanese cases is the degree to which the Japanese have prevented foreign participation in their economy. Japanese bureaucrats, historically, have been close to paranoid on the subject of the dangers of an invasion of foreign capital. By contrast, the Koreans and Taiwanese have given virtuoso performances in how to use foreign and multinational capital without at the same time becoming subservient to it. This is a large and complex subject, and we can only hope here to signal its importance and some of its ramifications.

Postwar Japan did not totally exclude foreign investment or foreign borrowing; loans from the World Bank and from American commercial banks were important during the 1950s. Moreover, if Korea and Taiwan enjoyed large amounts of American aid, Japan probably profited more than either of them from American offshore procurement contracts and military expenditures. At the same time, Japan was concerned to separate foreign money and technology, both of which it needed, from foreign-ownership rights and manufacturing facilities because it wanted to preserve its own large domestic market as a proving ground for its new industries. The domestic

⁵⁷ See the series "Ajia no biggu bijinesu," in *Ekonomisuto*, vol. 58, no. 6 (February 1980), pp. 96–97; vol. 58, no. 19 (May 1980), pp. 96–97; and vol. 58, no. 45 (November 1980), pp. 96–97; and *Free China Weekly*, vol. 24, no. 24 (June 19, 1983), p. 4. For a survey of the five hundred biggest firms in Taiwan, see *T'ien Hsia (Commonwealth: A Business Monthly)* (Taipei), September 1, 1982, pp. 49–61. The ten biggest firms in the country are analyzed in *T'ien Hsia*, November 1, 1981, pp. 43–48.

markets in Korea and Taiwan are significant, but they have not had the same magnetic power as Japan's for either foreign or domestic manufacturers. Foreign firms in Korea and Taiwan are producing primarily for export, whereas foreign firms in Japan would have liked to produce for the domestic Japanese market.

Moreover, just as the Korean and Taiwanese domestic markets are not large enough to sustain high-speed growth, their domestic savings capacities are smaller than Japan's. They had to internationalize in order to attract the needed savings. At the end of 1981, Korea and Taiwan were the fourth and seventh most indebted non-OPEC, non-Communist, less developed countries (the leaders were Mexico, Brazil, and Argentina).⁵⁸ Even so, during 1982, Korea enjoyed a debt-service ratio of 13.3 percent, below the international average of 15 percent, and it had prospects of increasing exports enough to lower its debt-service ratio to 11 percent during the current five-year plan (1982–1986). Korea is not one of the countries whose liabilities threaten the solvency of the international banking system—and Taiwan is even less so.

But the issue of Korea's export prospects raises the question of the other side of the trading coin. North America and Western Europe are the world's largest markets, and access to them is indispensable for any manufacturing and exporting country. By the 1980s Japan, thanks to its highly nationalistic policies, had become the only advanced industrial nation in the world that, for all intents and purposes, did not import any products it manufactured and exported so successfully (for example, automobiles). This situation, combined with the sheer size of the Japanese economy, contributed powerfully to the global trend toward protectionism (or, at the least, toward international cartelization) that appeared during the 1970s and 1980s. Korea and Taiwan are not immune to these trends, but their access to the American and Western European markets is less threatened because of their longer histories of internationalization and market access. The lessons in this development seem to be that the neomercantilism practiced by Japan is not an inherent feature of the capitalist developmental system (Korea and Taiwan have not overindulged in it), but that the controls exercised by Korea and Taiwan over foreign investment are probably necessary to avoid neocolonialism.

Many important aspects of the three capitalist developmental states discussed in this chapter have not been even touched upon in this sketch of their features—for example, the large public sectors in all three economies and the differing measures adopted by each nation to try to keep them efficient or to get rid of them. The model presented here does not aim at comprehensiveness or econometric detail. Its intent is threefold: to illustrate how economic performance is related to political arrangements, to argue for the essential rationality of the soft authoritarianism–capitalism nexus in terms of comparative development strategies, and to explore the range of subtle and specifically political problems that must be addressed and solved in implementing the strategy.

⁵⁸ Based on reports of the Bank for International Settlements, Country Exposure Lending Surveys.

If these goals have been achieved in even a tentative manner, we may then conclude by asking what are the future prospects of the model for the three successful cases or for potential emulators? Superficially, it would be possible to argue that to the extent that the model implies export-oriented growth, its future prospects are poor because changes in the international environment have lowered the chances for dramatic expansions of exports. This is superficial, however, because it implies that the environment is the main determining factor in the model. If that were so, there should today be many successful capitalist developmental states and not just a few in East Asia. It seems instead that the particular political economies of the capitalist developmental states have managed to adapt more effectively and more rationally to any given environment than either their purely absolutist or their purely capitalist rivals. Thus, as a matter of batting averages rather than absolute growth rates, it would follow that in a world in which all economies may grow more slowly in the future, the capitalist developmental states will still outperform the others. This is because they have discovered ways to surmount the rigidities of zero-sum domestic competition without falling into the trap of authoritarian displacement of the market and private enterprise.

4. Economic Development Model of Japan: Transferability to Korea and Taiwan

Ungsuh Park

SEARCH FOR AN EXPORTABLE DEVELOPMENT MODEL

A model usually connotes a miniaturized replication of the real thing. In the case of economic development, the real thing would have to be various statistical and nonstatistical evidences illustrating the performances of economic development.¹ Characterizing the economic development performance of a society by looking at such statistics as the sources of development financing, mobilization of technology either from domestic sources or from foreign sources, performances in manpower training, composition of domestic and foreign markets, and intertemporal variations of industrial structures would be meaningful. Such a collection of statistics would make it possible to understand the historical dynamics of the economic development process of a given society in a succinct way. However, the weakness of this approach is that this descriptive modeling of a development experience would be a simplification, inviting more questions than answers for those who look for the "secret of economic miracles."

When one discusses a development model, one tends to regard it as a collection of development strategies and a combination of economic and noneconomic characteristics of a society that should provide the basis upon which the economic development is achieved. True, ideological and religious background of a society, the immediate past history that has a bearing on the behavioral patterns of the citizens,

¹ The most frequently used concepts of a model in economic analysis of any kind are either econometric and statistical models or what economists call analytical models, which usually are devoid of statistical content. Even in economic development studies, analysis can be expedited by symbolic and analytical models, which are sometimes reinforced by small- to medium-scale statistical models. These are not the model for this paper.

idiosyncrasies in the value structure, particularly with regard to education, social mobility, commerce, and material well-being—all are important variables that contribute to molding the social foundations. However, these variables are rarely transferable to another society, and every society with aspirations to learn development models has to be satisfied with the noneconomic basis it has already acquired.

Therefore we will have to concentrate on the concept of a strategic model that is a collection of development strategies and policies. That would include the entire range of policy and institutional variables affecting all aspects of economic life of a society. In fact, when one discusses development models, this is usually the concept one naturally assumes. In this context we talk of the possibility of duplicating some of the experiences of a country which has preceded others on the path of economic development.

Having so narrowed our concern to the development strategy model of Japan, we then are led to another set of decision-making problems; for our analysis, a choice has to be made among all policy and institutional variables that affected the changes of economic life in Japan, and among the various subperiods of Japan's economic development history. This selection problem can better be solved if one has a clearly identified selection criterion. The title of this essay provides such a criterion: to concentrate on the time period and the policy variables among Japan's economic development experiences that are relevant to the possible future experiences of Korea or Taiwan. Viewed from this perspective, what happened during the Meiji Restoration in Japan, for instance, is of little concern for us because we cannot recreate the history of Korea and Taiwan. Predicting the future of Japan's development would also be futile because we may not face the same set of problems in Korea and Taiwan—problems such as the demographic structure, with a large old-age group, or of similar international economic circumstances, such as energy shortages.

From the points of view of Korea and Taiwan, the period of Japan's development experience that raises the highest curiosity and concern is the 1960s and early 1970s. During this period Japan virtually transformed its economy from one that can best be described as intermediately developed to one of the most advanced of the world. Korea and Taiwan today are somewhat close to entering the most advanced state of economic development.² It is appropriate therefore in this presentation to study the transition of the Japanese economy during the 1960s.

² The GDP per capita of Korea was only U.S. \$1,820 in 1983, and that of Taiwan around U.S. \$2,600. Judged by this criterion alone, the claim of economically advanced status sounds hollow considering that the typical GDP per capita of the most advanced nation at the moment is over U.S. \$8,000. However, since 1977 there have been pressures on Korea to join the Steel Commission of OECD as an observer. In the race of ultramodern technology development, Korea is reported to have produced 64K dynamic RAM semiconductor chips and has become the fourth country in the world to have produced them domestically. Already Taiwan is the locus of offshore production sourcing for many American computer manufacturers. Many other indicators testify to the strength of industrialization in Korea and Taiwan. Although there are no definite dates set for Korea and Taiwan to join OECD, it is generally considered that by the latter half of the 1980s both countries should be able to join the club.

BACKGROUND OF THE TRANSITION IN THE JAPANESE ECONOMY

During the period immediately after World War II (1945–1950), Japan concentrated most of its energy on the task of restoring and stabilizing the economy. This effort produced a resounding success and brought the rate of inflation from over 130 percent per annum during the period 1945–1947 down to 18 percent during 1945 and 1950. But the real restoration and progress came during the Korean War and the period immediately after (1951–1957), which is regarded as the greatest boom since the founding of the Japanese empire by Emperor Jimmu. Real GNP grew at 10.8 percent per annum, per capita GNP increased 2.1 times, and GDP rose from U.S. \$2.1 billion to U.S. \$55.6 billion in this period.

This phenomenal growth was caused by the rapid expansion in industries, which rose 2.9 times during this period. Taking a few examples: steel production increased 2.8 times, from 9.79 million tons to 27.25 million tons per annum; machine-tool production increased 26 times; and production of television sets increased 26 times. Rapid expansion in shipbuilding, and manufacture of commercial vehicles, motor-bikes, radios, television sets, plate glass, rayon, and cement caused Japan to rank number one or two in the world in volume of production in these fields. Rapid investment in new technologies and the latest equipment helped to increase productivity enormously and provided a sound basis on which successful international competition was launched.

Table 1
Economic Performance of Major Industrial Countries (1960)

	Units	Japan	U.S.	U.K.	Germany	France
GNP	\$ billions	43.0	506.0	72.1	72.5	60.6
Real growth (1954–62)	%	9.4	2.8	2.5	7.4	–
Per capita GNP	\$	462	2,800	1,378	1,308	1,328
Steel production	1,000 M/T	22,138	90,067	24,695	34,100	17,281
Automobile production	1,000 units	760	7,869	1,811	2,056	1,369
Shipbuilding	1,000 G/T	1,732	485	1,311	1,092	594

SOURCES: *International Financial Statistics*, Washington, D.C.: IMF, May 1978; *International Statistical Comparison*, Tokyo: Bureau of Statistics, Government of Japan, May 1971.

This period also saw a rapid transition of the industrial structure of Japan from one stressing primary industries to one centered on manufacturing and mining. This is seen in Table 2, where secondary industry (which covers manufacturing, mining, and construction) rose from 31.8 percent in 1950 to 35.9 percent in 1965. Tertiary industry rose from 42.3 percent in 1950 to 52.9 percent in 1956. This sector includes commerce, services, transportation, communications, and other utility closely related to the development of the secondary industries. On the other hand, the primary sector declined rapidly from 26 percent to 11.2 percent by 1965. In Table 2, a similar transition in the employment structure can be seen.

Table 2
Trends in Industrial Structure of Japan
(Percentages)

	Production Composition			Employment Composition		
	Primary	Secondary	Tertiary	Primary	Secondary	Tertiary
1950	26.0	31.8	42.3	48.3	21.9	29.7
1955	22.7	28.9	48.4	41.0	23.5	35.5
1960	14.6	36.4	49.4	32.6	29.2	38.2
1965	11.2	35.9	52.9	24.6	32.3	43.0

SOURCE: Won Duk Lee, *Case Study in Policy Response in Economies at Transition: Japan*, Seoul: Korea International Economic Institute, October 1978.

In Table 3, weight distribution of production and employment along primary, secondary, and tertiary sectors of Japan are compared with those of the other advanced nations for 1960. Despite the rapid economic development in the 1950s, Japan still lagged behind other advanced countries, particularly in the high shares of production and employment present in the primary sector. In terms of weight of the secondary sector, however, Japan had already caught up with the advanced nations by that time. We will later discuss problems of imbalance.

Shift in the weight-distribution structure among sectors is only a part of the picture. Among the secondary industries the heavy and petrochemical industries played outstanding roles. This was a consequence of large-scale investments in machinery and other capital-goods industries, and also because of the rapid increases in the demand for durable consumption goods, particularly electric and electronic goods.

Table 3
Industrial Structure of Major Industrial Countries (1960)
(Percentages)

	Production Composition			Employment Composition		
	Primary	Secondary	Tertiary	Primary	Secondary	Tertiary
Japan	14.6	36.4	49.4	32.6	29.2	38.2
U.S.	4.1	37.0	58.9	8.6	30.6	60.8
U.K.	4.0	45.6	50.4	2.6	45.8	51.6
Germany	5.7	54.4	39.9	13.8	47.7	38.5
France	9.5	46.2	44.3	22.4	38.1	39.5

SOURCE: Won Duk Lee, *Case Study in Policy Response in Economies at Transition: Japan*, Seoul: Korea International Economic Institute, October 1978.

The increasing weight of heavy industries is demonstrated in Table 4, where weights of production and export are shown for Japan as well as for several advanced nations. Although the weight of heavy-industry goods in Japan's exports was still substantially less than those of other industrial countries, in terms of production weights Japan comfortably surpassed many other industrial countries by 1961. Japan by this time was fully prepared to achieve the status of one of the most advanced industrial nations.

Table 4
Heavy Industries of Major Industrial Countries

	Weight in production		Weight in export	
	1953	1961	1953	1961
Japan	51.6	63.9	44.3	52.6
U.S.	55.2	62.5	79.3	82.2
U.K.	55.5	—	70.4	79.7
Germany	46.8	63.8	81.2	85.2
France	50.4	74.6	63.8	70.7

SOURCE: Study Group of Industry, commissioned by MITI of Japan, *Industrial Structure of Japan*, Tokyo, October 1964.

Although Korea and Taiwan are not exactly duplicating the Japanese experience, it will be seen later that quantitatively and qualitatively these two countries show similarities to the Japan of the early 1960s. The relevance of such comparison is made clearer when one considers, for example, the problems Japanese economists attributed to their own economy of that period and compares them with those that Korean economists attribute to theirs of the late 1970s. The following is a quotation from a report made by the special study group of Japan's industries commissioned by the Ministry of International Trade and Industry:

Despite the rapid modernization achieved in different parts of our economy, numerous problems developed underneath; some due to our negligence during the modernization process and some because of the rapid modernization itself. Such underlying problems include the unhealthy intra-industry structures; various distortions in the corporate portfolio managements; weakness in ability for technology development; inadequate social overhead capital; progressively deteriorating inter-regional disparities; inadequate development of the small and medium sized enterprises, agriculture, marketing structures, and the service industries; underdevelopment of the labour market; and rapid increases in the consumer prices, etc.³

The same study group claimed that the rapid expansion of the total size of industry helped to create disorderly, fragmented enterprises within industries, each with a scale of operation too small for competition with foreign firms in the international market. This situation triggered excessive rivalries between firms in both domestic and international markets. An orderly reorganization of the intra-industry structures was urgently needed during that time.⁴

The growth of enterprises in Japan was mainly accomplished by indirect financing, primarily by bank loans. This practice brought the average ratio between a corporation's own capital and borrowed capital to a low level, particularly if compared with American and British firms. This not only became an important cause for the high cost of products marketed, but also deprived many firms of the ability to withstand depression.⁵

New technologies played important roles in inducing rapid capital formation, but until this period nearly all new technologies in Japan were of foreign origin. Japan's role, according to the same report, usually was raising productivity in the production process or refining parts of the final products. Construction of social-overhead capital also had a poor record in this period. The ratio between social-overhead investment and total fixed investment was close to 40 percent in 1955 but dropped below 0.5 percent in 1961. This not only made further capital investment difficult but also created many difficulties for the public in general, such as the wild explosion of real-estate prices and notorious environmental pollution.

³ Same source as Table 4.

⁴ Same source as Table 4.

⁵ To be fair, it should also be mentioned that high-leveraged firms tend to be managed more efficiently all over the world because they cannot afford leniency.

The unbalanced growth-strategy pursued before the 1960s gave rise to a concentration of investments and income growth in the so-called four major industrial regions at the expense of industrial development of the other parts of the country. The rapid economic development also caused a steady deterioration of the relative positions of medium and small enterprises. In terms of value of output, the ratio between the medium-small enterprises and large companies was four to five, but in terms of value of investment the ratio was one to four in favor of large-scale enterprises. Furthermore, in terms of the value of investment per head of employees, this ratio used to be one to three in favor of large companies but deteriorated to one to seven by 1961.

Japan's conservative and traditional distribution system remained through the early 1960s and continues to some extent even now. Per capita, value added in this sector was less than three-quarters that of the industrial sectors, according to the same report. The situation was worse in agriculture, where productivity per capita was 30 percent that of the manufacturing sector in 1956 but dropped to 26 percent by 1961.

The closed-employment practice in Japan, particularly the lifetime employment offered by the large enterprises, helped to reduce the labor mobility and deterred the development of labor markets in the economy during the 1950s. Such underdevelopment of the agricultural sector, service sector, and the medium-small enterprises in general, contributed to consumer-price inflation.⁶

All of these difficulties characteristic of Japan's economy during the early 1960s are applicable to the Korean economy, particularly for the late 1970s but some still today. How Japan has intelligently responded to this unique situation is a valuable lesson for the latecomers Korea and Taiwan. Some of the lessons or development models may not be exportable, but by selective application of Japan's strategy, there should be much to gain for the two countries. The problem is in deciding what to adapt and what to replicate and how to accomplish both tasks. Furthermore, as will be seen in the next section, Japan's response to the situation was not straightforward but very complex.

THE POLICY MEASURES TAKEN AT THE TRANSITION

The exceedingly rapid economic development and accompanying social dislocations in Japan around the early 1960s forced the Japanese government to adopt a whole new range of policies, which can be considered in two large groups: liberalization policies and policies designed for continued growth and for rectification of the problems described above. The first group of policies was necessitated by external pressures arising from political-economic dynamics of the world at that time, and the second group was intended to cater to domestic needs.

The liberalization policies are epitomized by the process in which Japan joined the Organization for Economic Cooperation and Development (OECD) in 1964.

⁶ These problems in Japan's economic past are drastically abated now, and the correction of the distortions is itself an important part of the "Japanese model".

Despite the advanced economic status Japan had achieved by that time, it was not particularly welcomed as a member of OECD. Because of the regional character of this group, the existing members were apprehensive about admitting such a heterogeneous element as Japan and about the possibility of having to invite other extraregional members following Japan, such as Australia, New Zealand, and Finland.

Despite the reluctance of some OECD members, because of the phenomenal success of Japan's exports and the accumulation of foreign exchange, Japan was pressured to introduce a series of liberalization policies in its external contacts, which made its entry into OECD virtually inevitable. On June 24, 1960, the cabinet of the Japanese government announced the "General Principles for Liberalization of Trade and Foreign Exchanges." This document enunciated plans for import liberalizations and liberalization of foreign-exchange controls. In April 1963, Japan became a so-called GATT Eleventh-Article country. In fact in June 1961, the IMF formally requested Japan to take the necessary measures to qualify for IMF Agreement Article Eight.⁷ Japan succeeded in delaying for one year the implementation of those measures by promising that by September 1962 her import liberalization ratio would reach 90 percent.

The stage was thus set for Japan to liberalize its foreign-exchange controls, capital transactions, and other elements in international transactions. It was only natural for Japan to attempt to join OECD because it was already under pressure for liberalizations, and it was well on the way to complying with such pressures.

Joining OECD requires assumption of three broad responsibilities: that the member country support the objectives of OECD, abide by various agreements and internal regulations of OECD, and share its proper portion of the expenses of running the organizations and activities of OECD. Second, that the members meet the requirements of Article Eleven of GATT and Article Eight of IMF, and be prepared to extend significant financial resources in aiding the developing countries of the world; third, that the country liberalize current-account transactions in international trade, and capital movements beyond national boundaries.

The attempt to liberalize international transactions triggered stiff resistance in Japan. Various forms of both sensible and nonsensical infant-industry protection requests were made. Particularly, sympathy for those with problems created by the rapid economic changes Japan had just undergone provided credible arguments for those who wanted more time to prepare the economy for such exposure. In the end, liberalization was accepted and produced the June 24, 1960, announcement of the cabinet mentioned above.

⁷ According to Article Eleven of GATT, member countries are requested to accept the responsibility to liberalize their trade and repeal any protective measures of domestic industries except tariffs; particularly, quantitative restrictions of imports are totally prohibited. However, by joining OECD, members were allowed to qualify for exceptions from immediate repeal of quantitative restrictions, depending on the economic circumstances. Further, the Eighth Article of the IMF Agreement requires three responsibilities that automatically apply to the members of OECD, namely, no restrictions will be imposed on the payments for current-account transactions by the residents of the country; no bilateral monetary arrangement will be permitted to the exclusion of a third party, which would contravene the principle of equality in transactions among members; domestic currencies held by nonresidents will have to be converted upon request to either gold or any other foreign currency.

By a series of liberalizations of import restrictions, the number of restricted items was reduced from 466 in 1962 to 126 by 1965; the rate of liberalization in terms of number of items increased from 73 percent in 1962 to 94 percent in 1965. This trend is shown in Table 5.

Table 5
Trend in Import Liberalization of Japan

	Items restricted from import	Liberalization ratio (%)
1962	466	73
1963	155	92
1964 ^a	136	93
1965	126	94
1972	33	97
1978	27	98

SOURCE: *Requirements for Joining OECD and the Korean Economy*, Korea Institute for Industrial Economics and Technology, General Reference Series, No. 16, Seoul, April 1983.

^a Year when Japan joined OECD.

Foreign exchanges had been rigidly controlled in Japan since the end of World War II. From 1950, the Foreign Exchange and Trade Control Law centralized all foreign exchanges held by the residents under the Ministry of Finance; through a budgeting system of foreign exchanges, foreign currencies were not only controlled but allocated according to plans prepared by the government. Furthermore, external payments were made only by designated currencies—the American dollar at the beginning, but broadened to encompass fourteen currencies later. Liberalization of the foreign-exchange controls was slower than the liberalization of trade. In 1960 a principle was laid down that current-account transactions should be liberalized within two years and capital-account transactions should be gradually freed subsequently.

The current-account liberalization included liberalization of payments for foreign travel for official or commercial purposes only, and liberalization of the remittance for maintaining foreign offices by private companies. After Japan joined the OECD in 1964, the foreign-exchange budgeting system was repealed, in accordance with the requirement of the IMF Agreement. However, disbursing foreign currencies for the payment of royalties on patents and technology was liberalized only in 1973, and remittances of profits, dividends, and interests were liberalized in 1969. Overseas travel expenses and the remittances by those who migrated overseas were liberalized gradually, but considerable restrictions on various items in the insurance category remain to this day.

Liberalization of the capital-account transactions also provides a complicated delayed performance. A capital transaction represents a two-way movement, from overseas to the domestic economy and vice versa. Each transaction is divided into two forms, "direct investment" and the portfolio investment that Japanese documents call "indirect investments." Direct investment can be either the acquisition of an existing local firm or, jointly or independently, the establishment of a new firm; both aim at a lasting relation with the host economy by the investing party.

Before liberalization, Japan stringently controlled foreign exchange and capital movements. Capital inflows were reviewed case by case by the Special Committee for Reviewing Foreign Capital. The review required that each case demonstrate a positive contribution to the Japanese economy; a mere demonstration that the case was not detrimental to the Japanese economy was considered an insufficient reason for allowing the foreign capital to be brought into Japan. Japan resisted OECD's request to relax capital transactions, and of thirty-nine items required by OECD to be liberalized, only twenty-one items had been liberalized at the time of Japan's joining OECD; the other eighteen items were exempted from immediate liberalization.

In the first row of Table 6, progressive increases in the number of industries for which foreign investments were immediately allowed up to 50 percent equity ownership are shown, and in the second row the numbers of those for which 100 percent ownership was allowed are shown. At the first capital liberalization in 1967, the number of industries for which 50 percent foreign ownership was permitted was 33, and the number for which complete foreign ownership was allowed was 17. These numbers increased to 447 for the first category and 77 for the second category by 1970, and by 1971 the entire system was converted to a negative-listing system whereby, unless otherwise specifically prohibited, foreign investments became automatically permissible.

Table 6
Liberalization of Foreign Investment in Japan
(Number of industries)

	First liberalization July 1, 1967	Second liberalization Mar. 1, 1969	Third liberalization Sept. 1, 1970	Fourth liberalization Aug. 1, 1971
Automatic approval up to 50% equity	33	160	447	Introduction of negative-list system
Automatic approval up to 100% equity	17	44	77	

SOURCE: Won Duk Lee, *Case Study in Policy Response in Economies at Transition: Japan*, Seoul: Korea International Economic Institute, October 1978.

However, the spirit behind this negative-listing system was not necessarily realized in subsequent developments; the industries that were placed in the negative list included such broad categories as agriculture-forestry-fishery, mining, the oil industry, the leather and leather-manufacturing industry, and retail industries. Furthermore, 100 percent liberalization was not granted to seventeen other industries. Further relaxations are still being introduced, but the negative-listing system did not convert the situation into a free system for capital transactions, especially during the transition period of the Japanese economy.

For overseas investments by Japanese, liberalization started in the early 1970s. With respect to direct overseas investments, four liberalization steps were taken from 1969 to 1972, and for portfolio investment by Japanese into foreign equities and bonds, ten liberalization steps were adopted from 1970 to 1976. Even after these measures were taken, the applicants had to meet various conditions, such as that the firm have a certain percentage of employees stationed overseas, and that the projects enhance the interest of the Japanese economy in general. Investments in natural resources, overseas marketing networks, and technology importations are some of the projects regarded as enhancing the interest of Japan. Various financial institutions are allowed to invest in foreign portfolios, but such access has not yet been made available to the Japanese public.

Liberalization in the importation technology started in the early 1960s but most of the measures taken in this period were for the purpose of making technology importation easier and expediting the process of royalty payments. Real liberalization started in the early 1970s when the government's licensing requirements were gradually repealed.

The principal focus of this essay is Japan's transition from a sheltered to a more liberalized economy, but the importance of the mainstream economic development policies such as the promotion of real growth and exports, the adjustment of economic structures, and the attempts to rectify man-made imbalances cannot be overlooked. We will therefore review briefly two broad streams of domestic economic policies that the Japanese government pursued during this transitional period. Because of the diversity of economic policies, the following outline can only refer to the key policies. More detailed discussions are provided by the Economic White Papers prepared by the Economic Planning Agency of Japan. The first group of policies includes those designed for the continuation of rapid economic growth. The other group includes policies designed to correct distortions in the economic structure.

The first group includes direct-growth promotion such as the plans for doubling income, fiscal and financial policies to promote real growth, and particularly the promotion of heavy and petrochemical industries. Other policies directly related to the promotion of internal growth were export promotion, policies to "defend" the international balance of payments, and tariff and nontariff policies designed to protect domestic industries. Promotion of technology development resulted in another important group of policies of growth encouragement. There was rapid increase in technology-development funds, used for the funding of private research and development activities initiated by both private and public sources. Proliferation of

government-funded research organizations in this period reflects this effort. The research results were typically made available for private use at no, or minimal, cost. Many ingenious and creative policy measures were mobilized to promote growth, some of which were protective.

We have noted the economic and social problems inherent in the Japanese society or created by the process of economic and social change in the 1950s and early 1960s. The most notable policy to ameliorate these problems was price stabilization. A formidable number of measures were mobilized at the time of transition. Repeated announcements of the cabinet were directed toward price stability and aimed at demand restrictions and supply increases using various financial and fiscal instruments. The remarkable price stability achieved in the early 1960s was the result of these efforts.

Small- and medium-sized enterprises and the farm sector needed help to reduce their productivity and investment gaps with large corporations. Active promotion of the agricultural sector and the erection of heavy protective walls against imports of farm products were typical policies for reducing sectoral imbalances. Social welfare, public and private housing, and construction of new industrial estates received particular attention. National territorial reconstruction plans and the plans to industrialize previously retarded regions all belong to this category.

TWO FACES OF THE LIBERALIZATION POLICIES IN JAPAN

Japan's brilliant success in developing a world-class industrial complex in almost all manufacturing sectors despite her poor endowments in industrial resources has frequently been used by those who believe in protectionism. They cite Japan as evidence for the merits of a well-integrated industrialization policy—something that Western nations should emulate. In the United States, more than thirty separate bills were introduced in the Ninety-eighth Congress in industrial, fiscal, financial, and trade areas; if accepted they would have collectively forged a national industrial-policy package.⁸

These attempts invited strong resistance from economists of the liberal school of free trade, who believe that the economic development of Japan was a product not of excessive government intervention and integrated industrial-policy packages but of free domestic competition among companies. No company, they assert, that survived the severe competition within the domestic market by cost-cutting rationalization, technology development, introduction of new products, and continuous breakthroughs, had any difficulty in meeting the competition of foreigners either in or out of Japan. We are not prepared to join this debate and side with either of the disputants. Frankly, this author is not certain whether we should take the Japanese experience as a case of the success of free competition and free trade or as a model for successful

⁸ Richard B. McKenzie, "National Industrial Policy: An Overview of the Debate" and Katsuro Sakoh, "Industrial Policy: The Super Myth of Japan's Super Success," Washington, D.C.: Heritage Foundation, 1983, are some interesting papers concerning this issue.

cooperation and collusion between the government and private sectors. There were strong liberalization policies since the early 1960s and equally strong attempts to protect the domestic market from foreign competitions. Did Japan find the secret precisely of the right combination of protective and liberal policies? Or did the Japanese economy industrialize so successfully despite government policies swinging between liberalism and protectionism? These are interesting and relevant questions in understanding Japan's development model, but hardly material for this essay.

We have seen in the previous section that in the area of liberalization of capital-account transactions OECD granted Japan extensive reservations in the process of joining that organization. The area of transactions in invisible account also included a considerable number of items for which liberalization was postponed and reserved for later decision by the Japanese government. Japan certainly is not one of the most liberalized countries in this type of transaction. Among the OECD members, Japan, despite its high ranking in size and performance in many economic indicators, belongs to the group whose liberalization performance is below average judged by the number of reservations granted to it.

More prominent complaints against Japan's hesitant liberalization arose from the tariff and nontariff trade barriers that existed. Because of intense pressure and persuasion from important trading partners, Japan's average tariff rates (tariff revenue/total value of imports) came down to close to or slightly lower than those of other industrial countries except for agricultural and fishery products.⁹ However, that exception is very large; the average tariff rate charged for these products is at least four-and-a-half times that of the United States, and nearly twice as high as those of European Economic Community (EEC) countries even at the present time. Furthermore, according to the calculations of the Japan Tariff Association,¹⁰ the effective protection ratio of Japanese industries was uniformly higher than that of the United States, United Kingdom, and Canada. In Table 7, the effective protection rate is shown to have been high not only in agricultural and forestry products but also in mining products, textiles and other light-industrial products, chemical products, and metals and machinery, both in 1963 and after various later liberalizations had taken place. This high effective protection rate is also shown in the stiff escalation structure of Japan's tariffs. The escalation is particularly rapid in agricultural products. In applying the specialized preferences granted to the developing countries, Japan's record is also poorer than those of the United States and European Community countries. For instance, the number of agricultural projects for which a special preference was granted was 243 for the United States, 93 for the EEC countries, but only 75 for Japan during 1978. Furthermore, when the special preferences were granted, the rate for the United States and the EEC was typically zero, but in the case of Japan the zero rate was an exception even among cases of special preference.

⁹ A country like Korea suffers more from these exceptions than from the average tariff rates because the industrial structure of Korea is less complementary to Japan's than, say, tropical LDCs.

¹⁰ Japan Tariff Association, *Tokyo Trade and Tariffs*, Tokyo, June 1973.

Table 7
Rates of Effective Protection of Industries

	Japan		U.S.		U.K.
	1963	1972	1964	1972	1972
Agriculture and forestry	25.2	17.5	16.0	13.0	23.1
Mining	0.2	1.0	0.8	0.5	-3.5
Textiles and textile products	44.6	18.4	33.5	23.8	10.3
Light industries	26.2	13.3	14.3	10.1	8.7
Chemical products	28.2	9.6	18.9	10.1	2.8
Metals and metal products	29.2	16.8	13.0	8.1	4.3
Machinery	30.0	8.6	20.4	10.3	13.0
Weighted average	28.0	13.2	16.0	10.3	9.1

SOURCE: Japan Tariff Association, *Tokyo Trade and Tariffs*, Tokyo, June 1973.

However, the most intensive criticisms have been made against the nontariff barriers preventing access to the Japanese domestic market by foreigners. The evidence here has been extensive. In 1979, the Arthur D. Little Research Company of the United States submitted a research report commissioned by the Nippon Integrated Research Agency (NIRA) under the title "An American View Relating to Japan's Non-tariff Trade Barriers." According to this document, Japan had four broad categories of nontariff barriers:

First, the formal government import regulations, which included quota systems restricting imports in value as well as quantity; import-licensing systems controlling imports in value as well as items; and, finally, complicated customs-clearance processes.

Second, government participation in trade, which included the government's direct engagement in trading activities for items so reserved. Furthermore, the government was found to practice a rather complicated and ingenious administrative guidance mechanism by which imports to Japan are made exceptionally difficult.

Third, the administration of various standards required for products imported to Japan. Fastidious and stringent health standards required for items to be imported, unusual labeling requirements sometimes going to unnecessary details, and a complicated product-testing procedure that can be used to arbitrarily delay the passage of goods were reported to be some of the practices in this category.

Fourth, the cultural and commercial idiosyncrasies in Japanese customs in general. The Japanese distributing system, for instance, was reported to be so exceptionally xenophobic and exclusive that one could get the impression that there is a collusion between the Japanese public and Japanese traders to trade only among themselves.

The first three categories represent government policies if not basic strategies. These nontariff trade barriers represent one of the most ingeniously disguised protective trading systems in the world. Practice of these protective policies on the one hand and the extensive liberalization policies Japan implemented during the past score of years on the other hand make the "Japanese model" of transition from a middle-range developed country to a highly advanced industrial nation a very curious object of study.

JAPANESE DEVELOPMENT MODEL AND THE RECEPTIVITY OF KOREA AND TAIWAN

There are many cultural, social, and even geographic similarities among the three Northeast Asian countries—Japan, Korea, and Taiwan. All three are poorly endowed with natural resources and heavily populated, with densities of 485 for Taiwan, 380 for Korea, and 311 for Japan per square kilometer, according to the censuses of 1979. The standards of general education are higher than in other countries of comparable per capita income. According to the World Bank statistics, the adult literacy rate was 99 percent for Japan, 91 percent for Korea, and 73 percent for Taiwan in 1975.¹¹ With some variations, all three cultures are founded on the spiritual and secular influences of Buddhism, Confucianism, and local varieties of traditional shamanism. Even the ways in which Western influence penetrated these cultures have some similarities, in that the processes were more harmonious and gradual than in other parts of the world, and the Western culture did not totally dominate the traditional indigenous order.

One could proceed in this manner at great length, pointing out similarities in the economic and cultural backgrounds of these countries. It is sufficient, however, to note that these apparent similarities collectively have given outsiders the impression that Korea and Taiwan could gain by imitating the Japanese economic development and industrialization model, exploiting the similarities in historical and cultural background.

If one looks closer at the situation, moreover, the similarities extend beyond mere backgrounds. Background similarities naturally influence the three countries to pursue similar development and industrialization strategies. First, the development strategies of the three countries focused on industrialization policies, gradually shifting the center of gravity of the economies from traditional agriculture to the new manufacturing and service industries. Second, in following the industrialization avenue, all three economies took advantage of abundant and well-trained manpower by focusing on light and labor-intensive industries at the beginning, gradually moving toward heavy and petrochemical industries. Third, the poor endowment in natural resources dictated that all three countries take up an import-augmenting strategy, which in turn necessitated an export-oriented industrial strategy. Together with the

¹¹ IBRD, *World Tables*, Washington, D.C., 1976.

limited size of the domestic market at the takeoff stage, this poor resource endowment made export orientation the only viable developmental path for them. Fourth, because of convenience, both Taiwanese and Korean technocrats frequently referred to the Japanese model and experience in designing their own policies and institutions. Proficiency in the Japanese language in the pre-World War II generations in Korea and Taiwan is very high because of the legacy of colonial education, whereas after having received ten years of English education, a typical university graduate in these countries can barely converse with a native English speaker. This situation resulted in the prewar generations' absorbing the Western culture through a Japanese filter.

In spite of the overwhelming similarities in the economic and cultural backgrounds of these countries, however, profound differences exist. For illustration, in Table 8 the profiles of the three economies at three different times are compared. The late 1950s are selected for Japan because that time represents the peak of postwar industrialization, which laid the ground for further growth as well as for the gradual liberalization of this economy. In Taiwan the international balance-of-payments equilibrium was achieved in the early 1970s and led to various liberalizations by the Taiwan government. In Korea, the balance-of-payments equilibrium has never been attained. The year 1977 was selected for this comparison because this was the only year when Korea achieved something close to a temporary balance in the international-payment structure. The configuration of the Korean economy for 1983 is also added to facilitate an understanding of the structural differences between the economies of Korea and the other two countries.

Although in size the economies of Japan and Korea have some similarity, Taiwan was much smaller at the time of transition selected for this comparison. In terms of real growth rates, weights of the industrial sectors, shares of investment compared to GNP, domestic saving rates, and per capita income (particularly if one takes the effects of inflation into account), the three economies exhibit many similarities. But the similarities end approximately there, and marked differences show in international trade, in performance in price inflation, and in stringency in monetary and fiscal policies. What distinguishes Korea most from the other two countries is that in balance of payments, Korea's deficit was not only unresolved by 1977, when the commodity trade deficit was more than \$500 million, but also has increased sharply since then until the trade-account deficit reached \$1.8 billion, and the deficit in the overall current account \$1.5 billion.

The economic development of Japan was heavily indebted to the rapid expansion of its exports. However, its share of total trade compared with its GNP was less than 20 percent during the late 1950s and has never exceeded 25 percent in the postwar period. In Taiwan, this ratio consistently remained above 60 percent and sometimes reached close to 100 percent. For Korea the ratio remained around 70 percent after it reached a peak of 80 percent in the late 1970s. In this sense, the Taiwanese and Korean economies are substantially more exposed to international trade and are subject to the fickle variations of the international market.

Table 8
Main Economic Indicators at the Transition Phases

	Units	Japan	Taiwan	Korea	
		1958-60	1971-73	1977	1983
GNP	\$ billions	37.0	8.1	31.5	67.7 (1982)
GNP per capita	\$	398	418	864	1,671 (1982)
Real growth rate	%	9.3	11.8	10.3	7.3
Weight of industrial sector	%	34.4	31.9	28.8	30.2
Weight of investment	%	30.4	25.6	26.2	27.4
Weight of domestic saving	%	30.6	30.4	24.8	23.3
Weight of foreign saving	%	-0.2	-4.8	1.4	3.5
Balance of payment	\$ millions	256	408	32	-1,500
Current a/c	\$ millions	333	569	-518	-1,800
Export	\$ billions	3.4	3.1	10.01	24.1
Import	\$ billions	3.1	2.7	10.05	25.0
Weight of total trade to GNP	%	19.4	67.0	80.0	72.7
Price inflation (WPI)	%	-1.5	9.1	10.1	2.8 (GNP defl.)
Interest-rate rediscount	%	7.3-6.94	10.75-8.5	9.0-15.0	5.0
Growth rate of money supply	%	17.2	33.4	40.7	15.0

SOURCE: *Policy Responses at Structural Transition*, Special Report by Korea International Economic Institute, Seoul, 1979; *Monthly Bulletin*, Bank of Korea, various issues.

The low rate of price inflation, the reasonable growth rates of the total money supply, and the low interest rates suggest the prudence which the Japanese government exercised in managing its economy through the industrialization period, and the fortunate circumstance upon which a further rapid industrialization was launched. Taiwan and Korea look very different. In Taiwan, monetary and fiscal prudence finally brought about a relatively stable price situation in the early 1970s, and the economy still grew substantially during the rest of the 1970s. In Korea, stringent fiscal and monetary policies were applied only from the very late 1970s, but before that, inflation was at the double-digit level for nearly twenty years. Now all three countries have some of the most stable conditions in the world, but the paths of development they trod were very different and dictated by the special circumstances each country faced.

The comparisons show that in spite of the many apparent similarities in the backgrounds and strategic choices of the three countries, the actual paths of economic development they followed were different particularly with respect to the international balance-of-payments structures and the stringency with which the stabilization policies were applied. Some commentators claim that because of the small population and GNP, the development model for Taiwan is somewhat close to the Dutch model, whereas because of the larger population base, GNP, and domestic need for heavy industry to sustain a viable defense structure, Korea can afford to emulate the Japanese model, which includes a diversified industrial structure covering light, heavy, and modern high-technology industries. The development models of Korea and Taiwan should therefore differ not only because of the historical paths they took, but also in the types of economy they will eventually become if they proceed on their present courses.

DEVELOPMENT EXPERIENCES AND A DEVELOPMENT MODEL

Differences in the development paths become even clearer if one examines the experiences of Taiwan and Korea. Let us begin with Taiwan. With some oversimplification, the economic history of Taiwan after World War II can be divided into five subperiods.¹²

The first period, starting in 1945 and ending in 1952, can be characterized as the period of postwar confusion. Particularly between 1945 and 1948, the wholesale price index rose forty-eightfold. This was followed by the massive immigration of the Nationalist armies and government, which compounded the existing confusion. In this period much of the fiscal revenue requirements were met by American economic aid and gold reserves brought from the mainland. Monetary reforms and land reform were positive achievements made to pave the way for growth in the future.

The second subperiod, from 1953 to 1960, can be called the period of restoration of the economic order. Some notable achievements in this period were the rapid growth in agricultural productivity and the development of farm-based manufacturing such as food processing. This helped in substituting domestic products for massive imports and laid the foundation for the later expansion of exports. In this period the average real growth rate of GNP was 7.7 percent and the wholesale price index rose by only 9 percent per annum on an average, which represented an enormous improvement over the preceding subperiod.

The third subperiod started in 1961 and lasted ten years, until 1971. We can call this period the time of rapid expansion. The average growth rate of the real GNP reached 11 percent, which is one of the highest ever achieved by any country in history

¹² This kind of taxonomic exercise always invites unsympathetic responses from those who know history in greater depth. The following paragraphs should not be judged as exercises in historical classification but merely as a convenient tool for comparing the historical evolution of the Korean experience to that of Taiwan. The classification is designed to highlight the differences between the two industrial development strategies.

during a similar length of time. This growth was assisted mainly by the rapid expansion of exports of labor-intensive light-industry products. The achievement is particularly remarkable because the rapid growth was made under conditions of extremely stable prices. The wholesale price index in this period rose at an average of 1.8 percent per annum.

This success in the 1960s ushered in the fourth subperiod, which started in 1972 and ended in 1979. Let us call this the period of structural transition. Several important transitions took place in Taiwan. By 1972 it had achieved a surplus in its international balance of payments, which it successfully sustained thereafter. An important transition in industrialization also took place—the change from labor-intensive light industries to capital-intensive heavy and petrochemical industries. Massive investment in social-overhead capital now became not only possible but also the most important part of the nation's investment. Along with the impressive real growth averaging 8.2 percent in real terms, signs emerged of excess labor demand and massive import price increases following the two world oil crises. The combined effects of the price inflation brought an average 9 percent increase in the wholesale price index during this subperiod.

The last subperiod spans from 1980 to the present. During this period the Taiwanese economy managed gradually to recover from the period of recession caused by the second world oil crisis and to show rapid growth in GNP and exports under a relatively stable price situation. However, in the last subperiod, the strategic emphasis shifted from the heavy industries of the 1970s to technologically more advanced industries such as the electronics and chemical industries.

Let us now briefly outline the experience of Korea. The first subperiod of the Korean economic development history, which started in 1945 and ended in 1953, was characterized by even more confusion than that of Taiwan. This period was marked by the arbitrary division of the country into two not very viable entities. Moreover, the country was soon drawn into the massive destruction of the Korean War. This compounded confusion and destruction placed Korea far behind Taiwan in the race for economic development.

The restoration period after the Korean War extended from 1954 to 1960. During this period a massive deficiency of consumer goods drove the economy into double-digit inflation. More than \$2 billion of economic aid were infused into the economy, whose imports typically were ten times as great as its exports. Political instability compounded the problems. In contrast with the rapid increase in agricultural productivity and economic growth in Taiwan, the 1950s placed Korea at a further disadvantage by delays in laying the ground for future economic growth.

In the early 1960s Korea entered its first growth stage. In the period between 1961 and 1971 Korea pursued a highly successful import-substitution policy for a wide range of consumer products, which later proved to be the basis for rapid expansion of light-industry consumer-products exports. Helped by such export increases, real GNP rose at an annual average of 8.8 percent. This rapid growth, however, came before the country managed to arrest the high inflation of the 1950s, and the entire 1960s were

also marked by double-digit inflation (11 percent per annum) in terms of the wholesale price index.

The next subperiod, from 1972 to the end of the 1970s, also saw remarkable successes in Korean economic development. A rapid increase in agricultural productivity helped to bridge the growing income gap between the urban and rural communities. On the basis of the success in the light industries and, particularly, the exports of labor-intensive consumer goods, Korea started to stress heavy and petrochemical industries from the beginning of the 1970s. Particularly toward the end of the 1970s, the fall of South Vietnam and the threat of American troop withdrawals by the Carter administration stimulated Korean economic planners to invest rapidly in heavy industries—machinery, transportation equipment, plant construction and engineering, and some of the defense-related heavy industries.

In this period the economy grew at the average annual real rate of 12 percent, which is one of the highest sustained growth records achieved by any nation. However, the inflation inherited from the 1950s and 1960s, and the compounded effects of the two oil crises exacerbated price inflation, with the average annual increase in wholesale prices reaching 19.4 percent. Furthermore, the rising expectations for higher wages and a higher standard of living by the workers and general public added further inflation pressure to the already unstable prices. Between 1975 and 1978, the average real wage rate rose annually 18.5 percent in Korea, 13.2 percent in Taiwan, 6.6 percent in Hong Kong, and 4.1 percent in Singapore.¹³ The brilliant growth record of Korea during the 1970s was therefore facing emerging difficulties even before the onset of the second oil crisis.

The final subperiod, from 1980 to the present, has been marked by the painful readjustment of the economy climaxed by the -5.6 percent growth in 1980. This has been followed by a slow recovery both in domestic real growth and exports. However, the recovery was made under a remarkable stability of the price level, with increases ranging between 1 percent and 3 percent per annum in both CPI and WPI terms.

From this brief historical account of the two different experiences, one can question whether the Japanese model played an important role in the developmental process in either Korea or Taiwan. Both countries tried to respond to developmental challenges as intelligently as possible, given the international and domestic circumstances. Taiwan tried first to stabilize and later to grow. Korea tried to make up for its delay by growing as fast as possible, disregarding instability, and only afterward attended to the inflation problem.

¹³ Ungsuh K. Park, *Export Competition between and Comparative Advantages of Newly Industrializing Countries*, KIEI Working Paper No. 10-80, Seoul: Korea International Economic Institute, 1980.

DIFFERENCES IN INDUSTRIAL POLICY

We will now discuss the last and most important strategic differences in the development policies of these countries taken at the time of transition. In the process of transition from a middle-income economy to a highly advanced economy, Japanese industrial policy was characterized by overt liberal policies on the one hand and some less overt protective policies on the other. The liberalization policies not only symbolized the transition to an advanced country but they were also required by others for Japan to be recognized in this category.

To understand the extent of liberalization efforts in the industrial policies of the three countries, we will investigate the ratio of import liberalization. This is the most frequently used yardstick for measuring liberalization, but one should bear in mind that it reflects the liberalization only of commodity imports, which are just one part of international economic contacts. Furthermore, this ratio is calculated by the number of commodities (not the value of imports) released for freer imports but it pays no attention to the tariffs and other protective devices.

In Table 9, import liberalization ratios of Japan, Taiwan, and Korea are presented. In Japan this ratio reached 92 percent in 1964, which is roughly the end of the transition period of the early 1960s. It has since risen steadily to reach 97 percent and has remained there since. In Taiwan, restrictive trade policies dominated until the beginning of the 1970s, as can be seen by the import liberalization ratio. From then, this ratio climbed steadily to reach 96.5 by 1973. It climbed further to reach 97 percent, where it has remained. Korea presents a drastically different picture. Import policies of Korea were generally restrictive until the late 1970s. Since then liberalization has taken place very gradually. By 1983 the liberalization ratio reached 80.4. It is scheduled to reach 90 percent by the end of 1984.

We would reiterate that the import liberalization is only a small element among many other aspects of the economy where liberalization should be applied. This comparison therefore cannot be construed as conclusive evidence of the overprotection of Korea and liberal trade policies of Japan. However, in a broad comparison Taiwan seems to have liberalized her international trade more than Korea. In the absence of a meaningful comparison among the nontariff barriers of the three countries, it is impossible to obtain firm conclusions on the extent of liberalization, particularly between Japan and Taiwan. But the conclusion that Korea is more protectionist than Taiwan, at least at present, is hard to escape.

The reasons that Korea takes a more cautious attitude in liberalizing its imports are many. First, it had never attained a sustained equilibrium in its balance of payments, whereas Taiwan and Japan reached such a balance in the early 1970s and early 1960s, respectively, when they started to liberalize their imports.

There are additional interesting reasons involving industrial structures that caused this difference in industrial policy. As shown in Table 10, in terms of share of heavy and petrochemical industries within the total industrial sector, Japan stands in first place, closely followed by Korea, and remotely followed by Taiwan. In Korea, even the composition of heavy industry in total exports show the same bias in favor of

these industries. In 1971 the share of heavy industries in total exports was only 17.2 percent but by 1980 had risen to 43.9 percent, and by 1983 to over 56 percent.

Table 9
 Import Liberalization Ratios
 (Percentages)

	Japan	Taiwan	Korea
1962	83	—	—
1963	89	—	—
1964	92	—	—
1965	93	—	—
1966	93	52.3	—
1967	93	—	—
1968	93	57.9	61.7
1969	93	—	55.5
1970	94	61.5	54.0
1971	94	81.6	54.5
1972	97	82.1	51.0
1973	97	96.5	51.1
1974	—	97.7	51.0
1975	—	97.5	49.5
1976	97	97.6	50.5
1977	—	—	51.0
1978	—	97.7	53.9
1979	—	—	67.6
1980	—	—	68.6
1981	—	—	74.7
1982	—	—	76.6
1983	—	96.5	80.4

SOURCES: W. J. Lee, *Policy Responses at the Structural Transition in Taiwan*, Seoul: Korea International Economic Institute, 1978; *Present Tariff Policy and the Directions for Reform*, KDI, Discussion Paper 82-03, Seoul, 1982; *Directions of Tariff Reforms for Improving Industrial Structure of Korea*, Korea International Economic Institute, Research Report No. 14, Seoul, 1982; K. S. Sun, *Tariff Policies of Taiwan and Changes in Industrial Structure*, Taipei, Taiwan: Kungsang Shipao, August 1982.

Table 10
Share of Heavy and Petrochemical Industries
(Percentages)

	1960	1970	1980
Japan	43.2	51.2	56.3
Korea	20.8	43.0	53.2
Taiwan	11.6	24.2	25.7

SOURCE: Ministry of Commerce and Industry, Government of Korea, Seoul, December 1982.

This bias toward heavy industries in Korea explains the protective stance of Korean industrial policy. In light industry, both Taiwan and Korea have attained significant international competitiveness, backed by over twenty years of experience in almost all types of such industries. In both countries, however, heavy and petrochemical industries are a fairly new experience, which they started on a major scale in the late 1970s. Particularly in Korea, there was a rush toward heavy-industry investment in this period, which gave that country a large number of heavy-industry plants with quite inadequate technological preparedness. This made many industrial policymakers in Korea feel that they needed to protect these new investments, at least for the time being, until they attained some international competitiveness. Inasmuch as Taiwan has fewer of these noncompetitive heavy industries, as we have seen, it is less under pressure to protect its infant industries.

There is another interesting explanation for the difference between Korea and Taiwan in protectiveness. Whereas the gross national product of Taiwan is approximately half that of Korea, its export value is slightly greater than that of Korea. Because the value of imports is roughly equal to that of exports in both countries, other things being equal Korean enterprises stand to lose more than their Taiwan counterparts by freeing the domestic market for imports. This may explain at least partly why public sentiment and the feeling among scholars and government officials, let alone in the business community in Korea, have stronger protectionist tendencies than in Taiwan.

These remarks about Korea are not made to defend its industrial policy but to highlight a difference in the industrial policies of Korea and Taiwan. In light of Japan's enormous industrial success, either because of or despite her simultaneously open and protective policies, any doctrinaire generalizations about the merit of a certain type of industrial policy have limited credibility.

CONCLUSIONS

Our exploration of Japan as a development model has concentrated primarily upon the Japanese experience from the early 1960s, when that nation underwent a transition from newly industrializing country to advanced industrial nation. In addition to exploring the economic performance and structural changes taking place immediately prior to and during the transitional period, we noted that a hallmark of Japanese policies was the combination of liberalization and continued protectionist policies, making any simplistic analysis of the Japanese model erroneous.

The selective emulation of Japan's policies by Korea and Taiwan has been a part of their attempts to move rapidly forward and will continue, possibly accelerate, as they seek to advance from their present status as newly industrializing countries. The challenge confronting them is to make their domestic economies more competitive and durable under various international pressures. Yet if the transition to advanced industrial status takes place successfully, it will happen in a very different environment from that confronting Japan.

Moreover, certain differences in the experiences of Korea and Taiwan are now readily apparent. Korea has been taking a more protectionist path in her industrialization because of domestic factors, such as the balance of payments difficulties and the commitment to heavy and petrochemical industries. It is too early to conclude that Korean industrialization will spurt ahead of that of Taiwan, but one can already detect a trend whereby Korea is surpassing the production levels and technology of Taiwan in heavy industries such as shipbuilding, automobiles, plant engineering, and machine tools, and high-technology industries like semiconductors. This fact is more meaningful when one considers that in most of these industries, Taiwan started earlier than Korea.

If such a disparity in industrialization in favor of Korea is indeed realized in the future, economists will have an interesting paradox on their hands: the "irrational" industrial protectionist policies of Korea will have resulted in a more rapidly developing, if not more efficient, modern industrial economy. History will have demonstrated who was the better student of Japan.

5. Japan “Teacher”—ASEAN “Pupils”: Can It Work?

Hadi Soesastro

INTRODUCTION

This contribution focuses on whether and to what extent the ASEAN countries can learn “lessons” from Japanese development. We will consider what aspects of the Japanese experience can be transferred, and how this can be done. The preoccupation with this issue at the highest policy-making levels in Malaysia and Singapore suggests its relevance.

In recent years, the Japanese experience has been cited frequently as a model for the developing countries in Asia. The successes of South Korea’s and Taiwan’s development partly explain the enthusiasm, justified or unjustified, for the Japanese model in a number of countries, especially at the policy-making level. Efforts by leaders to learn from the successes of more advanced countries are not a recent phenomenon. The learning and transfer processes can take many forms. The Europeanization of Russia, carried out by Peter the Great, for example, was based on practical reforms, often introduced without plan or system, and in many instances involved the wholesale importation of expertise (and experts) from Europe. Accompanied by the so-called Grand Embassy (1697–98) comprising 250 people, Peter himself went to Western Europe to gather information on its economic and cultural life.¹ Similarly, the new Meiji leaders in Japan, soon after temporarily pacifying the country following the disposition of the last Tokugawa shogun, knew they had to come to terms with the West and decided to see at first hand how things worked there. In 1871, Iwakura Tomomi set off on a two-year world tour with an entourage of 54 people. They were impressed with what they saw and returned with an understanding of the necessity for a total overhaul of their society.²

¹ See for example, Bernard Pares, *A History of Russia* (London: Methuen, 1962), chap. XII.

² W. G. Beasley, *The Modern History of Japan* (London: Weidenfeld & Nicolson, 1963), pp. 369–370.

The period after World War II saw the emergence of a different type of "research." Modernization research, which focuses on the forces that precipitated and sustained the Industrial Revolution in Europe, investigates whether analogies exist that can be a basis of prediction for the future in the developing countries. It has been suggested that imitation of Europe industrialization has little to contribute to solving the problems of developing countries because conditions in these late modernizers differ in many respects from those of eighteenth and nineteenth century Europe. Some such differences are (1) that today's developing countries are confronted with a number of problems at the same time, problems that in the industrial countries occurred consecutively and were therefore easier to manage; and (2) that the growing technological gap has put today's late modernizers in a situation in which they have to depend to a large extent on the technology transfer of the industrial nations.³

Japan's success as a somewhat late modernizer has led to a boom in so-called miracle research since the 1970s, of interest not only to developing countries but also to other advanced industrial countries. It is not immediately clear, however, why Japan's experience should be a better example than the European countries' for today's developing countries. The literature abounds with studies and explanations aiming at answering the question What has made the Japanese so successful? but this essay does not examine the factors that seem to account for Japan's economic performance. Neither does it aim at a systematic discussion on the many conflicting views, arguments, and conclusions that have been derived from these studies, however important such a discussion can be for what is being attempted here.⁴

The question of transferability—the process and mechanisms of transfer—which should be of equal importance to policymakers, seems to have been inadequately addressed thus far. The basis on which to settle the discussions as to whether the Japanese experience is transferable or which aspects of it are transferable is yet unclear. Ultimately, conditions in the "borrowing" countries themselves will be the determinants.

Some suggest that this problem could be settled on the basis of positive economic analysis.⁵ Others have argued that "in order for Japan to be taken as a model for development for other countries, all aspects of its historical development must be applicable, for non-economic events cannot be neatly separated from economic processes."⁶ Still others believe that, short of the above, at least the same initial conditions must be present for the Japanese experience to be imitated or applied

³ Rudolf Hamann, "The Industrial Revolution in Europe: A Model for the Developing Countries?" in *Economics* (Tübingen, W. Germany: Institute for Scientific Co-operation), vol. 28, pp. 49–70.

⁴ For an excellent discussion on the various schools, see Chalmers Johnson, *MITI and the Japanese Miracle* (Stanford, Calif.: Stanford University Press, 1982), pp. 6–17.

⁵ See for example, Yujiro Hayami, *A Century of Agricultural Growth in Japan: Its Relevance to Asian Development* (Tokyo: University of Tokyo Press, 1975).

⁶ Yoshihara Kunio, *Japanese Economic Development* (Tokyo: Oxford University Press, 1982), p. 131.

directly.⁷ Still farther down the road, it has been suggested that countries lacking the same initial conditions should find appropriate “substitutes” for them.⁸

This cluster of unsettled issues leads to another related question: Is Japan a unique nation, so that all the prerequisites it had for rapid growth and modernization, as well as its history, must be replicated to make the experience transferable? Kanji Nishio, in his “foolish theory of Japan’s uniqueness,” strongly criticized this view.⁹ Saying that Japan is a unique nation has implications different from saying that Japan differs from other countries as other countries differ from each other. To say that Japan derives its success from mechanisms uniquely Japanese, in the same sense that they are not found in other countries, is also different, implying the impossibility of imitation.

Many aspects of the Japanese experience may not (or may) be unique to Japan, and it is especially difficult to use Japan and its economy as a model.¹⁰ As stated by Hayami, “We must strongly guard against easy historical generalizations and must be very cautious about deriving ‘lessons’ from past experiences.”¹¹ The kind of generalizations often made—such as the notion of Japan, Inc.—have been excessively sweeping, lacking in comparative perspective, and sometimes self-serving.¹²

Yet there are many reasons for the interest of developing countries and advanced industrialized countries in Japan’s experience. By learning the “secrets” of Japan’s rapid growth and the pronounced transformation (“miracle”) of its economy, developing countries entertain the hope of following the same course. In this regard, it has been suggested that the focus should be on Japan’s modernization process dating back to the Meiji Restoration in 1868.¹³ The Japanese experience is seen as offering to economists a superb laboratory in which to examine many leading development issues, such as the role of agriculture in the developing process, the nature and significance of “dualism,” and the impact of the government sector. On such broad issues, however, conclusions are likely to differ. For example, to some, Japan provides an example of “concurrent” development, namely development exhibiting a balanced expansion between agriculture and industry. To others Japan illustrates at its best what is called “prerequisite” agricultural growth, where the development of agriculture preceded and was necessary to that of other sectors.¹⁴

⁷ Yujiro Hayami, *A Century of Agricultural Growth*, p. 210.

⁸ Yoshihara Kunio, *Sogo shosha* (Tokyo: Oxford University Press, 1982), p. 300.

⁹ Kanji Nishio, “Orokanari Nihon tokushokuron” (The Foolish Theory of Japan’s Uniqueness), *Bungei Shinju*, February 1981, cited in Masanori Moritani, *Japanese Technology* (Tokyo: Simul Press, 1982), p. 221.

¹⁰ See Hugh Patrick and Henry Rosovsky, “Prospects for the Future and Some other Implications,” in Hugh Patrick and Henry Rosovsky, eds., *Asia’s New Giant: How the Japanese Economy Works* (Washington, D.C.: Brookings Institution, 1976).

¹¹ Yujiro Hayami, *A Century of Agricultural Growth*, p. 10.

¹² Patrick and Rosovsky, “Prospects for the Future.”

¹³ See for example, Goh Keng Swee, “Public Administration and Economic Development in LDCs” (Fourth Harry G. Johnson Memorial Lecture delivered at the Royal Society, London, July 28, 1983).

¹⁴ Allen C. Kelley and Jeffrey G. Williamson, *Lessons from Japanese Development: An Analytical Economic History* (Chicago: University of Chicago Press, 1974), p. 16.

From a different perspective, the appeal of Japan lies in its successful adoption of foreign (Western) technology (but also essentially capitalistic development) in a traditional setting. Japan's ability to learn from others may indeed account for much of its success. If this is true then learning from Japan about the way in which Japan has learned from others becomes all the more interesting and relevant.

In addition, interest in understanding the process and nature of Japanese development may simply be aimed at evaluating Japan's economic impact on international relations, or at obtaining background information for those looking for ways of penetrating the Japanese market or seeking means to protect their domestic industry from Japanese imports.¹⁵

The growing interest in Japan's trading companies (the *sogo shosha* fever as it is called elsewhere)¹⁶ is an example of a different class of things—Japanese considered worthy of emulation, namely, Japanese institutions, as distinct from the broad patterns of development and modernization. As argued by Vogel, it is readily demonstrable that, in many areas, Japanese institutions are more successful in coping with the same problems that confront the United States, and thus the United States may profit by borrowing from Japan.¹⁷ Currently, consideration is being given in many countries, including the United States, to setting up trading companies similar to *sogo shosha*. Korea, Taiwan, Thailand, and lately Malaysia have all set up their own versions of *sogo shosha*. As shown in the next section, interest in ASEAN countries has not been confined to Japan's experiences before World War II but is perhaps weighted toward recent developments. It is not clear why some—including Patrick and Rosovsky—suggest that Japan's experience of the recent past is least relevant to developing countries.¹⁸

Different developing countries may look at different aspects of the Japanese experience, depending on what each of them considers most relevant. Table 1 suggests, in hypothetical terms, the different aspects (classes) of the Japanese experience from which other countries may wish to learn: the broad pattern (strategy) of development and modernization (macrolevel) and the specific institutional arrangements or technologies (microlevel) from both the past and present.

Simply focusing attention on the broad pattern of development can lead to unrealistic, mechanistic models of doubtful value, as illustrated by the so-called one-factor theories (Rostow's economic-factor approach in his stage-by-stage account of development into modernity or even Bellah's attempt to establish the role of religion as the dominant value system in the modernization process). Preoccupation with micro-level research is equally deficient because the few salient features of a society (specific institutions) cannot be examined satisfactorily in isolation from the larger social and political environment. How best, then, can one make use of the Japanese model?

¹⁵ Yoshihara Kunio, *Japanese Economic Development*.

¹⁶ Yoshihara Kunio, *Sogo shosha*.

¹⁷ Ezra F. Vogel, *Japan As No. 1: Lessons for America* (Cambridge, Mass.: Harvard University Press, 1979).

¹⁸ Patrick and Rosovsky, "Prospects for the Future," p. 920.

Table 1

	Macro	Micro
Past	Agricultural modernization and industrial development	Landlordism (land-tenure system) and "gono" entrepreneurs
Present	Industrial modernization and export performance	Business institutions and management systems

As stated once by the economic historian Knut Borchardt, learning history (or from one country's experiences) may "contribute towards the problems being more clearly perceived, the right questions being put and potentially interesting answers being formulated."¹⁹ It is in this regard that this contribution attempts to distinguish between "learning the lesson" from the Japanese experience and "transferring or transplanting" it, because the former does not necessarily include the latter.

The next section examines policy issues relating to recent campaigns in two ASEAN countries, Singapore and Malaysia, to learn from or emulate the Japanese model. The third section discusses some "lessons" from the Japanese experience that may be relevant to ASEAN countries. The last section offers some tentative conclusions.

THE POLITICS OF LEARNING FROM JAPAN

Learning from Japan's experiences can have a variety of purposes. In practical-policy terms, the purpose governs what aspect(s) of the Japanese experience will be considered relevant. Singapore and Malaysia, as will be discussed below, illustrate attempts to "project" Japan's achievements so as to reveal shortcomings or failings at home, in the tradition of the projectionists, as labeled by Chalmers Johnson.²⁰ It is interesting to note that these campaigns started from the top of the government.

Japan, however, flattered as it might be by these campaigns, tends to be drawn into the domestic political scene in these countries. Equally striking to some Japanese is that suddenly they are put into the position of a *sensei* (teacher), albeit a passive one, with all its connotations.

¹⁹ Knut Borchardt, *Europas Wirtschaftsgeschichte: ein Modell für Entwicklungsländer?* Vol. 20 of the publications by the Wirtschaftshochschule Mannheim (Stuttgart, 1967), cited in Rudolf Hamann, "Industrial Revolution in Europe."

²⁰ Chalmers Johnson, *MITI*, pp. 6-7.

Singapore's Learn-from-Japan Campaign

The intense campaign in Singapore to learn from Japan's economic progress, launched in the early 1980s under Lee Kuan Yew's guidance, should not be surprising.

In view of Singapore's economic strategy today, learning the Japanese way seems eminently logical. The efforts to move away from manufacturing cheap consumer goods to manufacturing high-quality products such as electronics and computers resemble the Japanese strategy of the recent past. But perhaps the primary force lies with Lee Kuan Yew himself, as a person and as a leader of this city-state—with his concern for Singapore's survival as a state and nation and his drive to get the best out of Singapore's residents.²¹

Indeed, Singapore, small and lacking natural resources as it is, has an important asset—the ability to borrow foreign ideas. In the past, Singapore has looked to the United States for business techniques, to South Korea for industrial strategy, to Switzerland and France for educational systems, and to Israel for military expertise. However, since it turned to Japan, its leaders have decided that the country should learn not only new economic methods but also new social and cultural values. It is in this regard, perhaps, that the campaign went too far and became the target of criticism. The search for new cultural values has been a preoccupation of Singapore's leaders for some time. As suggested elsewhere, the Singapore government “seriously consider culture as a commodity to be designed, manufactured and handed down to the people from above.”²² The conversation below illustrates this mood:

Minister: Well, now how do you find Singapore?

Editor (*casually*): Great.

Minister: What do you mean?

Editor: Just great.

Minister: I don't think I like the tone of your voice.

Editor: I have just come from Djakarta and Manila. Nothing worked there. Here my telephone works, my flush flushes, everything is clean and antiseptic. Singapore is simply great.

Minister: All right, old chap, what's bothering you?

Editor: Look, what does it all mean? What about people? Don't they have minds? I see no evidence of people here having minds of their own, feelings of their own.

Minister: They are happy. See those modern high-rise buildings? We gave them decent places to live in.

Editor: What have you done to their minds?

Minister: Well, we are thinking about it. Having given them a clean city, modern amenities, and a strong economy, we are now thinking of what culture we should give them.

Editor (*after pause*): Is the culture factory also going to be in the Jurong industrial estate? (*End of conversation.*)²³

²¹ See T. J. S. George, *Lee Kuan Yew's Singapore* (London: Andre Deutsch, 1973), chaps. 6 and 7.

²² *Ibid.*, p. 110.

²³ This conversation, between a visiting Asian editor and a “PAP philosopher under whose ministerial charge fell culture,” was printed in George's book, *ibid.*, p. 109.

Proponents of the campaign point out that Singapore already resembles Japan in some important ways, namely: (a) the government takes a leading role in determining economic strategy; (b) the government cooperates closely with business; and (c) the government stresses the development of human resources through education. In addition, Confucianism—recently introduced as a subject in Singapore schools—is also seen as a common bond between the two nations.

Lee Kuan Yew's Learn-from-Japan campaign should perhaps be seen as part of his ambition to build a national identity for the immigrant nation of Singapore. When, in 1981, Lee met the Japanese prime minister, Zenko Suzuki, he was reported to have said, "Singapore and Japan's challenge is not only to prove that the traditional values of Asia and the advanced science and technology of the West are compatible, but also to guarantee that a new civilization can grow out of this unique combination of the East and West."²⁴

A highly skilled, well-motivated labor force and a sophisticated system of management are seen as prerequisites for the success of Singapore's economic restructuring. In this regard, Japan is seen as a successful example. Through this campaign, the government of Singapore systematically encourages local enterprises to try out aspects of the Japanese system, like the folkloric QCs (quality control circles), company welfarism, and cooperative labor relations. Lee Kuan Yew was reported to have indicated his unhappiness with the attitudes of Singapore's workers:

Singaporean workers were told they were lazy, materialistic, fickle, selfish and complacent. Japanese workers, on the other hand, were resourceful, loyal, conscientious, cooperative and skillful. To encourage those virtues, the government has harnessed its considerable apparatus of persuasion. In press, radio and television, with monotonous frequency, Singaporeans are exhorted by cabinet ministers, MPs and union leaders to improve their work habits and increase productivity.²⁵

Critics have pointed to various reasons that the success of this campaign is doubtful. The different culture, history, and background were identified by some as the main obstacle, but others recalled the Japanese occupation during World War II. Some workers resented the unfavorable and unflattering comparison with their Japanese counterparts. Others have pointed to the job-hopping habit and the high mobility of bright young executives, which rendered the Japanese system of lifetime employment difficult to transplant, and to the meritocratic system and the top-down style of decision making, which rendered the Japanese-style teamwork impossible to imitate.

While the genesis of the campaign itself did not seem surprising, the negative reactions to it were not expected by outside observers or by the Singapore government. The way in which the campaign was considered may account for much of the resentment. Singaporeans may be unhappy about being continually compared with the "better" Japanese, but more likely, they have become tired of continual and intense exhortations by the government.

²⁴ "Learning from Japan," in *Asiaweek*, November 5, 1982, pp. 29–37.

²⁵ *Ibid.*

In his National Day speech in August 1982, the prime minister admitted that the campaign had run into some criticism and indicated that the government might change course slightly on the issue. Publicly the government is now talking about a "Singaporean management style," but the efforts to learn from Japan are likely to continue. Preoccupation with Japanese management concepts, being taught and developed by institutions that have proliferated in Singapore and elsewhere in the region, have gained their own momentum. The Singapore National Productivity Board, for example, has vigorously promoted QCs over the years, and they have now been adopted by many factories and offices.

If anything can be learned from Singapore's case, it is the idea that techniques can be transferred most readily in an organized fashion through active government encouragement. Whether or not imported techniques will ultimately lead to new values and attitudes cannot be determined a priori. The result can only be evaluated when the process has taken its course. As stated elsewhere: "It is unlikely that the process [of borrowing foreign ideas] can be controlled easily by planning. . . . There is every reason to believe that despite our best efforts at sorting, sifting, and choosing, new practices will turn out to require more adjustments than originally anticipated."²⁶ The Learn-from-Japan campaign, instead, has been used primarily as an instrument for social engineering, in which changing attitudes and values were the explicit policy objective. Seemingly, it is this objective that the Singaporeans have come to reject, after pursuing it for many years.

Malaysia's Look East Policy

Despite important differences between Malaysia and Singapore, Malaysia's Look East policy resembles Lee's campaign in many aspects. In contrast to Singapore, Mahathir's policy—announced in December 1981, six months after he took office—came as a surprise. The negative reactions that followed, however, were not surprising.

The similarity between the two policies lies in their objectives, namely, a change of attitudes. As stated by Mahathir: "It is not just skills we are after, but more importantly, the correct attitude toward work, including the sense of belonging which breeds loyalty."²⁷

Mahathir, like Lee Kuan Yew, attributes the Japanese success to an energetic, forward-looking frame of mind, an attitude that he seeks to foster. His target group is not only the blue-collar and company white-collar workers, but also government bureaucrats. His effort to change bureaucratic attitudes was signaled with the setting up of a task force to draft a code of ethics for civil servants.²⁸ But, as stated elsewhere,

²⁶ Vogel, *Japan As No. 1*, p. 231.

²⁷ Raphael Pura, "Malaysia's Vague Campaign to Learn from Japan," *Asian Wall Street Journal*, July 13, 1982.

²⁸ K. Das, "Mahathir's 'Restoration,'" *Far Eastern Economic Review*, June 11, 1982, pp. 38–41. As reported by K. Das, there were analysts who believed that the Look East policy was only a thinly veiled plea to emulate Singapore, which has prospered with corrupt-free efficiency in government.

the Look East policy itself appears to be directed primarily at one racial group, the Malays. Mahathir wants them to become hard-driving businessmen and disciplined blue-collar workers dedicated to their companies and their country.²⁹ His argument, as expounded in his once-banned book, *The Malay Dilemma*, is that the Malays, the country's largest ethnic group, must throw off their traditional complacency and become more industrious.³⁰

The Look East policy, which is sometimes labeled "Mahathir's Restoration," seems to be more comprehensive than Singapore's Learn-from-Japan campaign. As stated by Mahathir in an interview, the policy is directed at "acquiring the kind of policies, systems and work ethic that the Japanese have."³¹ But other objectives are thought to accompany the policy, some explicitly stated by Mahathir. He includes the following: to increase the interest of Japan and South Korea in Malaysia; and to lead Malaysia toward a more balanced attitude, away from the almost total dependence on the West of the past. "The West," Mahathir noted, "has not made headway, but appears to be regressing. So in order for Malaysia to progress, we have to learn from the better example, and the better example is the Japanese example."³²

Some people have contended that the Look East policy was a manifestation of Mahathir's anti-British and more nationalist stance announced in October 1981. However, the roots of Mahathir's policy may have dated back much earlier when, as minister of trade and industry, he propounded the idea of setting up Malaysian sogo shosha-style trading companies. Pushed by the Look East policy, two such companies were established in early 1982, and four more followed, but only one has started operations.³³

The comprehensive nature of Malaysia's policy tends to prevent a sharp focus and creates confusion over the goals of the campaign.³⁴ Reactions are thus far-ranging. Like the critics in Singapore, Malaysians are doubtful about the "work ethic" policy. But Malaysian critics tend to go further in their arguments. The Look East policy portrays Japan as the perfect model nation and is based on a stereotypic view of the Japanese company. Furthermore, many aspects of Japanese social and economic policies are not acceptable to Malaysian society in the context of the New Economic Policy (NEP), such as Japan's tax system, social services, alleged oligopolistic industrial structure, and in-house unions.³⁵

²⁹ "Malaysia Looks East," *Asiaweek*, November 5, 1982, p. 31.

³⁰ Mahathir bin Mohamad, *The Malay Dilemma* (Selangor, Malaysia: Federal Publications Sdn. Bhd., 1981 ed.).

³¹ K. Das, "Mahathir's 'Restoration.'"

³² *Ibid.*

³³ For a discussion on this subject, see Chee Peng Lim, "Malaysian Sogo Shoshas: No Go So Far," in Jomo, ed., *The Sun Also Sets: Lessons in Looking East* (Selangor, Malaysia: Institute for Social Analysis, 1983).

³⁴ Pura, "Malaysia's Vague Campaign."

³⁵ See, for example, Kua Kia Soong, "Look East, but Watch for Blemishes," *Far Eastern Economic Review*, March 31, 1983, pp. 69-70.

The alleged linkage of the policy to a more nationalist attitude has raised strong misgivings as well. Critics argue that the policy “played into the hands of [a] revival of Japanese militarism and expansionism.”³⁶ Questioning the value and need of looking to Japan as a model, Chandra Muzaffar, a Malaysian reformist, has been quoted by the *Far Eastern Economic Review* as follows:

Even if it were possible, should we emulate Japan? Japan is in essence a huge economic machine obsessed with growth, with the conquest of markets. Its astounding success as a producer and distributor . . . has blinded us The economy, for all its dynamism, is dominated by powerful companies and their elites. Social disparities are significant How can we choose as a model . . . a nation whose economic imperialism is an established truth? In trade, investments, technology transfers and aid, Japan’s exploitative tendencies are quite apparent. This is . . . the saddest aspect of the whole Look East policy. For it legitimizes—even if unwittingly—Japan’s overwhelming economic power vis-à-vis Malaysia. It lends credence to its economic imperialism.³⁷

The fundamentalist Parti Islam Sa-Malaysia (PAS) is the most vociferous opponent of the policy. As stated by its youth leader Mustafa Ali: “Instead of looking east and looking west, the government should look to Islam if it wants to instill the qualities of hard work and discipline.”³⁸ Besides, the question was raised as to whether Malaysia really needs “models” from the already industrialized countries that developing countries are continually told to emulate.³⁹ But, thus far, there has been no response from the government to the criticisms; Mahathir seems to refrain from responding directly.

Whereas Singapore has downplayed its Learn-from-Japan campaign because of criticism from the public, Malaysia seems to be going full steam ahead with its campaign. At this stage, however, only a few concrete steps have been taken. In addition to the establishment of sogo shosha-style trading companies, the program to provide on-the-job technical training for about a thousand Malaysian youths at Japanese companies through 1984, and also in South Korea, has taken off since late 1982.

In this regard, Singapore may be one step ahead of its neighbor with respect to establishing its own training institutions, with Japanese assistance, in Singapore. The Japan-Singapore Training Centre, a joint venture, provides instructions to apprentice tradesmen in sophisticated Japanese manufacturing techniques, and the Japan-Singapore Institute of Software Technology provides training to computer programmers and systems engineers.

Malaysia sheds light on some interesting aspects of social engineering. The importance of an active role for government leaders in directing society is generally recognized, but there is a tendency to view social engineering as strictly an engineer-

³⁶ K. Das, “The Sun Also Sets,” *Far Eastern Economic Review*, September 8, 1983, p. 46.

³⁷ *Ibid.*; Muzaffar’s writings are also included in the volume edited by Jomo, *The Sun Also Sets*.

³⁸ “Malaysia Looks East.”

³⁹ Kua Kia Soong, “Look East.”

ing discipline. Mahathir and Lee Kuan Yew seem to have become the victims of stereotypic views of Japanese virtues, as disseminated by recent best-sellers on the many aspects of Japanese developments.

Mahathir's Look East policy, along with his concepts of Malaysia Incorporated and the recently announced Privatization Plan, should primarily be as a key element in his overall goals of social engineering: (a) to mold Malaysia into a nation of innovative entrepreneurs and skilled, disciplined blue-collar workers who will help to overcome the Malay dilemma and (b) to create vigorous private-sector-led economic growth that will ease dependence on government support.⁴⁰

In view of the goals, critics see the policy as poorly designed and simplistic. Some complain that Mahathir is practicing government by slogans, and contend that failure of the policies could produce results that could tarnish his entire economic program. Rather than mold the society into a new, harmonious nation, the policy may bring about serious disintegration. To look East, per se, may constitute no major problem, but the issues can be complicated by introducing the "Japanese factor" into Malaysia's domestic politics.

Thus far, the leaders in the three other ASEAN countries have shown no signs of following Lee and Mahathir. Even if the same interest in and admiration for the Japanese success exists, they seem cautious of explicitly promoting programs to emulate it.⁴¹ One reason may be that, whereas Lee and Mahathir are searching for an "ethos," found in the Japanese example, in the three other countries no such need is currently perceived.

In the three other ASEAN countries some suggest that the governments in fact should design programs and formulate more active policies to bring in Japanese know-how and technologies. Establishment of training institutions with full Japanese assistance, as in Singapore, and arrangements for trainees to work in companies in Japan, as in Malaysia, have often been cited and deemed desirable. At the private level, however, many institutions in these countries have embarked on teaching and propagating Japanese management systems and techniques. Although pursued less vigorously than in the two neighbors, learning from Japan has already become a regular feature in these countries.

Japanese Reactions

As might be expected, reactions by the Japanese have been mixed. Some Japanese scholars have joined their colleagues in Malaysia and Singapore in criticizing the policy, more or less for the same reasons, ranging from the general arguments based on sociocultural differences, including those pointing to the "dark side" of the

⁴⁰ Raphael Pura, "Malaysia in Spirited Debate over Private-Services Plan," *Asian Wall Street Journal*, September 7, 1983.

⁴¹ Only recently has the Indonesian vice president, Umar Wirahadikusumah, indicated in a speech the value of learning from Japan's success, albeit only in passing. But even this is the first of its kind in Indonesia at the official level.

Japanese experience, to the more specific issues of company management and labor relations. Japanese officials and businessmen have been more cautious, as suggested in press reports:

1. Some Japanese were disarmed at suddenly finding themselves the objects of Malaysian affection. "We were used to being criticized [in Southeast Asia]. . . . Now people want to emulate us head-long. . . . It's quite a new experience."

2. Some Japanese businessmen and officials worry about a possible backlash if hopes raised for a shortcut to industrial modernization are dashed because Japan fails to transmit the magic formula for success to its Malaysian pupils. "When expectations are high, we are a little fearful of the outcome," says a Japanese official. He says Japan is eager to cooperate with Malaysian plans, but acknowledges that many of his compatriots were surprised and "baffled" by Dr. Mahathir's initiative.

3. Japanese businessmen and officials, pleased with Dr. Mahathir's strongly pro-Japanese stance, hope the Malaysian policy will give Japanese industry a bigger edge in its business links there.

4. Some Japanese trading companies informally cautioned the Malaysians that it would be impossible to duplicate Japan's institutions, but they have offered assistance to Malaysia's new *sogo shosha*-style trading companies.

5. Some Japanese are uneasy about the responsibility thrust on them by the emulation of their method; but they are willing to help as much as they can, and most regard Singapore as a promising pupil.⁴²

In South Korea, despite some doubts by scholars, Mahathir's policy has won a positive response. As reported elsewhere: "From South Korea's point of view, Mahathir's call for technical help could not have come at a better time: it coincides with an industry-wide consensus here that South Korea should begin to raise its economic profile in Southeast Asia, which has so far been obscured by Japan's shadow."⁴³

The politics of learning from Japan, it seems, have become a complicated matter with wide-ranging consequences for both the pupils and the teacher. Because the learning process is a two-way affair, the Japanese can no longer ignore the call for assistance from the countries interested in the Japanese way of doing things. The Japanese, however, could be placed in an awkward position if learning from Japan is to function as an instrument for achieving economic and social objectives that are inevitably unique to each country.

For the pupils, as illustrated by Singapore and Malaysia, it would seem appropriate to first come up with a relevant paradigm of "learning the lessons" from the Japanese success, instead of being obsessed by stereotypic views on Japanese virtues. Whether this ultimately would imply imitating or transplanting the Japanese experience is secondary.

⁴²See Raphael Pura, "Malaysia's Vague Campaign," and "Learning From Japan."

⁴³Shim Jae Hoon, "Malaysia Goes East," *Far Eastern Economic Review*, February 5, 1982, pp. 95-96.

THE RELEVANCE AND IRRELEVANCE OF THE JAPANESE "MODEL"

If Japan is regarded as a successful example, although an especially difficult country and economy to use as a model, the art of learning the lesson from the Japanese experience requires the avoidance of stereotypes. As has been shown in many studies, the extraordinary successes of the Japanese economy cannot be ascribed to any single factor but, rather, from a combination of many factors, none of which predominates.⁴⁴ In other words, the success cannot be attributed simply to the Japanese work ethic.

Even though the importance of the hardworking Japanese cannot be discounted, Ozaki has provided all necessary explanations to demystify the work-ethic notion; in essence, the Japanese work hard not because they value hard work as a good thing, but for a variety of practical reasons.⁴⁵ Japanese farmers, for example, were forced to work hard because of the dictates of the natural environment, together with the harsh rule of the Tokugawa regime, and because of other factors such as the inheritance system. These factors cannot be recreated in other societies.

But the fallacy of Japan's uniqueness lies in the narrow definition of learning the lesson from Japan; that is, let us recreate all the necessary conditions (institutions) prevailing in the Japanese society to produce the same attitude toward work—otherwise the lesson will not succeed. The art of learning the lesson (from Japan or anywhere else) must be based on a reformulation of what is meant by "lesson(s)": What is the nature—not kind—of incentives or disincentives, institutions or the lack of them, that positively affect one's attitude toward work?

Take Japan's experience in the Meiji era; specifically, consider the factors accounting for agricultural growth and the mechanism enabling agricultural surpluses to be transferred to industrial development. It is not germane to determine whether Japan provides an example of "concurrent" development or illustrates "prerequisite" agricultural growth. Either way, there is nothing unique in Japan's agricultural development.⁴⁶

Of greater relevance to the ASEAN countries—excluding Singapore—is an understanding of the factors that account for the increase in Japan's agricultural productivity. As Table 2 shows, higher land productivity has compensated for the unfavorable endowment of land resources relative to labor.⁴⁷ This increase was possible because of the heavy investment in infrastructure (irrigation, etc.) and because of the diffusion of agricultural technology well suited to promote the relative efficiency of small-scale farms dependent on family labor.

⁴⁴See Patrick and Rosovsky, "Prospects for the Future."

⁴⁵Robert S. Ozaki, *The Japanese: A Cultural Portrait* (Tokyo: Charles E. Tuttle, 1978), especially the section "Work Ethic and All That."

⁴⁶See, for example, Kelley and Williamson, *Lessons from Japanese Development*.

⁴⁷The following discussion draws heavily on the work by Yujiro Hayami, *A Century of Agricultural Growth*.

Table 2
Agricultural Productivities and Land/Man Ratios

	Agricultural output per male farm worker ^a	Agricultural output per hectare of agricultural land ^b	Agricultural land area per male worker ^c
Japan			
1878–82	2.5	2.9	0.9
1957–62	10.7	7.5	1.4
Philippines			
1957–62	3.8	1.9	2.0

SOURCE: Yujiro Hayami and V. W. Ruttan, *Agricultural Development: An International Perspective* (Baltimore: Johns Hopkins University Press, 1971), reproduced in Yujiro Hayami, *A Century of Agricultural Growth in Japan* (Tokyo: University of Tokyo Press, 1975).

NOTES: ^a Wheat units per worker.

^b Wheat units per hectare.

^c Hectares per worker.

This is one lesson, not *the* lesson, and obviously a modest one. Why is it important? Take investment outlays first. The huge capital requirements for irrigation construction remain the main obstacle to raising land productivity in many developing countries and thus are a permanent source of intersectoral competition for public resources. Meiji Japan was in a favorable position in that it inherited a large portion of the necessary infrastructure from the Tokugawa period. This should not obscure the availability of the necessary overhead capital due to the favorable social returns, partly contributed by the farmers themselves, induced through *dynamic interaction between farmers and public agents*. The Philippines embarked on large investments in irrigation somewhat early (late 1950s), but they were based totally on government initiatives.

Consider now the diffusion of “appropriate” agricultural technologies. Indonesia, for example, exhibits a land distribution pattern similar to that in Japan, in which small-scale farms predominate (Table 3). A remarkable achievement in Japan was that the improved technologies did not alter the land distribution. The Japanese experience has shown that indigenous technologies can be superior (to imported ones), but the important aspect was the key role played by the *gono* class (landlords, who personally farmed only part of their holdings) in raising agricultural productivity by acting as village leaders both in the introduction of new technology and in improvements in the infrastructure, such as irrigation.

Table 3
Distribution of Farms by Size of Cultivated Land Area
(Percentages)

	Less than 0.5 ha	0.5-1 ha	1-2 ha	2-3 ha	3-5 ha	More than 5 ha
Japan						
1908	37.3	32.6	19.5	6.4	3.0	1.1
1970	38.0	30.2	24.1	4.8	1.7	1.3
Indonesia						
1963	43.6	26.5	18.2	5.7	3.5	2.5
1973	47.3	24.9	17.3	5.5	3.1	1.9

SOURCES: Japanese Data: Institute of Developing Economies, *One Hundred Years of Agricultural Statistics in Japan* (Tokyo, 1969); and Ministry of Agricultural and Forestry Statistics Research Division, *1970 World Census of Agriculture Report on Farmhouseholds and Population* (Tokyo, 1971); Indonesian Data: Central Bureau of Statistics, *Agricultural Census* (Jakarta, 1963 and 1973).

Our examination suggests a further lesson, namely, the important role of farm entrepreneurs. Can they be encouraged in countries such as Indonesia? There is no reason why they cannot, provided that the larger (wealthier) farmers are given incentives. The Land Tax Revision in Meiji Japan in 1873 provided such an incentive. An examination of Japan's agricultural history also shows the important role of the gono class in channeling resources from agriculture to nonagriculture. Farmers' "subsidizing" of other sectors during the process of development (industrialization) can also be observed in other countries, including Indonesia. But, apparently, it is the nature of the subsidy that matters.

This brief discussion may suffice to point to a general lesson that can be drawn from the Japanese experience, summarized in the following proposition: Combine the virtues of government-sponsored modernization with private-sector-led growth. How this has been applied in Japan, in terms of the mechanisms, may be unique, but the proposition itself is not a Japanese trait. It can be applied to other countries by selecting policies that take account of prevailing conditions—opportunities and constraints. Certainly, the Japanese experience cannot be transplanted in its original form.

An examination of the Japanese economic success after World War II would suggest the same lesson. Again, it is irrelevant to settle the question whether trade

expansion was caused by industrial growth or trade was the engine for growth. Either way, the Japanese case would not be unique.

As summarized by Patrick and Rosovsky, Japanese success after World War II cannot be described as miraculous, or as a consequence of some mysterious Oriental secret. Rapid economic growth results from a combination of favorable internal and external circumstances and supportive public policy. Noting that Japan, Inc. is a meaningless simplification or at best a misleading caricature, they nonetheless acknowledge the unusual relations between the public and private sectors in Japan.⁴⁸

Again, without providing elaborate explanation, the above suggests the same proposition: Combine the virtues of government-sponsored modernization with private-sector-led growth. The Japanese experience exhibits the following features: (a) major economic decisions are made only after extensive discussions, negotiations, and compromises between government and business (read big business), and through this cooperation, the planning horizons of both are lengthened, to the benefit of economic performance; (b) the Japanese government has demonstrated an impressive capacity of maintaining a relatively clear hierarchy of goals and, thus, both the government and the private sector can direct their efforts to solving the most serious problems facing the economy; and (c) the value of dynamism of private enterprise have been enhanced by the encouragement of government, which at the same time exercises a useful countervailing role without stifling private initiatives.⁴⁹

The test of the ability of the government to cooperate with—rather than control—the private sector has been and continues to be found in the formulation and implementation of Japan's "industrial policy," so well described by Chalmers Johnson in his thesis on the role of the developmental state in explaining Japan's economic performance. He suggests that "in states that were late to industrialize, the state itself led the industrialization drive, that is, it [took] on *developmental* functions," rather than stressing *regulatory* functions.⁵⁰

In this regard, the ASEAN countries can learn a relevant lesson from the Japanese experience. The different economic performances in the ASEAN-Four (Indonesia, Malaysia, the Philippines, and Thailand), as described elsewhere,⁵¹ are partly accounted for by the differing natures of the relationships between the governments and the private sectors. The differences can also be partly explained by the absence or existence of an industrial policy. These factors, if combined, promise to provide powerful explanations from which instructive lessons can be derived.

⁴⁸Patrick and Rosovsky, "Prospects for the Future," pp. 921–922.

⁴⁹Ibid.

⁵⁰See Chalmers Johnson, *MITI*.

⁵¹See the essay by Bruce Glassburner in this volume.

TENTATIVE CONCLUSIONS

The question whether the ASEAN countries can emulate Japanese practices of the type outlined above goes beyond the art of learning the “lessons.” If a lesson—one general lesson—is found worthy of serious consideration, it is that the body politic must find strategies to implement any policies, including “lessons” from other experiences. Here lies the art. It will not avail simply to impose systems, policies, or methods packaged under the trademark Made in Japan. Whether the institutions or mechanisms originating in Japan can be copied depends upon internal conditions in each country. Whether the same virtues and vices derivative from those institutions will be present in countries other than Japan cannot be predicted. Many countries have now introduced *sogo shosha*—style trading companies. In Japan itself they have been criticized for giving donations and bribes to politicians, but as stated elsewhere, it is the environment in which they operate, the corrupt political system, that gives rise to those practices.⁵²

Singapore and Malaysia suggest the limitations for an official “movement” of the sort discussed. However, whatever damage may have been caused in Singapore or Malaysia by the intense campaigns to learn from Japan and look East, all countries in Southeast Asia, in one way or another, are bound to absorb, borrow, copy, and modify some aspects of the Japanese way of doing things. The growing and important economic links between Japan and the ASEAN countries will continue to encourage a further interchange of ideas and practices. The Korean experience of learning from Japan may provide an instructive example for the ASEAN countries. Korea has conducted such a policy silently and perhaps in an obscure way, but systematically.

What would be the implications of the learning process—however obscurely this may be pursued—upon the *sensei-gakusei* relations involved? Because the learning process must be a two-way affair, the general environment for the relationship must be sound: both sides must see the value of it. The euphoria in some ASEAN countries with the efforts to transplant the Japanese work ethic may soon be over. The task of learning from Japan is far more complex, and to its accomplishment, the Japanese themselves can offer little in addition to that which they have already contributed. The central challenge lies with the governments and private sectors of the countries exploring the Japanese experience.

⁵²See Yoshihara Kunio, *Sogo shosha*, p. 294.

6. The Newly Industrializing Countries in Asia: Growth Experience and Prospects

Edward K. Y. Chen

INTRODUCTION

The phenomenon of newly industrializing countries (NICs) is undoubtedly the most notable development in the world economy in the past twenty years. A dozen or more NICs have been identified in the literature at different times, which have included Brazil, Argentina, Chile, and Mexico in South and Central America; Israel and Turkey in the Middle and Near East; Hungary and Yugoslavia in Eastern Europe; and the "Gang of Four"—Hong Kong, South Korea, Singapore, and Taiwan—in Asia. Aside from the Eastern European socialist countries, it seems that only the Asian NICs have continued to grow in the face of the external shocks after the first oil crisis in 1973–75. The Asian NIC phenomenon is therefore of special interest to both policymakers and scholars. Although there is no dearth of studies on the growth experiences of the individual Asian NICs, there are few comparative studies on the Asian NICs as a group.¹ This essay will therefore focus on the comparative aspects of the economic policies and economic systems in the "Four," with the major objectives of identifying the reasons for their success and of examining the prospects for continuing prosperity under different economic and political scenarios.

The NIC phenomenon is characterized by a rapid growth in income accompanied by an equally or even more rapid expansion in manufactured exports. With the

¹ The earliest work on a comparative study of the Asian NICs was probably E. K. Y. Chen (1979), which was based on a thesis submitted to the University of Oxford in 1976. A neoclassical approach is used to examine the causes and effects of rapid growth in the Asian NICs and Japan. More recent studies include Balassa (1981), which concentrates on adjustments after 1973; Hofheinz and Calder (1982), which is intended for general readers; Turner and McMullen (1982), which focuses on trade and implications for developed countries; and Matthews (1983), which makes special reference to Canada. For a radical economist's approach, see Hamilton (1983).

exception of Hong Kong, the NICs in Asia and other places went through a stage of import-substitution industrialization before they entered the stage of export-oriented industrialization with high growth rates. On the basis of these experiences, it is widely believed that export promotion is a better policy for economic development than import substitution.

A number of questions, however, can be raised in this connection. First, why is export promotion a better policy? Is export promotion a better policy only in the context of such small economies as the Asian NICs? Second, is the effective implementation of such policy in the Asian NICs more important than the choice of the policy per se? Increasingly, noneconomic factors such as Confucian ideology and type of political organization have been used to explain the success of the NICs. These factors may affect the implementation more than the choice of export promotion policies.² Third, to what extent is the success of the Asian NICs dependent on external resources and a favorable international economic environment? Hence, an interesting question is whether the Asian NICs can continue their rapid growth in the face of change in both internal and external economic environments in the coming years. In all these countries, political development is an additional concern where their prospects are considered.

This contribution will not attempt to trace and discuss in detail the record of economic growth and policy changes in the individual Asian NICs. As noted, this is not necessary in view of the number of existing country case studies. Our approach is to conduct a cross-section examination of these countries with the hope of coming up with some generalizations about the economic systems of the Asian NICs, whether emphasizing similarities or differences. Attention will not only be given to the policy changes that have led to rapid economic growth, but also to the concomitant achievements in income equality. The last section will discuss recent policy changes and economic growth prospects of these Asian NICs.

ECONOMIC GROWTH AND STRUCTURAL CHANGE

The experience of rapid growth and structural change in Hong Kong, South Korea, Singapore, and Taiwan has been well documented in so many national studies that it will suffice here to briefly mention the following statistics: In Table 1, the very high growth rates of both GDP and GDP per capita in the Asian NICs during the period 1960–81 is shown. The somewhat lower average growth rate of South Korea in relative terms 1971–81 was the result of the negative growth in 1980 in the face of external shocks. Singapore suffered from a negative growth in 1964 because of the loss of entrepot trade with Indonesia due to regional political conflicts. Hence the average growth rate was somewhat lower for the period 1960–70. The growth rates for

² For discussions on Confucianism and economic development, see, for example, Little (1978), Morishima (1982), and Hofheinz and Calder (1982). For ideology in general and economic development in Taiwan, see Fei (1982).

Japan and the United States are also shown in Table 1. In both cases, growth rates were much lower in the second period (1970–81), indicating that these two developed countries were hard hit by the oil crises, although the Asian NICs were able to adjust to external shocks. It is also noteworthy that Japan has not so far been able to revive its fast economic growth of the 1960s. Indeed, many economists believe that Japan has reached such a mature stage of growth that its growth rate will level off at 3–4 percent per annum for years to come.

Table 1
Growth Performance of Asian NICs, Japan, and the United States

	Average annual growth rates (%)				U.S. dollars
	GDP ^a		Per capita income ^a		Per capita income
	1960–70	1970–81	1960–70	1970–81	1981
Hong Kong	9.8	9.6	7.3	7.0	5,100
South Korea	8.6	7.0	5.7	5.3	1,700
Singapore	7.9	9.8	5.4	7.7	5,240
Taiwan	9.6	9.2	6.7	7.1	2,577
Japan	10.5	4.6	9.4	3.5	9,500
U.S.	4.3	2.6	3.0	1.5	12,567

SOURCES: International Monetary Fund, *International Financial Statistics*, various issues; Executive Yuan, *Taiwan Statistical Data Book*, various years.

^a At constant prices.

Despite the high growth rates of the Asian NICs in terms of per capita income, however, these countries are still a long way behind such developed countries as Japan and the United States. Although Hong Kong, Singapore, and Taiwan are the highest per capita income countries in Asia, after Japan, South Korea's per capita income is lower than that of Malaysia. In 1981, the per capita income of Malaysia was U.S.\$1840. Nonetheless, Malaysia is at most a near NIC inasmuch as its somewhat high level of per capita income is due mainly to its resource-based exports, especially oil. The degree of industrialization is surely higher in South Korea than in Malaysia.

The basis of rapid growth in all Asian NICs is the expansion in manufactured exports. In Table 2, the growth of total exports in all four countries during the period 1960–81 is shown. The growth in manufactured exports was even faster. This is illustrated by the percentage share of manufactured exports in total exports in Table 1 for 1960 and 1980. Because Hong Kong is resource-scarce and began rapid industrialization some years before 1960, its share of manufactured exports in total exports was already large in 1960. On the other hand, South Korea's rapid in-

dustrialization did not start until a few years after 1960 and hence the share in 1960 was small. In Singapore, a significant percentage of total exports is made up of petroleum products. In 1982, this percentage was 32.

Table 2
Total Exports and Manufactured Exports in Asian NICs

	Average annual growth rate of exports (%)		Manufactured exports as % of total exports	
	1960-70	1971-81	1960	1980
Hong Kong	15.2	21.2	80	96
South Korea	40.1 ^a	36.0	14	90
Singapore	8.8	23.8	26	54
Taiwan	25.3	29.3	32	91

SOURCES: World Bank, *World Development Report*, various years; Executive Yuan, *Taiwan Statistical Data Book*, various years; Census and Statistics Department, *Hong Kong Review of Overseas Trade*, various years.

^a 1961-70.

As can be expected, the rapid growth of income in the Asian NICs was accompanied by rapid structural change. In terms of GDP by industry, a rapid increase in the relative importance of manufacturing and a concomitant decline in the relative importance of agriculture can be observed in Table 3. However, because Hong Kong and Singapore are city-states, the primary sectors have always been small. Yet, rapid industrialization has resulted in a decline in the share of agriculture in GDP from 4 percent in 1960 to 1 percent in 1980 in both Singapore and Hong Kong.

It may at a first glance be surprising to find that there was no increase in the share of manufacturing in GDP in Hong Kong during the period 1960-80. The explanations are that, first, by 1960 industrialization had already reached a fairly high level in Hong Kong,³ and, second, in the 1970s Hong Kong emerged as an international finance center, a development that resulted in a slowing down of the growth of manufacturing but a rapid growth in financial services.⁴ In Table 4, the share of manufacturing in Hong Kong's GDP is shown to have reached its peak in 1970, and there has been a decline ever since, especially after the late 1970s. On the other hand, there has been a corresponding opposite movement of the share of financial and commercial services.

³ Data before 1960 are not available. In fact the statistics for 1960 and 1980 are not exactly comparable because different methods of estimations were used.

⁴ For the rise of Hong Kong as a financial center, see Jao (1979), Lee and Jao (1982), E. K. Y. Chen (1983c).

The higher figure for 1961 was due to the property boom, and that for 1972 to both the property and stock-market boom. Since the late 1970s, the growth of this sector has been the result of the expansion in international financial business. The experience of Singapore is similar; there has also been a rapid growth in financial activities.⁵ The share of financial and commercial services in Singapore's GDP increased from 11.3 percent in 1960 to 21.9 percent in 1980. In fact, up to the mid-1970s, financial activities were even more highly developed in Singapore, where the Asian Dollar Market was established in the late 1960s.⁶

Table 3
Share of Agriculture and Manufacturing in GDP
(Percentages)

	Agriculture		Manufacturing	
	1960	1980	1960	1980
Hong Kong	4	1	24	24
South Korea	37	16	14	28
Singapore	4	1	12	28
Taiwan	29	8	22	42

SOURCES: E. R. Chang (1969); Census and Statistics Department, Hong Kong, *Estimates of GDP, 1983*; Bank of Korea, *Economic Statistics Yearbook, 1983*; Department of Statistics, *Yearbook of Statistics, Singapore, 1982/83*; Executive Yuan, *Taiwan Statistical Data Book, 1983*.

In South Korea and Taiwan, the decline in the relative importance of agriculture is drastic. The share of manufacturing in GDP in Taiwan is much higher than in the other three Asian NICs because Taiwan has not yet developed its financial and commercial activities as Hong Kong and Singapore have, and has at the same time reallocated more resources from agriculture to manufacturing than South Korea. There is therefore a heavier dependence on manufacturing in Taiwan than in the other three.

⁵ See Lee and Jao (1982) and Tan (1978).

⁶ Hong Kong lost the opportunity to Singapore because the government was reluctant to abolish the withholding tax.

Table 4

Share of Manufacturing and Financial Services in Hong Kong's GDP
(Percentages)

	Manufacturing	Financial and commercial services
1961	23.6	17.4
1970	30.8	14.5
1972	28.0	21.6
1974	25.0	18.0
1976	27.4	18.8
1978	26.5	20.4
1980	23.9	22.9
1981	22.8	23.8
1982	21.8	22.1

SOURCES: E. R. Chang (1969); Census and Statistics Department, Hong Kong, *Estimates of GDP*, various years.

FROM IMPORT SUBSTITUTION TO EXPORT ORIENTATION

Development strategies for industrialization can be broadly divided into import substitution and export orientation, strategies not mutually exclusive. Import substitution can further be divided into a first stage of "easy" import substitution during which nondurable consumer goods are produced, and a second stage of "difficult" import substitution for the production of consumer durables, intermediate goods, and capital goods. The first-stage import substitution (IS1) is easy because production is roughly in line with the prevailing comparative advantage. The second-stage import substitution (IS2) becomes difficult because of rapidly increasing costs brought about by limited economies of scale, dependence on foreign resources and expertise, and development of monopolistic controls. Import substitution is associated with a package of policies aiming at protecting the infant industries and discriminating against exports. Such policies include overvalued exchange rates, multiple exchange-rate systems, import controls, high tariffs, and quantitative restrictions on imports. These measures discriminate against exports because they force exporters to face import prices of inputs above the world level.

Export orientation can also be divided into a first stage of exporting manufactures that are more labor-intensive (EO1) and a second stage of exporting products more capital- and technology-intensive (EO2).

Thus, for industrialization in developing countries, four possible stages of development exist: IS1, IS2, EO1, and EO2. Generally, countries pass through the various stages in the order here listed. Latin American countries went from IS1 to IS2 for some time before switching to EO1, during which high growth rates were

experienced. But, it seems that they went from EO1 to EO2 so readily and extensively that they got into trouble. The Asian NICs did not go through IS2. Hong Kong did not even pass through IS1, and in Singapore, the IS1 stage was very short. Both South Korea and Taiwan moved into EO1 when the stage of easy import substitution was over. As early as the beginning of the 1970s, both South Korea and Taiwan began to diversify into capital- and technology-intensive industries and therefore in some ways went into the stage of EO2. They have been more cautious than the Latin American countries. Thus, despite some setbacks in some of their heavier industries, particularly the energy-intensive ones, they have managed to succeed in establishing some capital- and technology-intensive industries and in upgrading many of their existing light industries. Hong Kong and Singapore began to move into EO2 after the late 1970s.

Thus, the common problems facing all Asian NICs under consideration are related to the industrial transformation from EO1 to EO2, and it seems that this transformation is more intriguing than that from IS1 to EO1. We shall return to this subject when the prospects of the Asian NICs are discussed. For the time being, let us summarize the policy changes in the various Asian NICs that have led to export-oriented industrialization and high growth rates in these countries.

In the process of industrialization, Hong Kong constitutes the only exception among developing countries in not having gone through an import-substitution stage before export orientation. The beginning of industrialization in Hong Kong was the result of historical factors that included the Communist takeover in China and the Korean War.⁷ The change of regime in China gave rise to a reduction in entrepot trade and to massive flows of capital, labor, and entrepreneurship from China into Hong Kong. The Korean War resulted in a United Nations embargo, which further reduced Hong Kong's volume of entrepot trade. Thus, it was for survival that Hong Kong had to industrialize, taking advantage of the inflow of production factors for industries.

Under a typical colonial administration, it was not expected that the government would play an important role in directing the transformation of the economy. Fortunately, because of laziness or the *laissez-faire* attitudes of the government, no measures were taken to protect the newly established firms and industries, and hence no biases against exports developed. Under these circumstances, Hong Kong could fully exploit its comparative advantage from the beginning for export-oriented industrialization. Given small size of the domestic market, lack of resources, and the possibility of obtaining imported inputs at world prices, entrepreneurs certainly will go for export orientation to maximize their earnings.

Although Singapore is smaller than Hong Kong in size and population, it went through a brief period of import substitution.⁸ With the development of self-government in 1959, Singapore attempted to promote industrialization through active government programs. In the years 1960–63, protective tariff and quantitative import

⁷ See E. K. Y. Chen (1980b).

⁸ For Singapore's experience of economic development, see, for example, S. A. Lee (1973) and P. Chen (1983).

restrictions were introduced. An important reason for Singapore to pursue import substitution policies then was the hope of establishing a common market with Malaysia. For two years after Singapore's independence, in 1965–67, more import duties and restrictions were introduced. The common market never came into being. Singapore was then forced to adopt an export-oriented development strategy. In the Economic Expansion Incentives Act of 1967, the tax rate on profits was reduced from 40 percent to 4 percent. At the same time, there were other tax concessions related to expenditure on research and development and capital equipment. Although tariffs on some imports remained, the incidence of import quotas was gradually reduced.

In South Korea and Taiwan, the switch from import substitution to export orientation necessitated a reform in exchange-rate policy in addition to import liberalization and export incentives. The policy changes in South Korea took place in 1960–61 with the establishment of the Park Chung Hee government.⁹ It was believed that (a) the easy stage of import substitution was completed and it was difficult to turn to a higher stage of import substitution, and (b) under these circumstances, the balance-of-payments problem could only be solved by export promotion. It turns out that the belief was correct. To promote exports, first the won was devalued in 1961 (from 62.5 won to 130 won per U.S. dollar) and again in 1964 (from 130 won to 256 won per U.S. dollar); second, measures to liberalize import restrictions were taken, especially after the devaluation in 1964; and third, various export incentives were introduced. These included tariff and tax concessions granted to imports of raw materials by exporting firms, accelerated depreciation, and various export credit subsidies. An interesting form of export incentive is the assignment of export targets to industrial associations, firms, and regions. When export targets are not met, measures are taken to rectify the situation, ranging from threats of sanctions to provision of additional incentives and government actions to remove bottlenecks.

Rigorous import-substitution policies were pursued by the Taiwan government during the period 1951–57. Strict import controls were imposed in 1951 and accompanied by a multiple-exchange-rate system. Import substitution was generally a success during this period, leading to a doubling of manufacturing production.

By 1958, however, easy import substitution came to an end and the manufacturing sector was faced with many problems, including falling prices and runaway competition. A series of policies switching to export orientation were adopted during 1958–60.¹⁰ They were preceded by the 1955 Rebate of Taxes on Export Products Regulations, which provided for the rebate of import duty, defense surtax, and commodity tax for exporting products. Like any package of policies aiming at export promotion, the measures taken by the Taiwan government included reforms in exchange-rate systems, import liberalization, and export incentives. First, the multiple-exchange-rate system gradually collapsed into a single-rate system, and the

⁹ For South Korea's experience of economic development, see, for example, Brown (1973), Frank et al. (1975), Hasan and Rao (1979), Krueger (1979), and Mason et al. (1980).

¹⁰ For Taiwan's experience of economic development, see, for example, Hsing (1971), Lin (1973), P. S. Ho (1978), Galenson (1978), Li and Yu (1982), and Kuo (1983).

exchange rate applicable to the bulk of imports and to exports by private enterprises was devalued from around NT\$25 to close to NT\$40 per U.S. dollar. Second, the government gradually liberalized and finally abolished the commodity import-quota system. Import controls were also liberalized. In 1961, domestic manufacturers seeking protection had to show that they were capable of satisfying domestic demand and that their prices did not exceed the prices of comparable imports by more than 25 percent. In 1964, this was reduced to 15 percent, in 1968 to 10 percent, and in 1973 to 5 percent. The reduction in tariffs was reflected by the decline of the ratio of net customs revenues to total imports from 42 percent in 1955 to 28 percent in 1960, 22 percent in 1965, 18 percent in 1970, and 14 percent in 1976.¹¹ Third, the provision of export incentives included the setting up of three export-processing zones in Kaohsiung, Nantze, and Taichung, cheap loans for exports, further tax concessions for some export products, and export insurance and promotion by government organizations.

The experiences of the Asian NICs indicate that only under export-oriented industrialization can sustained fast economic growth be achieved. Under import substitution, any success is short-lived. An important question is why export orientation is a better policy. If one goes by the traditional static trade theory, the gain from international trade will only lead to a once-and-for-all increase in income as a result of improvement in resources reallocation. On the contrary, the infant industry argument hinges on the dynamic effects of a learning process that will lead to higher economic growth. Similarly, the superiority of export orientation has to be explained on the basis of dynamic effects. Krueger (1981) gives the following explanations: First, export promotion is a better policy because it involves incentives rather than controls, and because measures can be applied more generally across the board. Whereas import-substitution policies discriminate against exports and create market distortion, many export-promotion policies give similar incentives to production for domestic and for export markets. Also, whereas import controls are usually highly selective, export incentives usually do not differentiate much among individual export commodities.¹² Second, it is easier to detect the effectiveness of export-promotion policies because export performance can be easily observed. Thus, policy mistakes of export promotion can be more quickly corrected. Third, export promotion gives industries the opportunity to enlarge their markets and achieve greater economies of scale. Fourth, export-oriented development forces industries to compete in the international market and achieve greater X-efficiency.

These explanations are not the complete story. To explain the generation of sustained growth under export orientation, we need a virtuous-circle hypothesis. It has been shown that the export sector usually has a high rate of profits and a higher propensity to save.¹³ This can perhaps be explained by Krueger's analysis that exporting firms achieve greater economies of scale and X-efficiency. In the Asian

¹¹ Quoted in Lee and Liang (1982, p. 315).

¹² Balassa (1981, essay 1).

¹³ E. K. Y. Chen (1977 and 1979) and Maizels (1968).

NICs, the rapid growth of exports was accompanied by a high rate of capital formation. In Table 5 the way in which the rapid growth of domestic capital formation has been increasingly financed by domestic saving is illustrated. Foreign capital (aid, loan, or investment) was crucial to the development of all Asian NICs at certain stages. But in all cases, the level of domestic saving rapidly increases as exports grow. It seems that a two-way relationship exists between saving and investment on the one hand and export growth on the other, giving rise to a virtuous circle of development.

Table 5
Investment and Saving in Asian NICs
(Percentages)

	Average annual growth rate of capital formation		Investment share ^a Saving share ^b			
	1960-70	1970-81	1960	1981	1960	1981
Hong Kong	6.9	14.1	18	30	6	24
South Korea	23.6	12.2	11	26	1	22
Singapore	20.5	7.2	11	42	-3	33
Taiwan	15.3	12.9	17	28	11	23

SOURCES: World Bank, *World Development Report, 1983*; Executive Yuan, *Taiwan Statistical Data Book, 1983*.

^a Investment share is gross domestic capital formation as a percentage of GDP.

^b Saving share is gross domestic saving as a percentage of GDP.

We can also explain the superiority of export orientation over import substitution by the two-gap model (Chenery et al., 1962, 1966). This model, at the risk of simplification, asserts that export growth will generate foreign-exchange earnings to overcome the foreign-resources constraint, which for developing countries is more binding than the domestic-resources constraint. It implies that export growth will enable a developing country to import capital and intermediate goods, and technology for growth in productivity and therefore income. It has been shown by a simple simultaneous-equation model that these hypothesized relationships did exist in the Asian NICs.¹⁴ Thus, inasmuch as the availability of foreign resources is a binding constraint, export orientation is a better policy than import substitution. The gain from trade in this case is not only static but also dynamic in the sense that export growth will initiate a dynamic process of capital accumulation and technological progress.

Even if export orientation is a better policy, one might still ask whether the stage of import substitution is necessary as a condition for export orientation. It seems

¹⁴ E. K. Y. Chen (1980a).

economists increasingly believe that import substitution is not really necessary.¹⁵ This is an issue difficult to generalize. It depends on the initial conditions of the country and the type of industries developed. It is certainly difficult to conceive that manufactured products can be produced immediately at world competitive prices without some previous industrial base. Even if one can cite examples, like garments and electronic products, that can penetrate world markets successfully without first producing for the home market, these products could not have been manufactured at such competitive prices without the industrial base and infrastructure created by the manufacture of other products under import substitution. In Hong Kong and Singapore, an infrastructure favorable to export-oriented industrialization was built during the entrepot stage of economic development. Also, Hong Kong and Singapore are special cases because industrialization was to a large extent triggered by the inflow of entrepreneurs—from Shanghai in Hong Kong and from developed countries in Singapore. A stage of import substitution for the breeding of indigenous entrepreneurship could therefore be avoided. Thus, Hong Kong did not undergo an import-substitution stage and Singapore could have done so if it had so chosen.

WHAT MAKES EXPORT ORIENTATION SUCCESSFUL?

Even if export orientation is in theory a better policy, there is no assurance that a country adopting this policy will experience fast economic growth. The experience of the Asian NICs seems to suggest that the success of export-orientation policies depends largely on the effectiveness of the government in implementing such policies, and on the availability of the appropriate factor inputs.

With the exception of Hong Kong, the governments played vital roles in the economic growth of the Asian NICs. It is a misconception of many Western economists (including Milton Friedman) that the Asian NICs represent the dreamland of the classical economists. Even in Hong Kong, the government has monopolistic control over land, through whose allocation the direction and level of economic activities are affected. In the other three Asian NICs, active policies of the governments at both the micro- and macrolevels affect the decisions of private individuals, and the governments also directly intrude by setting up public enterprises. For instance, in South Korea in 1972, the public-enterprise sector had a share of 9.1 percent in GDP and 13.1 percent in nonagricultural GDP. This is very high by the standard of capitalist economies. What distinguishes the Asian NICs from other developing countries is the effective implementation of export-promotion policies. This is brought about by an efficient, growth-oriented government and a harmonious government-business relationship in all Asian NICs.

In South Korea, the Park government, unlike the Rhee government that it succeeded, was committed to growth and to treating economic growth as a priority second only to national and personal political survival. More important, Park succeeded in influencing public officials and then businessmen to be committed to the

¹⁵ Scott (1978) and Myint (1982). Their case in point is Taiwan but their arguments seem general.

same goal of economic growth. In general, South Korea has a group of officials who are efficient in making policies and carrying them out. The same is true for the Taiwan government under the Chiangs. Whether to gain political survival after their defeat on the mainland or for some other reason, the Chiang government was equally committed to economic growth and managed to breed a class of able technocrats at the early stage of economic development.

In Hong Kong and Singapore, colonial rule created a class of high-quality bureaucrats capable of implementing policies, though not necessarily equally capable of initiating and formulating them. In Hong Kong, policy-making was assisted by a power elite consisting of the directors of the big British and Chinese corporations. Most of the appointed, unofficial members of the executive and legislative councils come from this power elite. Generally they are capable and committed to the growth of their companies and the economy as a whole. In Singapore, a new class of leaders brought up by Lee Kuan Yew and his People's Action party has arisen to become the power elite in policy-making.

The governments of the Asian NICs are all effective and at the same time autocratic in various ways. Does this imply that effective governments have to be autocratic? The answer is not clear and cannot be generalized, but the experience of the Asian NICs seems to suggest that autocracy creates stability and effective implementation of policies.¹⁶ Confucianism, which has a deep influence in all Asian NICs, might have something to do with this.¹⁷ Under the influence of Confucian teachings, people are more prepared to accept an absolute government and a hierarchical system; also they have great respect for education and officialdom. Thus, at least at the beginning of economic development, the Civil Service was able to attract people of high quality.¹⁸ This participation could at least partly explain why, in the Asian NICs, export-oriented policies were effectively carried out.

No matter how effective the bureaucrats are, policies cannot be smoothly carried out without the cooperation of the private sector. In Hong Kong, the private-sector power elite is fully represented in lawmaking and policy-making. Furthermore, the Hong Kong government has by and large adopted a nonintervention policy (except perhaps in the allocation of land), and hence traditionally a harmonious relationship exists between the government and business. In South Korea and Taiwan, there are large financial groups with highly centralized family control through holding companies. They are called *chaebol* in South Korea, written with the same Chinese characters as the Japanese *zaibatsu*. Unlike the Japanese *zaibatsu*, the Korean *chaebol* do not cluster around core banks, and usually play a supporting but subordinate role to the government. The big financial groups in Taiwan might involve banks but, like the Korean *chaebol*, would not challenge the power of the government. To characterize the amicable government-business relationship in Japan, people talk about "Japan,

¹⁶ See Taira (1983) and Johnson (1984).

¹⁷ Morishima (1982).

¹⁸ Johnson (1982).

Inc.” Similarly, we could talk about “Korea, Inc.” or even “Taiwan, Inc.” But their natures are different.¹⁹ In Singapore, local entrepreneurship did not rise until recently. For a long time foreign investors have been dominating most economic activities and still do. The relationship between the government and foreign investors has been very cordial. At all times, the Singapore government has given foreign investment significant tax and other concessions.

Despite the existence of capable bureaucrats and an amicable government-business relationship, export-oriented policies would not have generated good results without the availability of the right kind of factor inputs to support export-oriented industrialization. Let us here examine some features of the supply of labor, entrepreneurship, and capital in the NICs under study.

Labor

In the first stage of export-oriented industrialization, labor-intensive products are produced. It is therefore essential that the NICs have an efficient labor force for the production of exportables at world competitive prices. The following points have been made to explain the low labor costs (after adjustment for productivity) in the Asian NICs:

First, Fields (1982) argues that a neglected factor in explanation of the success of the Asian NICs is the wage-setting process. He mentions that in the Asian NICs the manufacturing wage is about 20 percent higher than the agricultural wage; by contrast, in Latin America and Africa, wages in manufacturing are more than double those in agriculture. In developing countries other than the Asian NICs, Fields asserts that some institutional forces in the wage-setting mechanisms have resulted in manufacturing wages well above the market equilibrium and therefore increased the labor cost and level of unemployment. Such institutional factors include minimum-wage laws, strong labor unions, generous government pay policies (which often set the pattern of wages for the rest of the economy), and high-pay policies of multinationals.

These institutional factors are largely absent in the Asian NICs. For instance, there is a minimum-wage law in Taiwan but the set level is so low that it does not operate in practice. In South Korea, Singapore, and Taiwan, trade unions are controlled by the government. Only in South Korea are trade unions permitted to bargain over wages. Trade unions in Hong Kong were (and to a large extent still are) weak because they are widely divided as a result of political differences.²⁰ Singapore experienced a period of intense left-wing union activity and labor unrest in the 1950s. Since the early 1960s, only the National Trades Union Congress, representing the moderates and supporting the People’s Action party leadership, has been permitted to exist.²¹

¹⁹ Mason et al. (1980) and Jones and SaKong (1980).

²⁰ See England and Rear (1982).

²¹ For the development of industrial relations in Singapore, see Deyo (1981).

Second, surplus-labor models have been used to approximate economic development with unlimited supplies of labor at low wage rates in the Asian NICs.²² Essentially, it is argued that agricultural development was successfully carried out in South Korea and Taiwan, and the agricultural sector was therefore able to relieve labor force to the manufacturing sector, thus keeping down manufacturing wages.²³ In both South Korea and Taiwan, successful land reforms were carried out, which had not only redistributive effects but also a positive impact on incentives and therefore productivity. Taiwan's industry has enjoyed a continuous net outflow of capital from agriculture, through government taxes and other direct and hidden levies.²⁴ In South Korea, export incentives have not been biased against agricultural products, whose export has continued to increase. In Hong Kong and Singapore, owing to the relative insignificance of agriculture, the source of surplus labor has been immigrants, from China in Hong Kong and from Malaysia and Indonesia in Singapore.

Third, the success of the Asian NICs is also frequently explained by the work ethic of the workers in these countries. They are hardworking, productive, and docile. Also their average standard of educational attainment is higher than in other developing countries. Confucianism, which advocates obedience, hard work, and respect for the learned, has been commonly regarded as the underlying factor for this characteristic of the labor force in the Asian NICs.

Entrepreneurship

At least in the early stages of export orientation, growth is largely demand determined in the sense that entrepreneurs try to produce whatever the overseas markets want. In this case, an ample supply of adaptable and dynamic entrepreneurs is required.

The presence of a large entrepreneur class distinguishes the Asian NICs from other developing countries. However, the entrepreneur class came initially from outside. Only gradually does the diffusion of the initial entrepreneurship give rise to indigenous entrepreneurs. In Hong Kong, the Communist take-over in China resulted in the inflow of many entrepreneurs, particularly the textile industrialists from Shanghai, to Hong Kong. They have played a key role in the industrialization of Hong Kong from the early years in the 1950s. In South Korea, many entrepreneurs are from the North, where some industrialization took place during the time of Japanese rule. In Taiwan, the mainlanders who moved to Taiwan in 1949 make up a large part of the entrepreneur class.

In none of these cases, however, is there evidence to support the Weber and Hagen hypotheses that emphasize the importance of religion, ethnicity, and social derogation as explanations for the rise of the entrepreneur class.²⁵ Those people who

²² For Taiwan, see Ranis (1978) and Myint (1982); for Hong Kong, see E. K. Y. Chen (1976).

²³ See, however, Y. Ho (1972).

²⁴ T. H. Lee (1971).

²⁵ Weber (1930) and Hagen (1962).

migrate account for a larger than proportionate share of entrepreneurs simply because they tend to be the more educated and those from the premodern industrialist class. Singapore lacked indigenous entrepreneurs at the early stage of industrialization. And indeed, even today Hong Kong, South Korea, and Taiwan have a much larger number of indigenous entrepreneurs than Singapore. From the beginning, Singapore has depended on foreign investment, though the local overseas Chinese have also played an important role. From this point of view, the Singapore economy, despite the common belief, has a more shaky foundation than the other three. For a long time, the strength of the Singapore economy has depended on an effective government and an efficient foreign sector rather than on the indigenous private sector. It is difficult to estimate the dynamism and resilience of the Singapore indigenous private sector because it has so far not been tested.

Capital

As shown in Table 5, in the Asian NICs under study the level of saving was initially much lower than the level of investment, implying that foreign-capital inflows had to be depended upon to fill the gaps. Thus, many analysts attribute the success of the Asian NICs to the availability of foreign resources at a critical moment in the breaking of the vicious circle of development. More specifically, American aid to both South Korea and Taiwan is regarded as a special factor explaining the subsequent fast growth in these two countries.

Some recent studies, however, reach a somewhat different conclusion.²⁶ Although it is admitted that aid was important to economic survival and development in South Korea up to the end of the 1960s and in Taiwan up to the mid-1960s, it is recognized that the role of foreign capital in these cases was simply to trigger a series of domestic responses. It is observed that the level of domestic saving began to increase quickly and the economy moved toward self-sustained growth. Thus, the crux of the matter is not exactly the inflow of foreign capital but more the positive responses of such inflow.

We can find many examples of continuous dependence on foreign capital and aid without signs of self-sustained economic growth. Hong Kong has not had foreign aid, though in the 1950s it was estimated that one-third of its capital accumulation came from abroad, most of it mainland Chinese or overseas Chinese capital. Singapore on the other hand received assistance in the form of British aid and fairly hard loans in the early years of its independence. But in all cases it is not so much their luck in obtaining foreign resources as their ability to make good use of such resources that explains their success.

Foreign resources flowing to developing countries can be categorized as grants, public loans, private loans, and foreign direct investment. Both South Korea and Taiwan received a significant amount of American aid in the form of grants in the

²⁶ Little (1978).

earlier years. In South Korea, grants have been given to public and publicly guaranteed loans since the mid-1960s. The share of foreign direct investment (FDI) in total capital inflows in South Korea has been much smaller than in Hong Kong, Singapore, and Taiwan. But the importance of FDI has been steadily increasing since the mid-1970s. More recently, the Korean government has further opened its door to more categories of industries.

Table 6
Foreign Capital Inflows in South Korea
(Percentages)

Item	1962-66	1967-71	1972-76
Public loans ^a	24.1	71.4	81.8
Private loans	1.2	5.8	6.6
Foreign direct investment	1.5	3.2	11.3
Grants	73.2	19.6	0.3
Total	100.0	100.0	100.0

SOURCE: Westphal et al. (1981), based on data provided by the Economic Planning Board, South Korea, and the World Bank.

^a Including publicly guaranteed loans.

On the other hand, the relative importance of FDI in total capital inflows has declined, and the relative importance of private and public loans has increased. In fact, Taiwan has gradually become a country with net capital outflow. In addition to portfolio investment abroad, many Taiwan firms have themselves undertaken FDI. Since the early years of industrialization, Singapore has been dependent on FDI. It is estimated that around 1973, multinational corporations accounted for 83.5 percent of Singapore's total domestic exports.²⁷ It is believed to still be about 75 percent. FDI is also an important factor in Hong Kong's industrial development. But the importance has been declining in terms of output and employment generation in manufacturing. In 1981, foreign firms in Hong Kong employed only 10 percent of the total manufacturing labor force and exported only 16.8 percent of Hong Kong's total domestic imports.

But, following the Hymer-Kindleberger tradition, we should treat FDI as a package consisting of not only capital but also technology and management and marketing skills. Foreign firms have generally been an important agent for the transfer and diffusion of technology.²⁸ In Hong Kong and Singapore, foreign investment goes

²⁷ Chia (1972).

²⁸ For technology and multinationals in Hong Kong, see Chen (1983b).

beyond manufacturing and is of equal or even greater importance in the financial sector. In both Hong Kong and Singapore, there are no local equity requirements and no restrictions on dividend or capital remittances for foreign investment. With the exception of Hong Kong, where the tax is already low, tax concessions to foreign investment are given by all the other three countries.

FDI is also mentioned as a factor contributing to the fast growth of the Asian NICs. The issue, again, is not that these countries have been lucky in being able to attract FDI but that these Asian NICs have been able to work with FDI successfully achieving faster growth but not greater unemployment, income inequality, and foreign technological and economic dominance. The experience of the Asian NICs seems to differ greatly from that of Latin America.²⁹ In the Asian NICs, the domestic sector has been quick to integrate with the foreign sector and thus has been working toward common goals. More important, export-oriented industrialization is basically a better policy than import substitution for benefiting from FDI. Under export-oriented policies, foreign investors have to produce at world prices and not in a protected home market. This means that foreign firms have to work with product lines similar to those of local firms and to use technologies in much the same factor proportions as local firms. Usually, in the Asian NICs, foreign firms do make efforts to modify their technology to suit local conditions. Thus, although the success of export-oriented industrialization depends in some ways on FDI, export-oriented policies themselves ensure that FDI produces positive effects on the economies of the host countries.

THE SOURCES OF EXPORT GROWTH

Another popular explanation for the success of the Asian NICs in export growth is the almost uninterrupted boom in the developed countries from the early 1950s to the outbreak of the first oil crisis in 1973. In this explanation, it is again luck that gave the Asian NICs the opportunity to be outward looking. Moreover, in the 1950s and 1960s we witnessed a period of trade liberalization in tariffs, though there was at the same time a new wave of quantitative trade restrictions. It is nonetheless said that, had the Asian NICs industrialized at a time when protectionism and recession prevailed, these countries would not have succeeded in export-oriented industrialization. Let us now look at the sources of export growth in the Asian NICs and examine how much such growth is explained by increases in world trade.

The technique we shall use is the constant-market-share method, first developed by Tyszynski (1951) and later widely applied to many country and regional studies.³⁰ Essentially, this method decomposes export growth into four components:

1. The effect of the increase in total world trade.
2. The effect of the changes in the commodity composition of world trade; this effect will be greater the faster the more than proportionate growth in world trade of the commodities exported in the base year.

²⁹ See, for example, Hellinger and Hellinger (1975).

³⁰ See, particularly, Richardson (1971).

3. The effect of the changes in the market distribution of the world trade; this effect will be greater the faster the more than proportionate growth in demand in the markets exported to in the base year.

4. The effect of increased competitiveness and therefore the ability to capture a larger share of the markets in the base year.³¹

The constant-market-share analysis is simple to operate but has shortcomings. For example, the method is arbitrary in that the share of competitiveness effect is nothing but an unexplained residual and the ordering of the terms in the actual computation effects the results. More important, this approach concentrates on the demand side. The supply factors are only implicitly considered in the competitive effect, which is only a residual. Also, this method treats commodity and the market distribution in a static sense with reference to only the base year.

Despite these limitations, the constant-market-share technique is a useful tool to examine the importance of increase in world trade to the export growth of a country vis-à-vis other factors. In Table 7, the decomposition of export growth in all Asian NICs is shown. The table is constructed on the basis of three sources, including the author's own computation for Hong Kong, 1976–81. Nonetheless, the computed results shown in the table are largely comparable; all are based on a three-digit classification of commodity, although the breakdown of markets is not all the same. Two important observations can be made.

First, there has been increasing dependence on the growth of world trade; at the same time there has been a decrease in the relative importance of the competitiveness effects. This trend is particularly notable in South Korea and Taiwan when we compare the periods 1965–70 and 1977–81. The reasons for this are probably (a) that the protective measures taken by developed countries in recent years have prevented the Asian NICs from capturing a larger share of the existing markets, and (b) that many more developing countries, such as Mexico, Brazil, Malaysia, and Thailand have switched to an export-oriented development strategy, competing with the Asian NICs in the developed-country markets. Thus, to a large extent, the Asian NICs in recent years can only expand their exports at the rate of the growth in world trade.

The second interesting observation from Table 7 is that, with perhaps the exception of Singapore, the effects of commodity composition and market distribution have not been important factors explaining export growth. What is implied by these results is that the commodities and markets on which the Asian NICs concentrate in the

³¹ The formula for the decomposition is

$$\frac{dx}{dt} = (s \frac{dQ}{dt}) + (\sum_i s_i \frac{dQ_i}{dt} - s \frac{dQ}{dt}) + (\sum_i \sum_j s_{ij} \frac{dQ_{ij}}{dt} - \sum_i s_i \frac{dQ_i}{dt}) + (\sum_i \sum_j Q_{ij} \frac{ds_{ij}}{dt})$$

x = a country's total export;

s = a country's share in world trade;

Q = the world's total trade;

s_i = a country's share in world trade of commodity i;

Q_i = world's total trade in commodity i;

s_{ij} = a country's share in total world trade of commodity i by market j;

Q_{ij} = total exports by all countries of commodity i to market j;

t = time.

Table 7
Competitiveness of Exports
(Percentages)

Item	Hong Kong		South Korea		Singapore	Taiwan	
	1965-70 ^a	1976-81 ^b	1965-69 ^a	1977-81 ^c	1977-81 ^c	1965-70 ^a	1977-81 ^c
World trade effect	50.2	93.3	26.2	92.0	65.0	30.6	70.9
Commodity composition effect	5.4	-7.4	-2.7	-3.5	7.1	-6.5	-1.1
Market distribution effect	-4.4	-10.1	-1.5	-1.8	2.8	3.2	-0.1
Competitiveness effect	48.9	24.2	78.0	13.3	25.1	72.7	30.3

^a Kuo (1983).

^b Computed by the author.

^c Cha et al. (1983).

base year do not experience more than proportionate growth during the period under consideration. There is no indication that commodity and market diversifications have taken place. The issues related to diversification will be discussed later.

ECONOMIC GROWTH AND INCOME DISTRIBUTION

The uniqueness of the Asian NICs is not just in their high growth rates but also in their growth with equity. Kuznets (1955) hypothesizes an inverted-U relationship between the levels of income and of inequality in the course of economic growth. The experience of South Korea and Taiwan for some time does not seem to fit into Kuznets' hypothesis; fast economic growth in South Korea and Taiwan was from the beginning accompanied by rapid decrease in income inequality. Indeed, by the late 1960s income distribution as measured by Gini Coefficient and other indices in South Korea and Taiwan was among the world's lowest. But interestingly, although income inequality has continued to fall in Taiwan, income inequality in South Korea has increased since the early 1970s.

Only scanty statistics on income distribution in Hong Kong and Singapore exist. In Table 8, the extent of income inequality in Hong Kong and Singapore is shown to be about the same and considerably higher than that in South Korea and Taiwan. In both Hong Kong and Singapore, income inequality declined at first but has been increasing, particularly in Hong Kong. The experiences of Hong Kong, South Korea, and Singapore might then be taken to provide evidence contrary to the Kuznets inverted-U hypothesis.

This is not the place to discuss in detail the pattern of income distribution at a more disaggregate level and the factors underlying the changes in income distribution in the Asian NICs. Extensive individual country studies exist.³² Suffice it to say that probably, not the *level* of development, but the *type* of development is important in affecting income distribution.³³ The export-oriented development strategy pursued by the Asian NICs has given rise to rapid increases in employment. This type of development strategy is therefore more in line with the comparative advantage of the countries. At the same time, a type of economic development that devotes a lot of energy and resources to agricultural development, such as that which took place in South Korea and Taiwan, would surely further improve the pattern of income distribution.

An additional factor in Taiwan is its attempt to decentralize its industries at the early stage so that the rural population can participate in industrial activities without moving far. In doing so, Taiwan has largely avoided the urban unemployment problems facing the Philippines, Thailand, and Indonesia, where industrialization is

³² For Hong Kong, Hsia and Chau (1978); for South Korea, Adelman and Robinson (1978), Mizoguchi et al. (1976), Park (1980, Part III); for Singapore, Rao and Ramakrishnan (1980); for Taiwan, Fei et al. (1979); for a comparison of the four, see E. K. Y. Chen (1979).

³³ See Fields (1980) and Ranis (1978).

mostly confined to the capital cities. It has also been argued that growth with equity in Taiwan is related to the Confucian teaching of the way of the golden mean.³⁴

The increasing inequality in Hong Kong and Singapore is probably related to their recent development as financial centers. This change in the type of development has resulted in a lower rate of labor absorption and an increase in the importance of the finance sector, which typically has a higher income inequality. In South Korea, the increasing income inequality is related to the development of capital-intensive industries at a somewhat early stage of development, say in the early 1970s. Hong (1984) argued that the mismanagement of credit rationing in favor of the arbitrarily selected heavy industries is responsible, at least partly, for worsening income distribution. Generally speaking, as the Asian NICs move from the EO1 type to the EO2 type of development, a trend of increasing income inequality is likely. For how long and to what extent this will occur depends on the type of EO2 policies that individual countries pursue. The implication seems to be that income inequality in the course of economic development will vary with the four different types of development strategy, viz., IS1, IS2, EO1, and EO2, and that it is possible to come up with some generalization about this relationship.³⁵

Table 8
Changes in Income Distribution

Hong Kong		South Korea		Singapore		Taiwan	
Year	Gini coefficient	Year	Gini coefficient	Year	Gini coefficient	Year	Gini coefficient
1966	0.487	1961	0.438	1966	0.498	1953	0.558
1971	0.439	1965	0.344	1972	0.443	1961	0.461
1976	0.435	1970	0.332	1973	0.457	1964	0.360
1981	0.481	1976	0.391	1974	0.434	1966	0.358
		1980	0.389	1975	0.448	1968	0.362
						1970	0.321
						1972	0.318
						1974	0.319
						1976	0.307
						1978	0.306
						1980	0.303

SOURCES: Hong Kong: Chau (1983); South Korea: Korean Development Institute; Singapore: Rao and Ramakrishnan (1980); Taiwan: Kuo (1983).

³⁴ Sun (1983).

³⁵ In a forthcoming paper, the author puts forward an S curve in lieu of Kuznets' inverted U.

PROSPECTS

By and large, the Asian NICs exhausted their comparative advantage in the export of labor-intensive light-industry products by the early 1970s. Hong Kong and Singapore responded by diversifying into financial activities and eventually succeeded in becoming international financial centers. South Korea and Taiwan, on the other hand, responded by diversifying into capital- and technology-intensive industries in the early 1970s. Both countries even started to build up heavy industries such as shipbuilding, iron and steel, automobiles, electricity generators, and petrochemicals. Such development was heavily guided by government policies, and involved in many cases the participation of public enterprises.

Owing to the basically laissez-faire policies in Hong Kong, industrialists have been oriented to diversification of products within the existing industrial groups rather than into new industries. For instance, Hong Kong has so far not been able to get rid of its heavy dependence on the clothing industry, and yet there has been rapid diversification in products, resulting in its becoming the "Paris of the Far East" in fashion designs. At the same time, although Hong Kong's electronics industry has succeeded in branching out from radios to recorders, hand-held games, computers, and telephones, it is still a consumers' electronics industry. Singapore is different. The dominance of foreign investment has led it to get involved in capital and technology industries in an early stage of industrialization. One-third of its industrial output consists of products related to petroleum, including oil refinery and storage, petrochemicals, and the building of oil rigs.

The first and second oil crises in the 1970s constituted serious blows to the heavy and energy-intensive industries established in South Korea and Taiwan. The past few years have been a stage of consolidation for them. Also, the exports of light-industry products, particularly clothing and textile, from all four Asian NICs have increasingly been subject to protectionism of the developed world. At the same time rising labor costs in these countries have made it increasingly difficult for them to compete with the many other developing countries that have shifted to export-oriented strategies in many light-industry products.

Thus, the Asian NICs have all entered a new stage of economic development, the transformation of EO1 to EO2. In this phase of development, production is no longer always for export. Many heavy and capital-intensive products are meant for the home market. This can therefore be called the secondary import-substitution-cum-export-promotion strategy of economic development, particularly in South Korea and Taiwan. The prospects of the Asian NICs hinge on how quickly and successfully they can attain sustained growth under EO2.

In this transformation from EO1 to EO2, we observe marked differences among the four. In Hong Kong, Singapore, and Taiwan, the attention is focused on the development of high-tech industries, particularly the information industry, which includes computers and parts, and telecommunication equipment. Yet the approaches are different. In Hong Kong, despite the appointment of the Advisory Committee on Diversification in 1977 and the publication of its report in 1979, rather little has so far been done by the government to upgrade the technological infrastructure of Hong

Kong's industries. Eventually the government is expected to agree to set up a technology-transfer agency and an electronics-testing laboratory, but it will take some time for these to materialize. Meanwhile, industrialists have to diversify and enter into pioneering production on their initiatives and at somewhat high risks.

The indigenous technological capability of Hong Kong industries is clearly now below that of the other three. For the time being, Hong Kong still excels in product design and workmanship and has an efficient and hardworking labor force. But it will not be long before Hong Kong loses its entire comparative advantage in the production of most products to other NICs. Laissez-faire industrial policy was, at one time, a desirable policy under which dynamic entrepreneurs could excel in product diversification. But it is difficult to see how Hong Kong industrialists will cope with a phase of industrial development in which the discrepancies between social and private returns are so great.

Both Singapore and Taiwan use direct intervention to promote high-tech industries. This has been known as the strategic-industry approach. In both cases, machinery manufacturing, engineering, and the information industry have been identified as the strategic industries that deserve special assistance. In both countries, strenuous efforts have been made to support research-and-development activities, including the setting up of science parks, venture-capital corporations, technology-research and -transfer organizations, and tax incentives. In Singapore, the government in 1979 imposed a statutory 20 percent increase of manufacturing wages for three consecutive years for the purpose of encouraging technology-intensive industries.

Comparing the two countries, it seems that the prospects of Taiwan are better than those of Singapore. Taiwan, although inviting foreign participation, is careful to develop its indigenous capability. It adopts a pragmatic approach to the restructuring of its industries. It is prepared to scale down its activities in heavy industries, especially those that are energy intensive, such as petrochemicals. In 1983, Taiwan was able to recover swiftly from the 1981-82 recession, and its manufacturing sector performed very well. On the other hand, although Singapore's overall economy was growing as fast as that of Taiwan in 1983, the source of growth was not manufacturing (which suffered a negative growth) but financial services and construction. It is too soon to predict the eventual success or failure of Singapore's "second industrial revolution," which was officially launched in 1979. But, on the basis of Singapore manufacturing's heavy dependence on government guidance and foreign investment in the past, we can at most be cautiously optimistic about the future of Singapore's economy.

South Korea's approach to industrial restructuring is less pragmatic and more nationalistic than that of Taiwan. On the one hand, the government promotes high-tech industries, for example, establishing the Korea Technology Advancement Corporation (in 1974), the Daeduk Science Town, and the Korea Technology Development Corporation (in 1981). There are also tax incentives for the private enterprises to undertake their own research and development. On the other hand, the government equally emphasizes the establishment of heavy industries, by its elaborate system of planning, backing by ownership of key corporations, and strong equity positions in

many more corporations. To finance these projects, "easy" monetary and fiscal policies were pursued (especially during the fourth plan, 1977–1981), resulting in rather high rates of inflation and heavy external debts.

More conservative monetary and fiscal policies were pursued in the other three Asian NICs. The heavy industries that South Korea particularly wants to develop are iron and steel, and the automobile industry. Taiwan is prepared to work with foreign firms in the manufacturing of automobiles, but South Korea is keen to build up a more or less autarkic capability. Shipbuilding and petrochemicals are other important heavy industries in South Korea. These are energy-intensive industries. South Korea, like Taiwan, has been trying since the first oil crisis to cut down its dependence on oil. Targets have been set to diversify into coal and nuclear energy.

Among all heavy industries, steel production seems to be the strength of South Korea. South Korea is unlikely in the near future to be able to follow the steps of Japan in the production of automobiles for export. The shipbuilding industry has gradually recovered from the world slump in the 1970s, but the targets set by the government are ambitiously unrealistic. In light industries, South Korea will probably lose its international competitiveness in textile and clothing even faster than Hong Kong, notwithstanding the lower wage rates in South Korea, because South Korea, unlike Hong Kong, will probably be unable to emerge as a fashion center. Furthermore, the opening up of China has enabled Hong Kong's textile and garment firms to reduce cost by placing the labor-intensive part of the production processes in China.³⁶

The economic prospects of the Asian NICs are governed not only by economic considerations but also by the possible political developments in these countries in the future. Political problems are crucial. In Singapore and Taiwan, the problem of succession exists. Despite the many attempts of Lee Kuan Yew to groom successors at different times, it is not clear who can succeed him after his withdrawal from politics. It is also difficult to predict whether a confidence crisis or economic disruption will occur after Lee's disappearance from the scene.

In Taiwan, the situation looks even more chaotic but is in fact less uncertain than in Singapore. President Chiang Ching-kuo, at the age of seventy-three, has been elected for another term of six years. Interestingly, he has chosen T. H. Lee, a Cornell Ph.D., famous agricultural economist, and native of Taiwan, to be vice president. Chiang has suffered from diabetes for many years, and he may not be able to stay the full six years. This means that by the constitution, T. H. Lee will become president. But because Dr. Lee is a scholar more than a politician, he will probably only be a nominal head (a move sufficient to please the native Taiwanese), and there will be a group leadership by mainlanders. This arrangement will probably bring stability and therefore continuing prosperity to Taiwan for many years. The other political threat to Taiwan is mainland China's proposal of regaining sovereignty over Taiwan and at the same time allowing Taiwan to become a special administrative region. However, Taiwan probably will not yield to this proposal, nor will China try to achieve this by force.

³⁶ For a discussion on the impact of China's open-door policy on Hong Kong, see E. K. Y. Chen (1983a).

Despite the sporadic political disturbances in South Korea, political problems are not serious. There is no succession problem because South Korea is not now ruled by an indispensable strong man. The stability provided by the military government is expected to remain. The confrontation with North Korea, especially after the Rangoon incident, will further pull the country together. It is also expected that the South Korean government will continue to be growth oriented.

The political stability of Hong Kong has been disturbed by the 1997 lease issue since Margaret Thatcher's visit to China in September 1982.³⁷ After more than one year's official negotiation in Beijing, the future of Hong Kong is by now more or less decided. Britain has formally stated that it will withdraw from Hong Kong in 1997. China, although regaining sovereignty, will allow Hong Kong to be a highly autonomous special administration zone for at least fifty years after 1997. This has been called the "Hong Kong people to govern Hong Kong" proposition.

This solution is fine in theory, but there is no guarantee that China will not interfere with Hong Kong's politics and economics after 1997, nor can we be sure that the existing policies of China toward Hong Kong and the rest of the world will not change. Indeed, since 1983, some interference has begun in the sense that China's Xinhua News Agency in Hong Kong has increasingly become a second government; moreover, China's investment has been pouring into all sectors of Hong Kong.

Under these circumstances, local investors are still hesitant to make long- or even medium-term commitments. This, however, is not a problem in the short run because foreign and Chinese investments have kept coming in to fill the gaps.³⁸ The inflow of China's capital is said to be for the purpose of restoring the confidence of Hong Kong's people. Working on a global-strategy basis, foreign investors are less concerned with political problems that are not immediate to them. In 1983, Hong Kong responded swiftly to the U.S. recovery and achieved a reasonably high growth rate of 6 percent; in 1982, the growth rate was 2.4 percent.

CONCLUSION

This contribution discusses the success stories of the Asian NICs—Hong Kong, South Korea, Singapore, and Taiwan—in the past two decades. We conclude that their successes can be explained by triangular interactions among absolutism, Confucianism, and capitalism. There are some "special factors" in the economic development of these countries and some factors upon which generalizations can be based. Thus, to the question whether the growth models of the Asian NICs are transferable, the answer is both yes and no.

All Asian NICs are at present at a crossroads of an economic transformation

³⁷ For a background on Hong Kong's 1997 lease issue, see the special issue on Hong Kong in *China Quarterly*, September 1983.

³⁸ Since 1982, many investment corporations have been set up by China in Hong Kong, and foreign investment, especially from the United States and Japan, has increased at an even faster rate than in the past.

from “easy” export orientation (EO1) to “more difficult” export orientation (EO2). This second-stage export-oriented industrialization is accompanied by a secondary import substitution in which some heavy and capital-intensive production is for the home market. Combining economic and political considerations, it seems that Taiwan has the most promising future. Its pragmatic approach to industrial transformation will give it many years of rapid economic growth. South Korea has perhaps placed too much emphasis on the development of heavy industries. Its short-run prospect is good but the longer-run future is uncertain. Hong Kong suffers from both the lack of government support to industrial transformation and political uncertainties related to the 1997 lease issue. Yet, on the basis of its strength in many light and skill-intensive industries and in financing services, we can be optimistic about the short-run future of Hong Kong. In the medium and longer run, political developments and possible changes in the industrial policy of Hong Kong’s government, and hence economic prospects, are difficult to predict.

At first it might appear surprising that we have not been very optimistic about the economic future of Singapore. This lack of optimism becomes clearer when we think of Singapore’s heavy dependence on industries related to petroleum, foreign investment and entrepreneurship, and government guidance. Beyond these considerations, there is the problem of political succession.

Yet we end on an optimistic note. Because of their political and economic resilience, the Asian NICs will probably in the end be able to solve their problems. Their past record warrants respect and hope for the future.

Bibliography

- Adelman, Irma, and S. Robinson. 1978. *Income Distribution Policy in Developing Countries: A Case Study of Korea*. Oxford: Oxford University Press.
- Balassa, B. 1981. *The Newly Industrializing Countries in the World Economy*. New York: Pergamon Press.
- Brown, G. T. 1973. *Korean Pricing Policies and Economic Development in the 1960s*. Baltimore: Johns Hopkins University Press.
- Cha, D. S., et al. 1983. *A Comparative Study of the Export Competitiveness of Korea, Japan, Taiwan, and Singapore* (in Korean). Seoul: Korea Institute of Industrial Economics and Technology.
- Chang, E. R. 1969. *Report on the National Income Survey of Hong Kong*. Hong Kong: Government Printer.
- Chau, L. C. 1983. *Rising Income and Rising Inequality in Hong Kong*. Discussion Paper No. 17. Hong Kong: Department of Economics, University of Hong Kong. April.
- Chen, E. K. Y. 1976. "The Role of Women in Economic Development: An Analysis with Special Reference to Hong Kong." In *The Role of Women in Development*, ed. F. Legaspi. Manila: Santo Tomas University Press.
- . 1977. "Domestic Saving and Capital Inflow in Some Asian Countries: A Time-Series Study," *Asian Survey*, July.
- . 1979. *Hyper-Growth in Asian Economies*. London: Macmillan.
- . 1980a. "The Economic Setting." In *Business Environment in Hong Kong*, ed. D. Lethbridge. Hong Kong: Oxford University Press.
- . 1980b. "Export Expansion and Economic Growth in Some Asian Countries: A Simultaneous-equation Model." In *Measurement, History, and Factors of Economic Growth*, ed. R. C. O. Matthews. London: Macmillan.
- . 1983a. "The Impact of China's Four Modernizations on Hong Kong's Economic Development." In *China and Hong Kong: The Economic Nexus*, ed. A. J. Youngson. Hong Kong: Oxford University Press.
- . 1983b. *Multinational Corporations, Technology and Employment*. London: Macmillan.
- . 1983c. "The Role of the Tertiary Sector in the Diversification of the Hong Kong Economy." Paper presented at the International Conference on Cheju Regional Development, Cheju, Korea, July.
- Chen, Peter S. J., ed. 1983. *Singapore Development Policies and Trends*. Singapore: Oxford University Press.
- Chenery, H. B., et al. 1962. "Development Alternatives in an Open Economy." *Economic Journal*, March.
- . 1966. "Foreign Assistance and Economic Development." *American Economic Review*, September.

- Chia, Siow Yue. 1972. "Export Performance of the Manufacturing Sector of Foreign Investment." In *Singapore in the International Economy*, ed. Wong Kum-poh and M. Tan. Singapore University Press.
- Deyo, F. 1981. *Dependent Development and Industrial Order*. New York: Praeger.
- England, J., and J. Rear. 1982. *Chinese Labour under British Rule*. Revised edition. Hong Kong: Oxford University Press.
- Fei, J. C. H., et al. 1979. *Growth with Equity*. New York: Oxford University Press.
- . 1982. "Ideology of Economic Development in Taiwan." In *Experiences and Lessons of Economic Development in Taiwan*. See Li and Yu.
- Fields, G. S. 1980. *Poverty, Inequality, and Development*. New York: Cambridge University Press.
- . 1982. "Industrialization Employment in Hong Kong, Korea, Singapore, and Taiwan." Mimeo.
- Frank, C. R., Jr., et al. 1975. *Foreign Trade Regimes and Economic Development: South Korea*. New York: Columbia University Press.
- Galenson, Walter, ed. 1978. *Economic Growth and Structural Change in Taiwan*. Ithaca: Cornell University Press.
- Hagen, E. E. 1962. *On the Theory of Social Change*. Homewood, Illinois: Dorsey Press.
- Hamilton, Clive. 1983. "Capitalist Industrialization in East Asia's Four Little Tigers." *Journal of Contemporary Asia*, No. 1.
- Hasan, P., and D. C. Rao. 1979. *Korea: Policy Issues for Long-Term Development*. Baltimore: Johns Hopkins University Press.
- Hellinger, D., and S. Hellinger. 1975. "The Job Crisis in Latin America: A Role for Multi-national Corporations in Introducing More Labour-intensive Technologies." *World Development*, June.
- Ho, Samuel P. S. 1978. *Economic Development of Taiwan, 1860-1970*. New Haven: Yale University Press.
- Ho, Yhi-Min. 1972. "Development with Surplus Population, the Case of Taiwan: A Critique of the Classical Two Sector Model, à la Lewis." *Economic Development and Cultural Change*, January.
- Hofheinz, Roy, and K. E. Calder. 1982. *The East Asia Edge*. New York: Basic Books.
- Hong, Wontack. 1984. "Export-oriented Growth and Trade Patterns of Korea." Paper presented at the National Bureau of Economic Research (NBER) Conference, Kuala Lumpur, Malaysia, January.
- Hsia, R., and L.C. Chau. 1978. *Industrialization, Employment, and Income Distribution: A Case Study of Hong Kong*. London: Croom Helm.
- Hsing, Mo-huan. 1971. *Taiwan: Industrialization and Trade Policies*. Oxford: Oxford University Press.
- Jao, Y. C. 1979. "Hong Kong's Rise as a Financial Centre." *Asian Survey*, July.
- Johnson, Chalmers. 1982. *MITI and the Japanese Miracle*. Stanford: Stanford University Press.
- . 1984. "Political Institutions and Economic Performance: A Comparative Analysis of the Government-Business Relationship in Japan, South Korea, and Taiwan." Paper presented at this (Berkeley, California) conference.
- Jones, L. P., and Il SaKong. 1980. *Government, Business, and Entrepreneurship in Economic Development: The Korean Case*. Cambridge: Harvard University Press.

- Krueger, A. O. 1979. *The Development Role of the Foreign Sector and Aid*. Cambridge: Harvard University Press.
- . 1981. "Export-led Industrial Growth Reconsidered." In *Trade and Growth of the Advanced Developing Countries in the Pacific Basin*, ed. Wontack Hong and L. B. Krause. Seoul: Korea Development Institute.
- Kuo, Shirley W. Y. 1983. *The Taiwan Economy in Transition*. Boulder: Westview Press.
- Kuznets, S. 1955. "Economic Growth and Income Inequality." *American Economic Review*, March.
- Lee, S. Y., and Y. C. Jao. 1982. *Financial Structures and Monetary Policies in Southeast Asia*. London: Macmillan.
- Lee, Soo Ann. 1973. *Industrialization in Singapore*. Camberwell, Australia: Longman.
- Lee, T. H. 1971. *Intersectoral Capital Flows in the Economic Development of Taiwan, 1895–1960*. Ithaca: Cornell University Press.
- Lee, T. H., and Kuo-shu Liang. 1982. "Taiwan." In B. Balassa, ed., *Development Strategy in Semi-industrialized Countries*. Baltimore: Johns Hopkins University Press.
- Li Kwoh-ting and Tzong-shian Yu. 1982. *Experiences and Lessons of Economic Development in Taiwan*. Taipei: Academia Sinica.
- Lin, Ching-yuan. 1973. *Industrialization in Taiwan, 1946–72*. New York: Praeger.
- Little, I. M. D. 1978. "An Economic Reconnaissance." In *Economic Growth and Structural Change in Taiwan*. See Galenson.
- McMullen, N. 1982. *The Newly Industrializing Countries: Adjusting to Success*. London: British-North American Research Association.
- Maizels, A. 1968. *Exports and Economic Growth of Developing Countries*. London: Cambridge University Press.
- Mason, E. S., et al. 1980. *The Economic and Social Modernization of the Republic of Korea*. Cambridge: Harvard University Press.
- Matthews, R. A. 1983. *Canada and the Little Dragons*. Montreal: Institute for Research on Public Policy.
- Mizoguchi, T., et al. 1976. "Overtime Changes of the Size Distribution of Household Income in Korea: 1963–71." *The Developing Economies*, September.
- Morishima, M. 1982. *Why Has Japan "Succeeded"?* London: Cambridge University Press.
- Myint, H. 1982. "Comparative Analysis of Taiwan's Economic Development with Other Countries." In *Experiences and Lessons of Economic Development in Taiwan*. See Li and Yu.
- Park, Chong Kee. 1980. *Human Resources and Social Development in Korea*. Seoul: Korea Development Institute.
- Ranis, G. 1978. "Industrial Development." In *Economic Growth and Structural Change in Taiwan*. See Galenson.
- Rao, V. V. Bhanaji, and M. K. Ramakrishnan. 1980. *Income Inequality in Singapore*. Singapore University Press.
- Richardson, J. D. 1971. "Constant-Market-Share Analysis of Export Growth." *Journal of International Economics*, September.
- Scott, M. 1978. "Foreign Trade." In *Economic Growth and Structural Change in Taiwan*. See Galenson.
- Sun, Li-teh. 1983. "Confucianism and the Economic Order of Taiwan." Paper presented at the Third World Congress of Social Economics, Fresno, California, August.

- Taira, Koji. 1983. "Japan's Modern Economic Growth: Capitalist Development under Absolutism." In *Japan Examined*, ed. Harry Wray and Hilary Conroy. Honolulu: University of Hawaii Press.
- Tan Chwee-huat. 1978. *Financial Institutions in Singapore*. Singapore University Press.
- Turner, Louis, and N. McMullen. 1982. *The Newly Industrializing Countries: Trade and Adjustment*. London: Allen and Unwin.
- Tyszynski, H. 1951. "World Trade in Manufactured Commodities, 1899–1950," *The Manchester School*, No. 2.
- Weber, Max. 1930. *The Protestant Ethic and the Spirit of Capitalism*. Trans. Talcott Parsons. New York: Scribner. German original 1905.
- Westphal, L. E., et al. 1981. *Korean Industrial Competence: Where It Came From.* Washington, D.C.: World Bank Staff Working Paper No. 469, July.

7. ASEAN's "Other Four": Economic Policy and Economic Performance Since 1970

Bruce Glassburner

The Association of Southeast Asian Nations (ASEAN) is now eighteen years of age.* It has received well-deserved attention and praise for its achievements. Much of this success has been of a political nature; indeed, as an association, its successes fall almost exclusively in the political arena. This is not to say that economic success has eluded the six members individually. Quite the contrary. The combined (weighted average) real GDP per capita growth rate of the five members in the decade of the 1970s was 4.5 percent—which, sustained, doubles in sixteen years. Removing highly dynamic Singapore from the group makes little difference to that rate of growth because of its small population weight.

This essay excludes Brunei, which joined ASEAN in 1984. Singapore is also omitted from discussion not because it is of less interest than the other four, but because it is such a special case. The larger four nations have more varied resources, are, broadly speaking, more alike, and have more problems in common. Singapore, as one of the "Gang of Four" or Asian newly industrializing countries (NICs) deserves a separate category. The "other four" have done well economically, but significantly less well than Singapore; and they have, in varying degrees, more complex and less tractable problems of economic structure.

All the "other four" are now classified by the World Bank as being "middle-income economies." Until 1981, Indonesia was still categorized as one of the "low-income economies," but its steady high per capita income growth into the early 1980s

* Thanks are due to the Institute of East Asian Studies at the University of California, Berkeley; the Center for Strategic and International Studies (CSIS), Jakarta; and the Research School of Pacific Studies, Australian National University, Canberra, for financial and institutional support. The following persons have contributed with helpful critical comments: Hadi Soesastro, Donald Emmerson, H. W. Arndt, Helen Hughes, Anne Booth, Peter McCawley, and Hal Hill.

has carried it past five nations since then. In general, all the four except the Philippines¹ have outperformed the middle-income category, as shown in Table 1.

The plan of this presentation is to start at the top in Table 1 and proceed through the four, thus proceeding from the largest and poorest of them, Indonesia, to the smallest and richest of them, Malaysia. Indonesia is the appropriate starting place for two reasons. More than half of the total population of the group is found in Indonesia; hence the region can hardly succeed unless Indonesia succeeds. Beyond that, Indonesia is the country among the four known best to, and hence the appropriate point of departure for, the author. In each of these four brief country studies, the dimensions of policy orientation and economic performance with which we will be most concerned will be the following: (1) How outward looking have the international trade and industrialization policies been, and to what extent have those policies produced positive results? (2) What were the repercussions of the oil shocks of 1973–74, 1979–80, and 1982–83 on the economic system? (3) How has the nation handled its main macroeconomic policy instruments, that is, its budgetary and monetary policies? (4) How has the nation dealt with its agricultural sector, and how well has that sector performed? These four areas of economic policy and performance are not clearly separable. However, they provide a manageable set of categories.

Supportive of this type of approach in making a comparative study is the excitement created by the high growth performance of Japan and the more recently emerged Gang of Four comprising Taiwan, South Korea, Hong Kong, and Singapore, all characterized by rapid growth of foreign trade—export-led growth. The ASEAN other four have also enjoyed high growth rates in the 1970s, and there is a natural inclination to assume that their growth, too, was due primarily to the adoption of outward-looking policies, and that they may be regarded as the next Gang of Four. But can they be properly so regarded? Or do they suffer from political and economic constraints that will stunt such growth?

It is not intended here to argue that an outward-looking policy toward international trade is all that is required for development success—hence the four questions posed above. Resiliency in the face of uncertainty in both the domestic and the international environment, good macroeconomic management, a supportive agricultural policy—along with reasonable stability in the political system—all can be crucial. The emphasis on economic openness put here is rather intended to point up the significance of meeting international standards of economic efficiency, and of comparative advantage as a guide to resource allocation.

Neither is this essay to be regarded as an argument for *laissez-faire*. None of the four countries discussed can even remotely be considered to have a hands-off government. Obviously, a strong trade orientation implies a low level of intervention in the affairs of private enterprises engaged in international trade and those producing

¹ Whether the Philippines has done “well” in this period depends on the point of reference. Although Philippine growth, 1970–80, fell slightly below that of the average of all middle-income economies, it exceeded (marginally) the weighted average growth of the World Bank’s newly defined “Lower Middle Income economies.” See Table 1.

Table 1
Basic Data on ASEAN's "Other Four"

Country	World Bank ranking ^a	Population mid-1981 (millions)	Population density (persons/sq. km.)	Population growth 1970-81 (% per annum)	1981 GNP per capita (U.S. \$)	Growth of real GDP per capita 1970-80 ^b (% per annum)	Annual rate of inflation 1970-81 (%)	Adult literacy 1980 (%)	Life expectancy at birth 1981 (years)
Indonesia	41	150	78	2.3	530	4.8	20	62	54
Thailand	48	48	93	2.5	770	4.2	10	86	63
Philippines	49	50	165	2.7	790	3.5	13	75	63
Malaysia	77	14	43	2.5	1,840	5.3	7	60	65
Low-income countries	1-34	2,210	71 ^w	1.9	270	2.9 ^c	11 ^w	52 ^w	58 ^w
Middle-income countries	35-94	1,128	27 ^w	2.4	1,500	3.7 ^c	13 ^w	65 ^w	60 ^w

^a Ranking among nations according to 1980 GNP per capita—from World Bank, 1983a.

^b GDP per capita in 1975 prices. This column was calculated from IMF, 1982. All other data in this table are taken or calculated from World Bank, 1983a.

^c GNP growth 1960-81 (from World Bank, 1983a).

^w Weighted average.

tradable goods. The essence of governmental responsibility in an open economic system is toward providing an environment for the efficient functioning of markets, which, to oversimplify, calls for supplying "public goods" efficiently and in ample quantity. Such a government might well be large, particularly in a large economy, but its orientation will be more supportive than directive; it will allocate its resources so as to augment, rather than compete with, the private sector, except where a demonstrable social-welfare case exists for more direct participation.

INDONESIA

The Indonesian economy grew rapidly in the 1970s and its growth was exported in the sense that exports grew faster than output. It is less appropriate, however, to describe Indonesian international trade and industrialization policy as "outward looking." Even before the quadrupling of oil prices by OPEC in 1973–74, the economy under the Soeharto government had made rapid strides in expansion of exports. To be sure, much of this early rapid growth was recovery from the depths to which the Sukarno government had taken the economic system, and to some extent it was statistical illusion, created by the lifting of much of the maze of controls that the Sukarno government imposed—and by the resumption of statistical reporting that had been forced into falsification by those controls.²

In the six years 1966–72, exports had increased in nominal U.S. dollar (USD) value two-and-a-half times, and then increased another 79 percent in the single year 1972–73.³ The trade-account balance was positive in both 1972 and 1973, although because of substantial services deficits, the current-account balances remained negative (Rosendale, 1981; International Monetary Fund, 1982). But both private and public capital inflows rose so rapidly that monetary movements, which had been virtually static or adverse, turned sharply in Indonesia's favor, with reserve accumulations of \$610 million in the two years 1972 and 1973.

Balance-of-payments performance for the remainder of the decade held generally strong, as indicated in Table 2. The rate of growth of exports was impressive, with oil leaping ahead spectacularly during the six fiscal years 1973–74 through 1979–80 at a compound rate of 46 percent per annum in nominal USD terms. But the growth of nonoil exports was also rapid—21.6 percent per annum (USD value) during the same

² Evasion of trade barriers is still prevalent in Indonesia through false invoicing, bribery of customs officials, and smuggling. No recent efforts have been made to measure the magnitude of unrecorded trade that derives from these practices. For earlier efforts to deal with these problems, see Simkin (1970) and Richter (1970).

³ Oil was the major contributor to this growth, jumping from \$203 million to \$913 million 1966–72 (28 percent per annum in USD value terms). Volume of oil exports rose by 17 percent per annum. By comparison, Arndt (1983a) notes that real oil *output* growth had been 8 percent per annum 1950–66. The USD value of nonoil exports also increased by 80 percent, but rubber, once the proud mainstay of Indonesia's export bill, actually declined 15 percent in value of exports, even though the unit of value of rubber exports increased by 11 percent during that period (IMF). This part of the presentation draws heavily on my paper, "Oil, Public Policy, and Economic Performance: Indonesia in the 1970's" (1983a).

period. However, the current account remained negative until the final fiscal year of the decade of the 1970s because imports grew at virtually the same rate as nonoil exports, that is, at 20.6 percent per annum, while the services account remained heavily negative.⁴

Exports thus led output growth in Indonesia. In 1967, the year of ASEAN's formation and essentially the first year of the Soeharto government's new economic policy, exports represented 8.8 percent of GNP, whereas in 1981 they accounted for 27.5 percent of GNP.

In judging the Indonesian case, one must recognize that external forces were extremely important, and that trade policy retained basic shortcomings that make it unlikely that ASEAN's largest nation can sustain this source of growth impetus for the future unless basic attitudes and policies can be adjusted. The first point to be made is that the terms of trade improved hugely during the period 1972–80. The barter terms-of-trade ratio (1973 = 100) leapt from 72 to 291. The tenfold increase in the price of oil was largely responsible for this, but nonoil prices also moved strongly with a rate of increase of the weighted average of the prices of the six most important nonoil commodities of 26 percent per annum over the seven-year period 1972–73 through 1979–80.⁵

Thus, it was not a great triumph of trade liberalization that brought on Indonesia's rapid export growth and its strong foreign-exchange position⁶ but primarily good fortune in the terms of trade across a broad spectrum of traded goods, combined with a large, sustained official capital inflow. Foreign aid grew faster than nonoil exports; net nonofficial capital inflows were actually negative during the period 1973–74 through 1979–80. Indonesia's official external-debt position has not become dangerous in spite of this pattern of capital flow. The total disbursed debt had reached \$18.4 billion at the end of 1982, 21 percent of Gross Domestic Product. Debt service for 1982 was 8.3 percent of export earnings (World Bank, 1984).

To give credit where due, progress was made by the Soeharto government in dismantling the stifling, unenforceable network of controls on trade that it inherited from the Old Order. This was particularly true of the foreign-exchange system. From a multitiered exchange regime of unfathomable complexity in 1967, the Soeharto government moved to a unified, convertible exchange system in 1969. Exchange control from that point onward has been indirect, that is, by intervention in the foreign-exchange bourse by the Bank of Indonesia as buyer or seller as the situation seems to require. In addition, attempts were made to simplify procedures at the major

⁴ This is not to suggest that current-account balance is inherently "good." A current-account deficit, supported by a manageable rate of capital inflow, and imports rising *pari passu* with exports earnings are normal aspects of healthy growth.

⁵ The six are timber, rubber, coffee, tin, palm oil, and copper. Weights used are 1979/80 export value. In the following two years, these prices fell by 12 percent. Calculated from World Bank (1983b), annex Table 3.2.

⁶ Gross revenues reached \$6.8 billion by 1980, but had fallen to \$3 billion by March 1983, when the devaluation apparently succeeded in reversing the capital outflow (Glassburner, 1983b).

Table 2
Indonesia's Balance of payments, 1973/4-1982/3
(Millions U.S. \$)

	Actual									
	1973/74	1974/75	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83 ^a
1. Net oil	641	2,638	3,138	3,710	4,352	3,785	6,308	9,345	13,908	10,429
2. Net LNG ^b	--	--	--	--	93	225	667	1,256	n.a.	n.a.
3. Nonoil (net)	-1,397	-2,776	-3,992	-4,512	-5,135	-5,165	-4,777	-8,470	-16,698	-17,144
Exports, f.o.b.	1,905	2,033	1,873	2,863	3,507	3,979	6,171	5,587	4,170	3,893
Imports, c. & f.	-2,938	-4,341	-5,090	-6,167	-7,241	-7,543	-9,028	-11,837	-13,228	-16,457
Service (nonfreight)	-364	-468	-755	-1,208	-1,401	-1,601	-1,920	-2,220	-4,850	-4,580
4. Current account (1 + 2 + 3)	-756	-138	-854	-802	-690	-1,155	2,198	2,131	-2,790	-6,715
5. SDRs	--	--	--	--	--	64	65	62	--	--
6. Official transfers \$ capital	643	660	1,995	1,823	2,106	2,101	2,503	2,529	2,712	3,772
IGGI	556	513	945	1,596	1,694	1,625	2,050	2,251	n.a.	n.a.
Program aid	281	180	74	147	157	94	239	118	n.a.	n.a.
Project aid	275	333	871	1,449	1,537	1,531	1,891	2,411	n.a.	n.a.
ODA	275	333	482	513	661	814	919	1,144	n.a.	n.a.
Non-ODA	--	--	389	936	876	659	892	989	n.a.	n.a.
Non-IGGI	87	147	1	227	412	534	453	278	n.a.	n.a.
Cash loan	--	--	1,049	--	--	--	--	--	n.a.	n.a.

Table 2 continued
Indonesia's Balance of payments, 1973/4–1982/3
(Millions U.S. \$)

	Actual									
	1973/74	1974/75	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83 ^a
7. Debt repayment (principal)	<u>-81</u>	<u>-89</u>	<u>-77</u>	<u>-166</u>	<u>-761</u>	<u>-632</u>	<u>-692</u>	<u>-615</u>	n.a.	n.a.
8. Miscellaneous capital	<u>549</u>	<u>-131</u>	<u>-1,075</u>	<u>38</u>	<u>176</u>	<u>392</u>	<u>-1,315</u>	<u>-361</u>	<u>1,140</u>	<u>1,397</u>
Direct investment	<u>331</u>	<u>538</u>	<u>454</u>	<u>287</u>	<u>285</u>	<u>271</u>	<u>217</u>	<u>140</u>	n.a.	n.a.
Oil sector	<u>18</u>	<u>13</u>	<u>14</u>	<u>-32</u>	<u>-50</u>	<u>75</u>	<u>-1,240</u>	<u>-685</u>	n.a.	n.a.
Others	<u>200</u>	<u>-682</u>	<u>-1,543</u>	<u>-217</u>	<u>-59</u>	<u>196</u>	<u>-292</u>	<u>184</u>	n.a.	n.a.
9. Total (4 through 8)	<u>355</u>	<u>302</u>	<u>-11</u>	<u>893</u>	<u>831</u>	<u>770</u>	<u>2,759</u>	<u>3,746</u>	<u>1,062</u>	<u>-1,546</u>
10. Errors & omissions	<u>5</u>	<u>-311</u>	<u>-353</u>	<u>108</u>	<u>-180</u>	<u>-62</u>	<u>-1,067</u>	<u>-1,010</u>	<u>-2,050</u>	<u>-1,734</u>
11. Monetary movements	<u>-360</u>	<u>9</u>	<u>364</u>	<u>-1,001</u>	<u>-651</u>	<u>-708</u>	<u>-1,692</u>	<u>-2,736</u>	<u>988</u>	<u>3,280</u>

SOURCE: Bank Indonesia. Data for 1981/1982 and 1982/1983 derived from Bank Indonesia, *Indonesian Financial Statistics*, May 1983—categories not strictly comparable to earlier years.

NOTES: LNG = Liquefied Natural Gas;
SDRs = Special Drawing Rights of the International Monetary Fund;
IGGI = International Governmental Group for Indonesia (aid consortium);
ODA = Official Development Assistance.

^a Preliminary.

^b Gross exports of products less imports of goods and services of the oil and LNG sectors respectively.

ports, to eliminate most “unofficial taxes” on trade, to lift most formal export taxes, and to simplify the tariff structure. The government has come far, but it has not come far enough if it hopes to resume and sustain rapid growth in the future.

The reason for this pessimism with reference to a regime that has come so far so fast is essentially as follows: The industrialization strategy, upon which the long-term future of export-led growth must depend, has been and remains primarily import-substitution oriented. Protection levels, despite the 1973 tariff reform, remain extremely high, and probably mask low or even negative value added within high rates of growth of industrial output as measured in domestic prices (Boediono, 1983; Gray, 1982). The combination of periods of nominal exchange-rate stabilization and rapidly growing domestic government expenditure has weakened the competitive position of Indonesian exporters in international markets, despite periodic large (and therefore disruptive) devaluations. The attitude of fear and distrust of private entrepreneurship, and the consequent reliance on government investment to increase industrial output, have inhibited private investment and prevented the kind of self-propelled export-led growth that is characteristic of the Gang of Four. Finally, despite all efforts to date, the bureaucratic snarls associated with investment and trade remain deeply entrenched and intractable (see McCawley, 1980, for a similar view).

The impact of the first two oil shocks (1973–74 and 1979–80) on the Indonesian economy was favorable because Indonesia is a significant oil exporter. The oil glut of the early 1980s has had comparable depressing effects. In all three cases, radical changes in oil prices have forced adjustment problems on Indonesian policymakers. In the first two instances, the essential problem was one of coping with the surge of foreign-exchange availability. Its most important impact was the alleviation of the foreign-exchange constraint, which allowed rapid expansion of both investment and consumption and allowed for a buildup of foreign-exchange reserves. However, it also created a problem of monetary and fiscal management, and one of exchange-rate policy. Government revenues (largely derived from oil-company taxes) increased at a rapid rate, providing the incentive for equally rapid increases in government expenditures. However, oil-company revenues are collected almost entirely in U.S. dollar terms; hence, unless expatriated or used for the importing of goods, they must be converted into Indonesian currency at the Bank of Indonesia. Indeed, the Bank of Indonesia accumulated reserves by this process. Thus, the Indonesian budget, although always nominally balanced, was expansionary and led to rapid rates of monetary growth and an internal rate of inflation higher than that of Indonesia’s trading partners.

A concomitant of this problem is that the Indonesian rupiah has continuously declined in relative purchasing power. However, the Bank of Indonesia maintained a stable nominal rate of exchange against the U.S. dollar over extended periods (for example, the rate was fixed at \$1 = Rp415 from 1971 until November 1978), with the result that Indonesian producers of import-competing and exportable goods were placed at a competitive disadvantage—or, as the international economists say, the “real effective exchange rate” appreciated (by about 40 percent over the 1971–78 period). Concern over this difficulty led to the 34 percent devaluation in November

1978. The latter decision was made on the assumption that Indonesia's export earnings and public revenues would soon be slackening in the face of a declining real price of oil on international markets and a rapidly rising rate of domestic consumption of oil products. The Indonesian government did not anticipate that OPEC would undertake another round of radical price increases within another year. Although the 1978 devaluation was a success in the sense that it was followed by a surge of nonoil exports,⁷ it exacerbated inflationary tendencies and was then overwhelmed by the new surge of foreign-exchange earnings as OPEC again doubled prices in 1979–80.

The same problems of monetary and reserve management had to be faced once again, and this time the Indonesian authorities allowed the nominal rate of exchange against the U.S. dollar to float upward slowly—roughly at the rate at which the U.S. dollar was appreciating against the IMF's Special Drawing Rights (SDR). The oil glut brought on by the world recession of 1982–83 has brought yet another type of shock to Indonesia, in the form of a sharp drop in official prices of oil (17 percent) and an even sharper drop in volume of oil production and sales. The balance of payments plunged to a current-account deficit of \$6.7 billion for fiscal year 1982–83, and the drop in government revenues has led to severe retrenchment (McCawley, 1983; Glassburner, 1983b). As a first major step by the Fourth Development Cabinet to meet this crisis, Indonesia devalued again, by 27.5 percent, on March 30, 1983. A series of dramatic investment rescheduling announcements has followed, and in June 1983, a major reform of banking regulations was undertaken. A major reform of the taxation system was initiated at the outset of the fourth Five-Year Plan in April 1984 (Arndt, 1983b; Awanohara and Habir, 1983; Glassburner, 1983b).

Most of what needs to be said about Indonesian macroeconomic policy is implicit in what has preceded, inasmuch as it is interwoven with balance-of-payments policy. Budgetary policy has been nominally conservative, in that all budgets of the Soeharto government have been "balanced." This so-called balance, however, is achieved by accounting foreign-aid proceeds as receipts and hiding domestic deficits and surpluses in accounts with Bank of Indonesia. Moreover, as already indicated, the monetization (in rupiah terms) of dollar-demoninated revenues has made government finance expansionary. Thus the money supply, narrowly defined, increased at 32 percent per annum from 1971 to 1982. With such rapid money growth, it is surprising that the average rate of inflation (1971–81) was no more than 17 percent (Jakarta cost-of-living-index). It implies a great deal of absorption of real-money holdings (nearly 7 percent per year).

The government budget quadrupled in real terms (on the expenditure side) between fiscal years 1972–73 and 1980–81—starting from a very low base. As a share of GNP, government expenditure rose from 14 percent in 1970 to 26.5 percent in 1980. The largest part of this growth was financed by rapidly rising oil revenues, but the commonly held notion that the availability of oil income weakened the government's

⁷ As Garnaut (1979) has pointed out, nonoil export growth was under way *before* the 1978 devaluation, and the extent to which the devaluation contributed to the surge is difficult to assess.

effort at nonoil tax collection is not borne out by examination of the revenue data except for the notably weak revenue buoyancy of the personal income tax (Glassburner, 1983a).⁸ Although nonoil tax receipts remain low as a percentage of GDP, they have grown rapidly enough to prevent a fall in that percentage. The forthcoming tax reform is designed to increase it.

Banking, credit, and interest-rate policies were of mixed quality. Capital rationing and interest subsidies have been a constant part of the scene and have contributed to capital intensification, particularly in government investment; but interest rates to that part of the private sector lacking access to preferential lending, and to savers, were usually positive in real terms and contributed to the monetary absorption referred to above. The private-banking sector is not well developed, despite rapid growth of private banking in recent years, because of the limitations placed on foreign and nonindigenous bankers. State-owned banks have thus been allowed to dominate commercial banking, and they have been heavily favored by subsidized liquidity credits from the central bank. Credit control of the state banks was by quota until recently. In June 1983, these circumstances were changed markedly for the better by new banking regulations (Arndt, 1983b).

The growth of the Indonesian agricultural sector (including forestry and fisheries) during the 1970s was substantial by comparison with the average performance of the World Bank's middle-income group of economies. In the GDP accounts, real growth (in 1973 prices) over the years 1971–81 was 3.8 percent per annum. This implies 1.5 percent per capita agricultural-output growth per year. Even more striking was the food crops component, which was the leading subsector with a 4.5 percent real-growth rate. On the other hand, the other three nations being discussed here had better overall agricultural performance in the 1970s than Indonesia, as will be shown later.

Agricultural growth in Indonesia was uneven, dominated by weather and pest-damage cycles. Also, there was wide dispersion in the growth performance of various staple crops. Policy concentrated on rice intensification, with the result that inferior staples, notably cassava, grew less well, suggesting that Indonesia's poorest farmers were neglected. The rice program itself, centered on the *Bimbingan Massal* (mass guidance), or *Bimas* program, was erratic both in form and in impact. Rice consumption outpaced production through most of the 1970s, and at one point in the mid-1970s, Indonesia was importing one-third of all rice sold on international markets. However, in the late 1970s, largely as a result of the introduction of pest-resistant varieties of rice, Indonesian production of rice leapt forward, and by 1981 the nation found itself with a domestic rice surplus and all storage facilities overflowing.

Policy and performance in estate crops (mainly rubber, palm oil, coffee,

⁸ This is not a trivial flaw. Direct taxation of private incomes should be expected to grow relative to other forms of government revenue, provided the income-tax law is reasonably well designed and enforced. Although the Soeharto government has improved taxation performance generally, reform of the poorly designed and still more poorly enforced personal income tax was deferred until April 1985 when a streamlined law and enforcement system were introduced.

coconut, sugar, tea, and spices) have also been inconsistent in treatment of various crops, and the government has been widely criticized for failing to ease the lot of smallholder producers of these commodities or to conduct a policy that would be conducive to improvement of income distribution in the agriculture sector, where poverty is so highly concentrated. On the latter issue, the evidence is mixed, but there is little doubt that millions of rural Indonesians continue to live in conditions of miserable poverty. In sum, Indonesian economic policy and performance in the 1970s were a vast improvement over anything that had gone before since independence was achieved. The main immediate concern is the radically adverse change of fortunes since 1982, the huge deficit in the balance of payments and the pressure on the government budget. The Fourth Development Cabinet, inaugurated in early March 1983, retains most of its technocratic members, although Professor Widjojo is no longer in his positions as state minister for finance, industry, and economics and chairman of the Planning Council. These positions are now divided between Ali Wardhana and J. B. Summarlin. The Indonesian technocrats have demonstrated resiliency and boldness in the past—traits they will need in surviving the present crisis and in reestablishing the growth impetus of rapidly expanding international trade. Unfortunately, as McCawley has put it, “Indications are that the liberalisation of the Soeharto era has almost run its full course; this is despite the fact that the economic policies of the Soeharto era have not really been very liberal at all” (McCawley, 1980).

The essence of a sustained export-led growth policy, unless it is largely or entirely dependent on extractive exports, is that producers of internationally traded goods be given access to and be required to meet the competitive standards of the international marketplace. That implies a rate of exchange that reflects the scarcity value of foreign exchange, minimal effective protection for producers of import-competing goods, and non-discrimination against labor-intensive manufacture for export. On the hopeful side, the Indonesian economic leadership has surprised us in the past with bold moves in the face of economic pressure. But, unless McCawley’s judgment (and mine) prove to be wrong, the adjustment necessary to turn protectionist Indonesia into an outward-looking nation economically will require more than the courage of its technocrats. It is worth adding that, in their effort to move in that direction, they face formidable domestic opposition (Glassburner, 1983b).

THE PHILIPPINES

The Philippines and Thailand are the two nations of the ASEAN other four that do not have the good fortune to have oil surpluses for export. This has meant that pressure to develop means of conserving and earning foreign exchange from alternative sources has been much greater for these two nations; hence foreign trade, international finance, and exchange-rate policies have had to play a particularly important role in their economic policy. Political instability in 1983–85 also sets the Philippines apart, delaying efforts at solution to, and exacerbating, already difficult economic problems.

The Philippines established early a classic case of the important substitution syndrome, which has an initial stage of rapid industrialization based on expansion of production of consumer goods for the domestic market behind high effective protection barriers. The rapid growth spurt that derived from this concentration of effort on the import-competing sector lost momentum as the limits of the domestic market to absorb such goods were approached. The rapid-growth import-substitution phase was accomplished mainly in the years after World War II, 1949–57, when manufacturing growth exceeded 10 percent per annum. The manufacturing-output growth figure fell by nearly half in the period 1957–61, and remained in the 5–6 percent range throughout the 1960s, during which decade a number of largely ineffectual policy changes were made; in the 1970s, with greater attention paid to efforts at export promotion, industrial growth recovered to the 7 percent range (7.4 percent compounded, 1972–80; World Bank, 1982).

As one Philippine economist has said, “The Philippines had this [the import-substitution strategy] in common with most other developing countries but in an unusually severe form” (Bautista, 1980). Effective protection rates, or protection to value added, for so-called nonessential import-competing consumer goods and producer goods were raised to extremely high levels—to a peak of 365 percent for consumer goods in 1969, and to 203 percent for nonessential producer goods in 1971 (World Bank, 1976). At the same time, exports were discriminated against, with negative protection to value added for traditional exports (–43 percent in 1970) and low to negative for new exports.

The result of these policies was a concentration of investment in urban market areas, using imported techniques that were capital-intensive, thereby contributing to regional income disparities, to the low rate of labor absorption, to unemployment, and to deteriorating income distribution. The industrial complex not only used capital inefficiently but also became increasingly dependent on imported capital goods and raw materials, paradoxically exacerbating rather than relieving the burden on the balance of payments. These difficulties, in turn, fed back into further interventionism—complex and administratively costly investment licensing, foreign-exchange controls with an overvalued peso, and increasing corruption in administration.

Efforts at rectification of this unbalanced growth pattern have been slow to have effect. In 1967, the Industrial Incentives Act was passed, which established the Board of Investment, whose responsibility it was to determine a new set of investment priorities and to revise the incentives pattern. In general, its early orientation was toward broadening capital-investment incentives to restimulate the flagging industrial growth rate, and virtually all measures taken were of a capital-cheapening rather than an employment-encouraging nature. Some explicit but largely ineffectual efforts were made at encouraging manufacture for export (for example, tax credits to exporters for import duties and for domestic taxes on inputs).

In 1970 the overvalued peso was devalued by 39 percent and was allowed to float. By early 1983 the peso had been allowed to depreciate against the U.S. dollar by an additional 32 percent. From 1973 on, the tariff structure was revised by stages, which alleviated somewhat the steep cascading that created the highly distorted

pattern of effective protection (to value added) referred to above. Later in the 1970s more serious liberalization was undertaken by further tariff reforms, extension of virtually all investors' special benefits that had previously been confined to import-competing-goods areas to the export-manufacturing sector, and broadening of bonded-warehousing opportunities and credit concessions. All these measures were designed to emulate the conditions existing in such successful exporting nations as South Korea and Taiwan. But licensing and other administrative procedures remained complex and expensive, thereby restricting access to these new benefits, especially for small- and medium-sized firms. Nevertheless, the efforts paid dividends in the 1970s. Export earnings, in current U.S. dollar terms, increased by 20 percent per annum 1972–81, and exports of nontraditional manufactures grew at more than double that rate (44 percent—from a small base).

But Philippine growth in the 1970s did not become export led, partly because policy changes came late, and partly because of bad luck. The growth of aggregate GNP was virtually at the same rate as the growth of exports, and the ratio of exports to GNP in 1981 had risen only to 19.1 percent (it was 17.8 percent in 1972), much the lowest of the four countries being compared in this contribution.⁹ Indeed, it might be argued that the Philippines had no leading sector in the 1970s. The distribution of GDP by sector at the end of the decade was little changed from that at the beginning (World Bank, 1982, Table 2.4a).

In the early 1980s the country is still suffering from serious balance-of-payments deficits (Table 3), now being compounded by capital flight induced by political uncertainty. Aside from the Philippine manufacturing sector's inefficiency in its use of foreign exchange, the Philippines has suffered from serious deterioration in terms of trade. The ratio of unit values of exports f.o.b. (free on board) to unit values of imports c.i.f. (cost, insurance, and freight) fell from 100 in 1972 to 62.1 in 1981 (World Bank, 1982b, Table 3.4), even though some important export prices (for example, sugar and coconut oil) increased during that period. Oil prices were largely responsible for this ill luck, but problems of the oil shocks were exacerbated by the rising costs of capital goods and intermediate inputs on international markets, and weakened markets for exports.

The impact of the first oil shock, 1973–74, was severe for the Philippines. After having enjoyed a boom year in exports in 1973, and a positive current-account balance of \$536 million,¹⁰ the huge increase in the oil-import bill in a single year—from \$166 million in 1973 to \$573.2 million in 1974—led to large and growing deficits for the remainder of the decade (Bautista and Power, 1979, p. 22; Table 3, below). The end of the commodity boom of the early 1970s, combined with the oil crisis, reduced the Philippines' term-of-trade index by 22 percent between 1973 and 1975. The second oil

⁹ The 1981 ratios of exports to GNP for the others were Indonesia 27.5 percent, Thailand 25.9 percent, and Malaysia 54.6 percent.

¹⁰ 1973 was only the second year of positive current-account balance after independence. The earlier occasion was 1946.

Table 3
The Philippines, Balance of Payments Summary
(Millions U.S. \$)

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
CURRENT ACCOUNT										
Merchandise trade (net)	-124	290	-418	-1,165	-1,060	-764	-1,307	-1,541	-1,939	-2,230
Exports	1,106	1,886	2,725	2,294	2,574	3,151	3,425	4,601	5,788	5,722
Imports	1,230	1,596	3,143	3,459	3,634	3,915	4,743	6,142	7,727	7,952
Services (net)	-55	--	-34	-45	-259	-248	-178	-390	-546	-545
Receipts	347	639	834	907	871	1,085	1,413	1,576	2,075	2,555
Payments	402	639	868	952	1,130	1,333	1,591	1,966	2,621	3,100
Private transfers (net)	152	169	201	252	237	240	283	229	300	325
Receipts	158	172	202	255	239	244	286	234	305	328
Payments	6	3	1	3	2	4	3	5	5	3
Official transfers (net)	36	77	75	66	32	20	29	126	134	147
Receipts	40	84	82	74	41	29	36	135	146	157
Payments	4	7	7	8	9	9	7	9	12	10
Current-account balance	9	536	-176	-892	-1,050	-752	-1,173	-1,576	-2,051	-2,303

Table 3 continued

The Philippines, Balance of Payments Summary
(Millions U.S. \$)

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
CAPITAL ACCOUNT										
Direct investment (net)	<u>-22</u>	<u>64</u>	<u>28</u>	<u>125</u>	<u>144</u>	<u>216</u>	<u>171</u>	<u>99</u>	<u>45</u>	<u>407</u>
Private MLT loan capital (net)	<u>-17</u>	<u>-5</u>	<u>32</u>	<u>126</u>	<u>336</u>	<u>101</u>	<u>209</u>	<u>163</u>	<u>496</u>	
Disbursements	<u>137</u>	<u>196</u>	<u>276</u>	<u>331</u>	<u>538</u>	<u>476</u>	<u>905</u>	<u>790</u>	<u>870</u>	
Repayments	<u>154</u>	<u>201</u>	<u>244</u>	<u>205</u>	<u>202</u>	<u>375</u>	<u>696</u>	<u>627</u>	<u>374</u>	<u>1,332^a</u>
										<u>2,072</u>
Public MLT loan capital (net)	<u>157</u>	<u>76</u>	<u>112</u>	<u>231</u>	<u>704</u>	<u>561</u>	<u>682</u>	<u>988</u>	<u>536</u>	<u>740</u>
Disbursements	<u>235</u>	<u>184</u>	<u>180</u>	<u>346</u>	<u>869</u>	<u>766</u>	<u>945</u>	<u>1,320</u>	<u>709</u>	
Repayments	<u>78</u>	<u>108</u>	<u>68</u>	<u>115</u>	<u>165</u>	<u>205</u>	<u>263</u>	<u>332</u>	<u>173</u>	
Short-term capital (net) ^b	<u>56</u>	<u>74</u>	<u>231</u>	<u>102</u>	<u>-96</u>	<u>312</u>	<u>168</u>	<u>-49</u>	<u>784</u>	<u>188</u>
Inflows	<u>579</u>	<u>657</u>	<u>1,138</u>	<u>1,283</u>	<u>1,381</u>	<u>2,475</u>	<u>3,442</u>	<u>4,231</u>	<u>7,458</u>	<u>8,767</u>
Outflows	<u>523</u>	<u>583</u>	<u>907</u>	<u>1,181</u>	<u>1,477</u>	<u>2,163</u>	<u>3,274</u>	<u>4,280</u>	<u>6,674</u>	<u>8,579</u>
Capital-account balance	<u>174</u>	<u>209</u>	<u>403</u>	<u>584</u>	<u>1,088</u>	<u>1,190</u>	<u>1,230</u>	<u>1,201</u>	<u>1,861</u>	<u>1,927</u>
Errors and omissions	<u>-112</u>	<u>-81</u>	<u>-117</u>	<u>-213</u>	<u>-200</u>	<u>-274</u>	<u>-144</u>	<u>-264</u>	<u>-348</u>	<u>-611</u>
Allocation of SDRs	<u>16</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>28</u>	<u>29</u>	<u>27</u>
Monetization of gold	<u>7</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>32</u>	<u>41</u>	<u>128</u>	<u>400</u>
Overall balance	<u>94</u>	<u>664</u>	<u>110</u>	<u>-521</u>	<u>-161</u>	<u>164</u>	<u>-54</u>	<u>-570</u>	<u>-381</u>	<u>-560</u>

SOURCE: Central Bank of the Philippines.

NOTES: MLT = Medium and Long Term;

SDRs = Special Drawing Rights of the International Monetary Fund.

^a Total medium- and long-term loans.

^b Original maturity up to and including one year.

shock was even more devastating. The crude-oil-import bill leapt from an already large \$907 million to \$1,857 million between 1978 and 1980, and the current-account balance (again, Table 3) sank from a deficit of \$1,173 million in 1978 to \$2,051 million in 1980.

The Philippines met the challenge of the first oil shock better than that of the second. The growth boom of 1973 (9.6 percent GNP growth—well above the trend rate) was merely damped down to the decade trend of the 1970s, or slightly above 6 percent per annum. Some acceleration in growth occurred in 1977 through 1979 (an average of 6.8 percent growth), but the setback after the second shock was much greater, compounded by the major decline in world markets for the country's exports. Growth subsided to 4.4 percent in 1980 and to 3.1 percent in 1981. The world recession thus hit the Philippines soonest among the ASEAN other four, and it has also hit the hardest. Possibly, if serious efforts at structural change (rather than financial accommodation) had been the main response to the first shock, the economy could have weathered the second shock and the recession better.

In terms of macroeconomic policy, the Philippine government has responded to these challenges in sophisticated fashion. The rate of growth of the narrowly defined money supply in 1973–83 was actually less than the rate of increase of consumer prices (12 percent versus 14 percent). Thus its high inflation rate was more a reflection of the 17 percent increase in import prices than of faulty monetary policy. The government budget surpluses of 1973 and 1974 turned to deficits from 1975 on, but these were kept at moderate levels of approximately 10 percent of expenditures, and financed for the most part by noninflationary borrowing.

However, the combination of the terms-of-trade problem and heavy official borrowing¹¹ led to large, persistent current-account deficits in the balance of payments, and a rapidly growing debt burden (from \$477 million in 1974 to \$7.4 billion in 1981). The debt-service ratio (total debt service to exports) had risen to 23 percent in 1982 (World Bank, 1982, p. ix). Foreign-exchange liabilities of the banking system, including the central bank, have exceeded gross foreign-exchange reserves since 1979 (World Bank, 1982, appendix Table 3.3). The Philippines thus has the most serious international financial situation of the four.

The Philippines is also the most in need of restructuring among the four, in order to meet the challenge of a poor record of labor absorption. It has the fastest rate of population growth among the four, and given the youth of the nation's population, an even higher rate of labor-force growth (4.9 percent, 1970–80; World Bank, 1982, appendix Table 1.2). Industrial growth in the past has not alleviated this problem, in large measure because of the capital-intensive bias of the investment pattern. This has contributed to the highest rate of overt unemployment among the four (more than 5 percent in 1980)¹² and to the most skewed distribution of income.

¹¹ The heavy official capital inflow served partly to accommodate the effects of the oil shocks and partly to sustain and expand an ambitious public-sector investment program.

¹² It should be acknowledged that overt unemployment rates mean even less in developing countries than in developed countries. The very poor cannot "afford" unemployment, being forced to find means to subsist. Most overt unemployment is concentrated in the urban areas, in young age groups, and in middle-income groups.

This complex of problems led the Philippine government to attempt introduction of major structural change, along lines recommended by the government-commissioned study of Bautista and Power of 1979 (cited above) and supported by a series of structural adjustment loans on the part of the World Bank. Although this is a well-conceived effort, implementation was initiated only recently, and political events have delayed it further. These considerations, along with the damage done by the second oil shock and the prolonged world recession of the early 1980s, have made prospects of success for these reforms problematic. If the Marcos government falls, economic policy could change dramatically—and probably toward an even more inward-looking pattern.¹³

The agriculture sector of the Philippine economy performed well in the 1970s, averaging 4.9 percent per annum for the decade (World Bank, 1983a, Table 3). Moreover, agriculture in the Philippines is a net source of foreign exchange accounting for \$1.6 billion in foreign-exchange earnings (gross) in 1981. Agricultural imports in the same year were valued at approximately \$600 million. Continued improvement in the agriculture sector is vitally important to the Philippines, if only because it still produces more than 25 percent of gross national product and employs 53 percent of the labor force. Success in agriculture is also a necessity from a distributional point of view. The Philippine government has been criticized for having concentrated so much of its industrialization effort on Luzon, and in the Metro-Manila area in particular. The largest percentage of poor Filipinos reside in rural areas and are either directly or indirectly deriving their livelihoods from agricultural pursuits.

Virtually all agricultural foreign-exchange earnings are derived from exports of coconut products, sugar, and fruits. Abaca, coffee, tobacco, and (recently) rice make only modest contributions. As in Indonesia, the heaviest emphasis of agriculture policy has been in rice production, and success in extension and improvement of irrigation facilities and the breeding and dissemination of high-yielding rice varieties has given the Philippines a modest surplus for export in the late 1970s, after many years of having to import to meet rapidly growing domestic demand.¹⁴

The good performance of the Philippine agriculture sector suggests untapped potential for growth and for export earnings. As David has shown (1982), the government's industrialization policies had strongly adverse effects on agricultural incentives for three decades. Agricultural policies have compensated for these adverse effects only in moderate degree, and unevenly in geographic, cropping, and income-distribution terms. In contrast to the extremely high effective protection coefficients for import substitution industry cited earlier, agriculture generally has had zero or negative *nominal* protection, and given generally adverse terms of trade vis-à-vis the nonagricultural sector, probably strongly negative effective protection. David has

¹³ At a conference held in Canberra, November 16–18, 1983, former senator Jose Diokno, a leader of the opposition, called for abandonment of Marcos' economic policies and for elimination of the influence of the World Bank and IMF in particular.

¹⁴ This is not to suggest that rice self-sufficiency or even an export surplus of rice is a desirable economic goal intrinsically. Probably the emphasis on rice in agricultural policy has skewed resource allocation in that direction at considerable cost in efficiency (as it has in Malaysia—see later).

calculated a weighted average of nominal protection of -4 percent for the entire agriculture sector for the 1970s. The negative protection is highest, unfortunately, in major export crops (David, 1982, Table 3).

Although much of this penalizing of the agricultural sector is the by-product of the industrialization effort, the Philippine government has also undertaken overt actions diminishing agricultural incentives, such as the importation of concessional food and its sale at prices that depress domestic food prices below world-market levels, the imposition of export taxes and quotas, special commodity levies (for example, on coconuts), and the monopolization of trade in some commodities by government trading agencies.

However, it would be unfair to condemn the Philippine government without qualification for neglect of and discrimination against the agricultural sector. Although David is correct in her assessment that agriculture has been victimized by the industrialization strategy, her own data show that 31 percent of all governmental development expenditure accrued to the agricultural sector in the 1970s. In per capita terms, that percentage is still discriminatory against the agricultural population—and still more so against the rural population—but it has undoubtedly mitigated the mentioned negative-incentive effects. These funds have gone into agricultural education, irrigation, research, extension, and rural infrastructure. Moreover, overt taxation of the agricultural sector has been low—as it frequently is in developing countries.

The case remains strong, nevertheless, that it will be in the general interest of the Philippine nation to promote agricultural development with greater vigor, not by adding to the protection system by extending it to the agriculture sector, but by dismantling the protection system for the nonagricultural sector, by maintaining an exchange rate that approximates the scarcity value of foreign exchange, and interest rates that approximate the scarcity value of loanable funds. The country, despite its fairly rapid agricultural growth during the past decade, still is behind most of Asia in its yields for major crops; moreover, there is considerable potential for improvement of cropping patterns by shifting from staple foods toward higher-value crops, in response to higher domestic demand induced by rising per capita incomes and to export opportunities for such crops.

THAILAND

Despite the similarities in their circumstances with respect to the oil crises, and their shared bad luck with respect to the terms of trade, Thailand and the Philippines present interesting contrasts in both policy and performance characteristics, particularly with respect to foreign trade. Despite important lapses, the Thai government has generally avoided severe discrimination in favor of import-competing industries and against exporters (rice being a notable exception—see later). The consequence has been successful export-led growth. Between 1970 and 1982, Gross Domestic Product, in constant 1975 prices, grew at 6.6 percent per annum, and the volume of exports expanded at 12.3 percent.

This rapid growth of exports has been characterized by great variability, not only with reference to the aggregate rate of growth, but also with respect to price fluctuations and to composition of exports. This variability is at once a measure of Thailand's persistent trade difficulties and its flexibility in meeting them. For example, in 1976 the export-volume index rose by 39 percent, whereas in 1973 it fell by 6.5 percent (International Monetary Fund, 1982 and 1983). The standard deviation of annual changes, 1970–82, was 11.9 percentage points. As to price variability, Thailand's terms-of-trade index varied between a 39 percent gain in 1973 and a 24 percent loss in 1971, with a standard deviation of 14.5. This variability, and its perversity, are shown in Figure 1.

The diversification of Thai exports is indicated by the decline of the nation's ten principal primary exports as a percentage of total value of exports from 74 percent in 1970 to 57 percent in 1979, although the value of those ten exports grew at 21 percent per annum. Rice, rubber, maize, tin, tapioca, sugar, and shrimp all exceeded \$100 million in value of earnings in 1979, with rice and rubber, the traditional leaders, still most important in absolute terms. Rice earned \$764 million, and rubber \$605 million (World Bank, 1980), but manufactured products, collectively, earned \$959 million in 1979 and grew, from 1970 through 1979, at 42 percent per annum in value terms. Textiles, garments, jewelry, and canned pineapple were the most important of the high-growth items among manufactures.

Despite this growth and diversification, Thailand had a mixed experience with its balance of payments during the 1970s and early 1980s. Both the trade- and current-account balances were negative throughout the period 1970–81, financed by sufficiently strong capital inflows for foreign-exchange reserves to grow in seven of the eleven years.¹⁵ Reserves peaked in 1978 at \$2 billion and then declined in three of the following four years, falling to \$1.5 billion in 1982. The 1970s started with Thailand in a strong reserve position, even an excessive one, with 8.6 months of import value in reserve. By 1981, that ratio had fallen to 2.3, which is lower than developing countries generally.¹⁶ The heart of the payments problem is to be found in the oil shocks and the decline in Thailand's terms of trade.

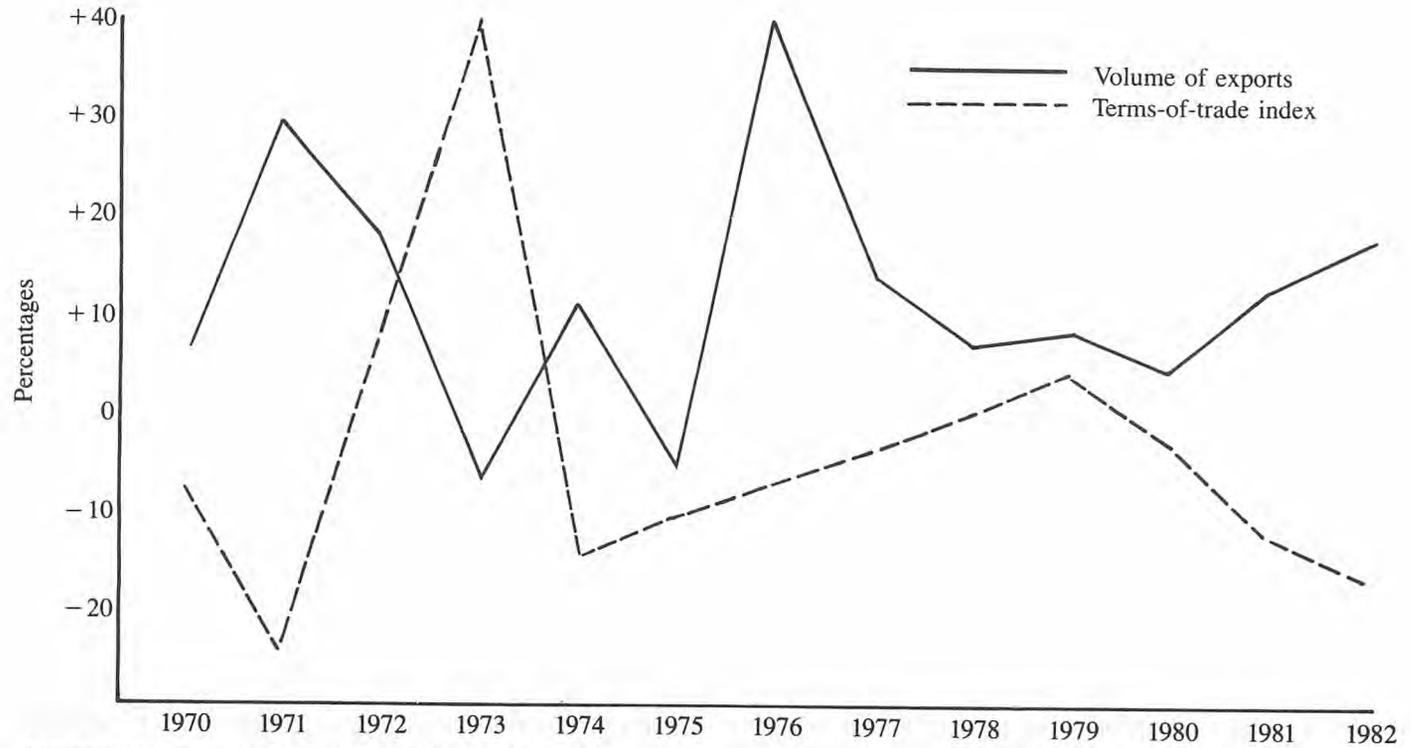
The first oil shock was not particularly troublesome, even though the dollar value of imports doubled in two years, 1972–74, and fuels and lubricants imports increased by more than \$400 million. Foreign-exchange reserves increased during those two years by nearly \$800 million. The main reasons for this apparent paradox was that Thailand was able to take better advantage of the primary commodity price boom than the Philippines, and expanded manufacturing efforts as well. Thus, it more

¹⁵ Foreign borrowing is undertaken, in large measure, to finance imports. This is especially true of official capital inflows. Hence, a current-account deficit is partly *induced* by such borrowing. Given a good export performance, combined with strong capital inflow, reserves accumulate despite a current-account deficit.

¹⁶ Middle-income economies averaged 3.1 months of coverage in 1981. Industrial market economies, by comparison, averaged 3.8 months (World Bank, 1983a).

FIGURE 1

Thailand



SOURCES: Calculated from IMF 1982 and IMF 1983.

than doubled the value of its exports in 1972–74, from \$1.046 billion to \$2.405 billion. But there was no such price-increase compensation when the 1979–80 oil shock struck, and the current-account deficit rose from \$1.1 billion in 1978 to \$2 billion by 1980. This is, of course, an unstable situation. Both private and governmental external indebtedness have risen rapidly. Foreign indebtedness has risen to \$5.2 billion by 1981—14 percent of GNP (World Bank, 1983a). However, Thailand's debt-service problems are not alarming yet. The debt-service ratio (to export earnings), as reported in the World Bank's *World Development Report*, was only 6.7 percent for 1981. This ratio had risen to 9.7 percent by the end of 1982—still within a tolerable range (*Far Eastern Economic Review*, October 29, 1982).

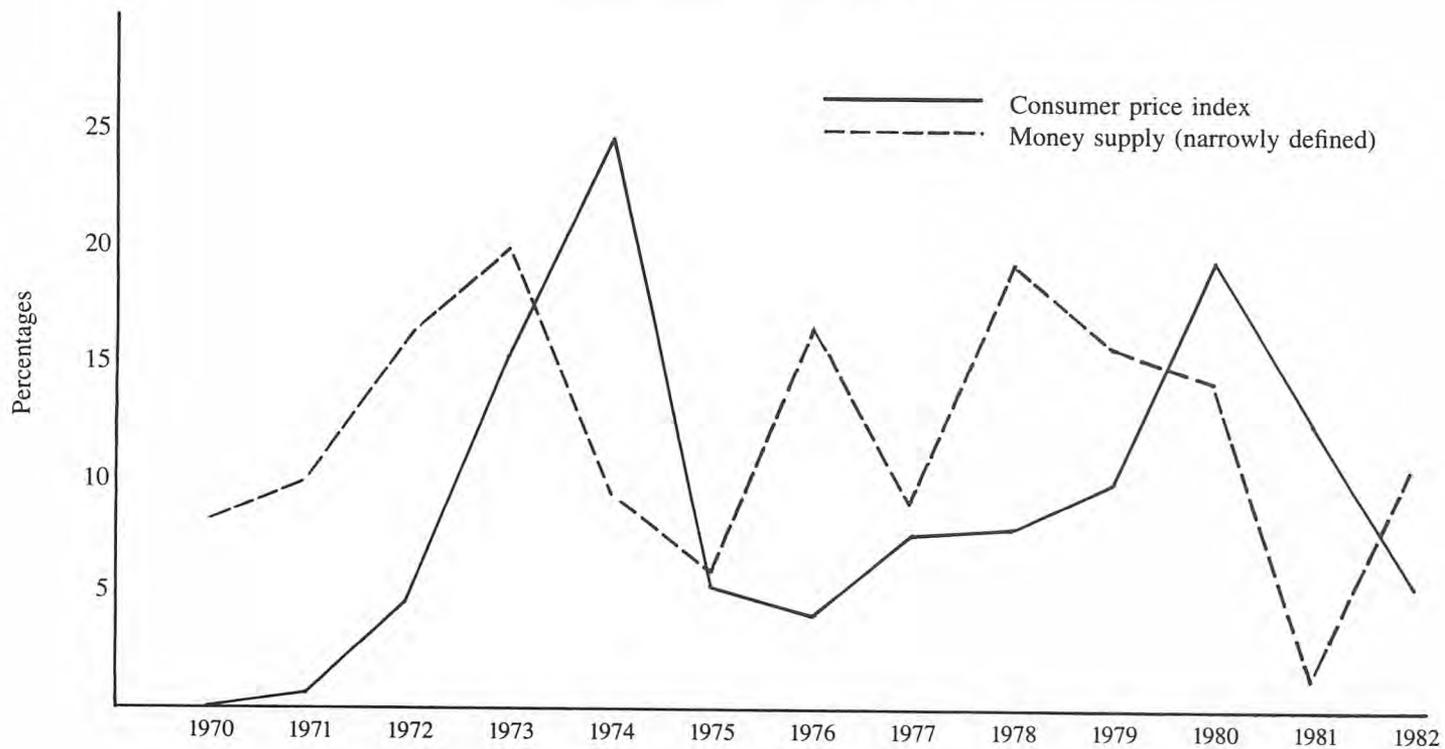
Nevertheless, it is essential that Thailand find the means to discourage the rapid rate of growth of imports and expand the rate of growth of export earnings—and at the same time, if politically feasible, avoid adoption of restrictive controls that would diminish growth. Thailand was slow to raise domestic prices of petroleum products in response to the earlier OPEC increases, but has now done so and is enjoying the advantage of substantial decline in the real price of oil imports. Like the Philippines, Thailand must rely on the recovery of exports, and must generate additional opportunities for export earnings.

The 1970s also brought price instability to Thailand. After enjoying a decade rate of consumer-price increase of only 2.3 percent per annum in the 1960s, the compound rate was 10 percent in the 1970s, with wide variation in the rate. The peak rate for the decade was 24 percent in 1974, with subsidence in the mid-1970s, then back to double-digit inflation in 1979, 1980, and 1981 (Figure 2). The standard deviation was 6.9 percentage points. Government deficits averaged 3.2 percent of GNP during this period, and the rate of growth of the narrowly defined money supply was 12.3 percent; in Figure 2, changes in the money supply are shown to have led price changes consistently, with approximately a one-year lag. However, because the index of import unit values for Thailand increased at a compound rate of 15.1 percent, 1970–81, this cannot be considered poor macroeconomic policy performance. Instead, it suggests that monetary and fiscal management have become more complex for the Thai government. The Thai economy is very open, and thus susceptible to imported price instability.

Agriculture accounted for 26 percent of Gross National Product in Thailand in 1979, and a large part of manufacturing is the processing of agricultural produce. Agricultural exports accounted for 51 percent of all export earnings in 1979. Thus, despite rapid industrialization during the past two decades, Thailand remains dependent upon good agricultural performance in order to perform well in the aggregate, and particularly so with reference to the balance of payments. Moreover, Thailand still has great potential for agricultural growth, although the main source of such growth in the postwar period—expansion of cultivated acreage—is now closed.

Evidence for the latter assertion is that yields per acre for major crops in Thailand lag behind comparably endowed Southeast Asian nations; additional evidence is found in the rapid rates of output growth experienced in the past, despite

FIGURE 2
Thailand, Money Supply and Prices



heavy taxation of staple export commodities—most notably rice and rubber. Moreover, Thailand, despite its fairly liberal economic policies, has discriminated against the agriculture sector by generally extending protection to industry while taxing agricultural exports. To be sure, industrial protectionism in Thailand is milder than that in the Philippines or Indonesia, but the discriminatory pattern exists, and its alleviation would contribute toward a higher rate of agricultural-output growth. Thailand is the only net exporter of food in the ASEAN region, and plays a major role for the area for that reason. It appears essential that Thailand move toward elimination of the severe taxation placed upon rice producers through export taxation, “premium” pricing, and the rice-reserve ratio policies of the past. These, combined, constitute an effective export tax in excess of 40 percent of exported value, and 80 percent of farm-gate value (Bertrand, 1980).

Although agricultural-export taxation has been inhibiting, most other aspects of Thai agricultural policy have been supportive. Sugar has been protected (a dubious but supportive policy), and although rubber is taxed at export, it is also supported through the government replanting scheme. The agriculture sector is subsidized by provision of irrigation facilities at little or no cost for water use.¹⁷ All these interventions have distorting effects to some degree, but they have not prevented a sustained rate of agricultural-output growth of 4.8 percent per annum in real terms. This has been achieved with rapid diversification as well. In the 1970s, maize, kenaf, cassava, oil seeds, fruits, and vegetable crops have all expanded rapidly (Bertrand, 1980).

In sum, Thailand has suffered from economic shocks, particularly in the years since the second major OPEC price increases and the advent of world recession. The nation has shown remarkable resilience, a willingness to alter policy in the face of changing conditions, and has generally avoided the more extreme forms of protectionism, despite pressures from vested interests and economic chauvinism. This success is often attributed to the stability of the position of the “technocrats” in Thai government—which at least superficially appears to be constantly in political turmoil. Given the extreme nature of the present economic crisis, it is perhaps bold to refer to Thailand as “the best two-way bet in the ASEAN region” (Rowley, 1982). But Thailand would appear to have a better chance of returning to rapid, sustained growth than either Indonesia or the Philippines. Quite strong revival appeared underway in 1983—6 percent growth according to early estimates—despite sluggish export performance (*Far Eastern Economic Review*, November 17, 1983).

MALAYSIA

One could make the case that Malaysia is already one of the Asian NICs. Per capita income was 8 percent higher than that of South Korea in 1981 (World Bank,

¹⁷ This is normal practice. Irrigation is heavily subsidized in many developed countries as well.

1983a).¹⁸ The economy is extremely open, with 55 percent of GNP accounted for by exports in 1981, and the pattern of economic policy has been one of moderate interventionism and protectionism. The rate of growth of exports in real terms, 1970–81, was 6.8 percent per annum, the same as the rate of real GNP growth.¹⁹ The government leadership explicitly looks to South Korea and Japan as models for policy design.

Malaysia is better endowed with natural resources than the Gang of Four—Singapore, Hong Kong, Taiwan, and South Korea. Success in the exporting of rubber, tin, palm oil, logs, and petroleum has propelled the impressive growth record, but manufacturing has also rapidly grown at 7.6 percent per annum in real terms, 1970–82. The Macro-Interagency Planning Group estimated that the manufacturing sector would be producing 18.1 percent of Gross Domestic Product in 1983 (Malaysia, Ministry of Finance, 1982).

Malaysia's balance-of-payments performance during the years 1970–82 is shown in Table 4. As indicated, the trade balance was consistently positive until 1981, but because of persistent negative balances on invisibles, the current account was negative in seven out of twelve years. Capital inflows were sufficiently strong to compensate until 1981 and 1982, so that reserves increased in all years except those last two.

Malaysia's average reserves (including the market value of gold) were at 6.7 months value of imports over the thirteen years 1970 through 1982. The peak was attained in 1975, with 8.3 months, and the low point in 1982, at 4.5 months. Thus, despite the reduction that came with the world recession of the early 1980s, Malaysia's reserve position has been high, probably higher than optimal.

Broadly speaking, external markets were helpful to Malaysia, as illustrated in Figure 3. Export prices, especially petroleum, led import prices upward through most of the 12-year period, but export price volatility created instability in the terms-of-trade index. (The standard deviation of the terms-of-trade index, 1970–82, was 17 percentage points.) The main topographical feature of the pattern of fluctuations is the huge climb of 60 points in the index from 1975 to 1979, followed by the plunge of 55 points from 1979 to 1982. Understandably, the current-account balance followed these gyrations closely.²⁰

¹⁸ South Korea has been growing much faster than Malaysia, however, having averaged 6.9 percent per capita GNP growth, 1960–81, versus 4.3 percent for Malaysia (World Bank, 1983a). By backward extrapolation of those rates, Malaysia's per capita GNP would have been 87 percent higher than South Korea's in 1960!

¹⁹ Thus, Malaysia's growth has not been "export led" in the sense that exports have grown more rapidly than other sectors; but given the huge proportion of GNP exported, maintaining such a high degree of openness in itself is evidence of strong trade orientation.

²⁰ The terms-of-trade index used here (and elsewhere in this contribution) is the ratio of import prices to export prices—the "barter" terms of trade. This index is a reasonable indicator of relative market position in the short term. But in the longer term, with changing productivity, comparative resource cost—the "factor" terms of trade—is a preferred indicator.

Table 4

Malaysia, Balance of Payments Summary
(Millions of Malayan dollars)

	1970	1971	1972	1973	1974 ^a	1975	1976
Trade balance	1067	686	365	1594	755	724	3762
Exports	5020	4884	4736	7263	9991	9057	13330
Imports	(-)3953	(-)4198	(-)4371	(-)5669	(-)9236	(-)8333	(-) 9568
Services (net)	(-) 862	(-) 878	(-) 906	(-)1197	(-)1365	(-)1710	(-) 2020
Transfers (net)	(-) 180	(-) 137	(-) 157	(-) 151	(-) 140	(-) 79	(-) 100
Current-account balance	25	(-) 329	(-) 698	246	(-) 750	(-)1065	1642
Capital-account balance	315	787	1163	854	1179	1723	1354
Short-term private capital plus errors and omissions	(-) 272	(-) 255	(-) 76	(-) 524	23	(-) 487	(-) 942
Overall balance	68	203	389	576	452	171	2054
SDR allocations	64	61	60	0	0	0	0
Net change in Bank Negara reserves ^b	(-) 132	(-) 264	(-) 449	(-) 576	(-) 452	(-) 171	(-) 2054

Table 4 continued
 Malaysia, Balance of Payments Summary
 (Millions of Malayan dollars)

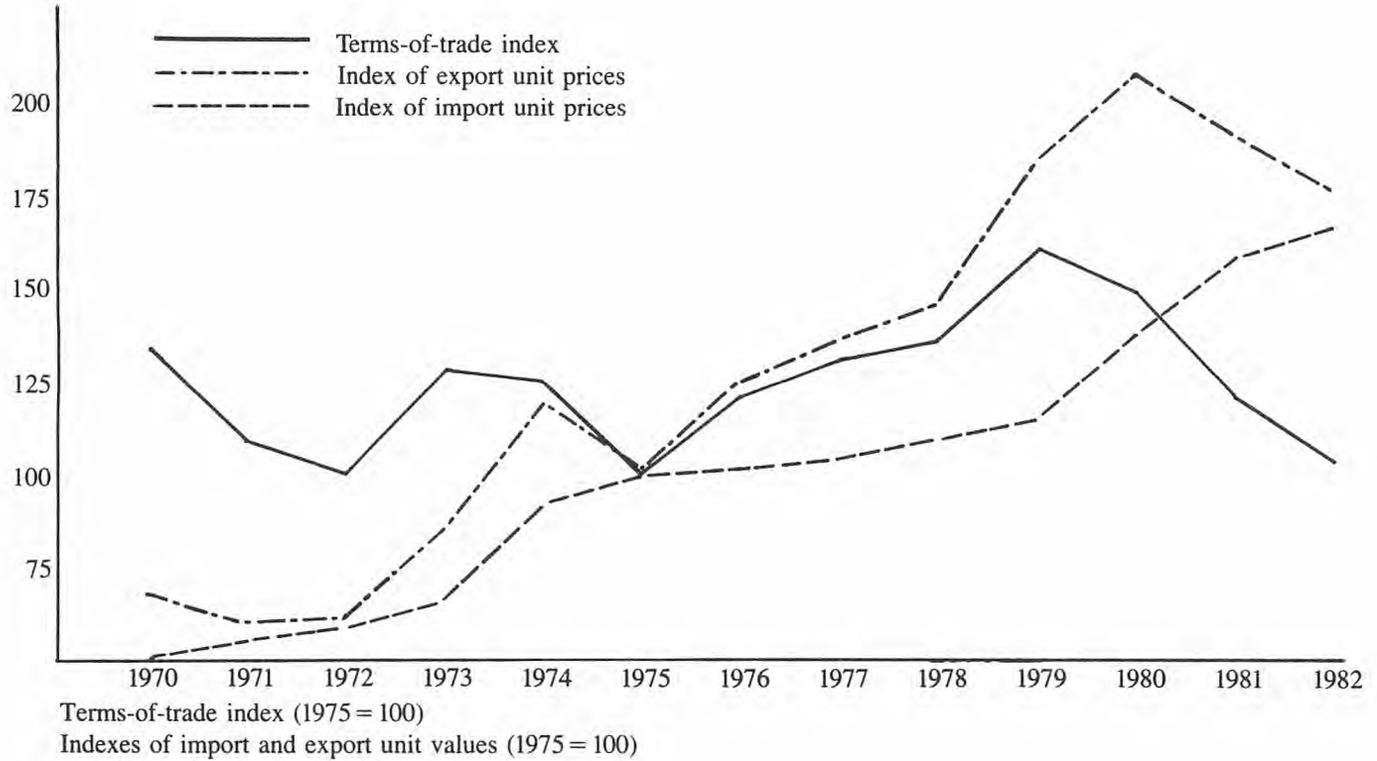
	1977	1978	1979	1980	1981	1982 ^a
Trade balance	3871	3690	6603	4909	(-) 110	(-) 2453
Exports	14861	16932	24060	28013	26910	26440
Imports	(-)10990	(-)13242	(-)17457	(-)23104	(-)27020	(-)28893
Services (net)	(-) 2515	(-) 3337	(-) 4299	(-) 5429	(-) 5066	(-) 6093
Transfers (net)	(-) 78	(-) 104	(-) 141	(-) 238	(-) 110	(-) 103
Current-account balance	1278	249	2163	(-) 788	(-) 5286	(-) 8649
Capital-account balance	1792	1576	2055	2086	5810	7843
Short-term private capital plus errors and omissions	(-) 2267	(-) 1200	(-) 2429	(-) 296	(-) 1617	63
Overall balance	755	625	1789	1002	(-) 1093	(-) 752
SDR allocations	0	0	74	76	583	152
Net change in Bank Negara reserves ^b	(-) 803	(-) 625	(-) 1863	(-) 1078	510	600

SOURCES: Young, Bussink, and Hasan, 1980 (for year 1970–74); Malaysia, Ministry of Finance, 1982 (for years 1975–82).

^a Estimated.

^b (-) means increase here.

FIGURE 3
Malaysia



Malaysia's strong trade performance cannot be attributed to policies of unqualified free trade. The government intervened to promote import substitution, following the usual pattern of such policies, particularly since the late 1960s—that is, tax holidays for pioneer investors, substantial tariff protection, and cascaded tariffs to enhance effective protection relative to nominal protection. The element absent from the conventional import-substitution strategy is the overvaluation of the rate of exchange.

The neoclassical economist argues that overprotection of import-substitution industry leads to losses in efficiency because it diverts resources from investment in areas of the nation's comparative advantage, and paradoxically tends to increase rather than decrease dependence on the international system because of the concentration of industrial investment in production of final products whose primary and secondary inputs must come from abroad. But Malaysia, rather in the pattern of Thailand, has not done itself serious damage with these import-substitution efforts, apparently because the most serious forms of discrimination against other traded goods were avoided. Quoting Shepherd (1980):

This characterization of the Malaysian incentives system—that excessive protection leads to significant inefficiencies and that tax incentives are unnecessarily generous—seems to be typical of many critical characterizations of the manufacturing sectors of developing countries. Yet, it has also been asserted that industrial performance in Peninsular Malaysia has been impressive. These two seemingly contradictory assertions can be reconciled because the excesses of the Malaysian incentive systems are not extreme by the standards of many, if not most, developing countries and because these excesses do not characterize all sectors.

The same appears to be broadly true of efforts on the part of the government to shift the balance of economic power from foreign enterprise and the Malaysian Chinese to the *bumiputra* (sons of the soil). For the most part, these efforts have been in the nature of explicit or implicit subsidies to the indigenous entrepreneur, as opposed to constraints on nonindigenous enterprises—as tends to be the case in Indonesia.

Because Malaysia is an oil exporter, its problems with the oil shocks were closer to those faced by Indonesia than to those faced by the Philippines and Thailand—namely, dealing with the sudden surges of foreign-exchange earnings, and the monetary complications attendant to accumulation of reserves. Total reserves, including gold valued at world-market prices, increased by more than 80 percent between 1972 and 1974 and by 61 percent between 1978 and 1980. The overall increase from 1973 to 1980 was slightly more than fourfold. During the same period, the money supply (narrowly defined) increased 2.6 times. The rate of inflation, as measured by the consumer price index (compound, point to point), was 6.3 percent. World inflation, as measured by the IMF index of unit values of exports, was 15.3 percent per annum over the same seven years. And although Indonesia undertook a major devaluation in 1978, following an extended period of a fixed nominal rate of exchange, Malaysia allowed her rate to *appreciate* in nominal terms by 10 percent.

The implication of this pattern of numbers is that Malaysia, by a combination of good luck and prudent monetary and fiscal management, was able to avoid the problems of loss of international competitiveness from which Indonesia suffered. Because internal inflation was markedly below that of trading partners and trading competitors, Malaysia actually gained in competitive strength, despite the oil shocks. In terms of real purchasing power, the Malaysian dollar was actually depreciated during the inter-oil shock period.²¹

As already noted, Malaysia's inflation rate during the 1970s was well below the level of the ASEAN nations generally and, despite the openness of the Malaysian economy, below that of the world economy. In the period 1970–82, Malaysia experienced only two years of double-digit inflation, 1973 and 1974, pulled strongly in the direction of higher prices by the general commodity boom and the oil-price increases. This remarkable stability is a reflection of a pattern of macroeconomic policy that keeps monetary expansion within reasonable bounds. The rate of monetary expansion from 1970 through 1981 was 16 percent per annum; real growth of Gross Domestic Product was 7.9 percent. Thus, monetary growth exceeded real growth of output plus the rate of inflation by less than 2 percentage points—a margin easily absorbed in the form of increased demand for real cash balances for nontransaction purposes.

Fiscal policy has not been allowed to contribute in a major way to monetary growth in Malaysia, despite a rapid rate of growth of government expenditure, and government deficits that have also grown rapidly. In 1970, government expenditures were 23 percent of GNP; by 1981 they had risen to 44 percent; and the fiscal deficit, which in 1970 was a mere 4 percent of GNP, had grown to be 20 percent of GNP. Although this process cannot be allowed to continue at this rate indefinitely, Malaysia has been able to cope with it by a combination of refraining from borrowing from the central bank (which would expand the monetary base), and borrowing from the social-security and Employees Provident Fund surpluses—in effect, mobilizing forced private savings. In addition, foreign borrowing has been used with moderation, much of it for import-intensive development expenditure. External debt was kept within manageable bounds, at least until recently. Total public external debt in 1980 was U.S.\$3.1 billion, less than 14 percent of GNP. Debt service in that year amounted to U.S.\$208, only 2.3 percent of the value of exports of goods and services (World Bank, 1983a). However, since then Malaysia has been borrowing heavily in support of public investment (in the face of weakened export markets), and serious concern about its “profligate ways” has been expressed (Rowley, 1983).

Agriculture is a vital sector for Malaysia. Despite the growth of industry, agriculture still was producing 23 percent of Gross Domestic Product in 1982 (versus 37 percent in 1970). Moreover, combined with forestry and fishing, the sector

²¹ The “real effective rate of exchange” is defined as $R = r(P_f/P_d)$ where r is the nominal rate, P_f is an index of foreign prices, P_d is an index of domestic prices. Thus, with the relative price ratio rising, the real rate (that is, the real price of foreign exchange) is increasing. Hence, in real terms, the value of the Malaysian dollar fell, even though the nominal value (\$US per \$M) was rising.

provides an estimated 37 percent of all employment. These statistics understate the sociopolitical importance of the sector, however, because the concentration of poverty, and of bumiputra poverty in particular, in the rural sector is the root cause of Malaysia's maldistribution of income. The essence of the so-called New Economic Policy is to enhance employment opportunities outside the rural sector, particularly for the bumiputra, and at the same time raise productivity in the rural sector so that the gap in real incomes between the rural and urban sectors can be narrowed progressively.

This is not to say that agriculture has performed poorly in recent years. The agriculture component of the Gross Domestic Product accounts has grown, in constant dollar terms, by 4.6 percent per annum 1970–81.²² The aggregate growth figure masks an important, shifting composition. After succeeding, in the 1950s and 1960s, in replacing most of the nation's old rubber trees with new high-yielding varieties and generating a trend rate of output growth of approximately 5 percent per annum, a combination of market forces and government programs has led to a marked shift toward oil palm as a major cash crop. Rubber has almost ceased to grow in volume terms (0.9 percent per annum, 1970–82); while oil palm, which produced only 41 percent as much tonnage of product as rubber in 1970, has grown, 1970–82, at 16 percent per annum and now provides 128 percent more per year (by tonnage) than rubber.²³ These two commodities are the most important cash crops, accounting for approximately two-thirds of crop incomes. Rubber and palm oil also generate 24 percent of total export earnings.

The third most important crop is rice, which is the staple food commodity for most Malaysians; its cultivation is a source of livelihood for many of the poorest Malaysian farmers. Despite heavy subsidy during an extended period (Meerman, 1979), growth in rice production was slow in the 1970s (only 2 percent per annum 1970–82). This is not enough to match the rate of population growth, or the rate of growth of demand. Hence, Malaysia must still import roughly 20 percent of its rice requirements, and that is likely to expand. The rice deficit is not a serious problem, given Malaysia's strong trade position. Self-sufficiency in rice is not a necessary, or even desirable, economic goal, although it has political importance in Malaysia, as it does in Indonesia and the Philippines. Meerman (1979) considers pursuits of the goal of rice self-sufficiency to have been very costly to Malaysia in terms of resource mal-allocation. Nevertheless, a major government effort in improvement of irrigation in rice-growing areas has been undertaken during the third and fourth plan periods (1976–85).

Malaysia is interesting in that —despite a good performance in the agricultural sector, rapid expansion of exports, and good growth in industry including labor-intensive export industry— income distribution remains a central problem. Gradual progress is being made, but the country's geographical makeup, particularly that of Peninsular Malaysia, and the intractability of the occupation distribution by ethnic

²² Calculated from Young, Bussink, and Hasan (1980), Table C6, and from Malaysia, Ministry of Finance (1982), Table 2.2.

²³ However, rubber remains the more important crop in value terms because its price per metric ton is virtually twice that of palm oil (as of November 1983).

group have made such progress difficult. Rapid growth has contributed significantly to the reduction of the incidence of "absolute" poverty, but the differentials in rates of growth, as between geographic and ethnic groups, have remained large; hence the distribution pattern changes only very slowly.

A disturbing aspect of the recent situation in Malaysia was the debate over industrialization strategy underway as time for the midplan review of 1983 approached. Prime Minister Mahathir was believed to be on the verge of leading the nation into a "second round of import substitution" involving a shift in the direction of high capital intensity and higher technology, in order to increase the rate of flow of technology transfer and the training of high-skill manpower, and to create stronger interindustry linkages (Smith, 1983). It is argued that such a strategy would also lead to a stronger directly productive role for government, and thereby strengthen the relative position of the bumiputra in the economic system.

The danger inherent in promoting such acceleration in modern heavy industrialization is that it probably cannot be achieved without capital subsidies and protection of these new industries during the process of learning-by-doing and achieving full economies of scale. The history of economic development illustrates how effectively inefficiency can be locked in by such efforts. Protection, once established, has a nasty way of becoming permanent, along with the inhibiting effects of such protection on unprotected industries and agriculture. Steel, automobiles, and petrochemicals are symbolic of high stages of industrial advancement, but they can also be symbolic of diversion of capital resources from areas of relative economic efficiency—sirens luring economic planners toward shipwreck. The Malaysian leadership would be well advised to examine such a policy shift with skepticism.

CONCLUSION

The four nations under consideration in this essay, although faced with serious economic problems at the time of this publication (late 1985), have all succeeded in terms of most important macroeconomic variables and have expanded export trade at good rates. But all face major problems in sustaining their good records in the decades ahead. Clearly Indonesia and the Philippines have the most difficult tasks to face; Thailand and Malaysia have better prospects. Indonesia is heavily dependent upon recovery of world demand for petroleum and for its traditional export commodities. It also faces a formidable political task in restructuring its industry, which has been built with too great a dependence on government capital subsidies and high levels of effective protection. The Philippines has been attempting to introduce an industrial restructuring program, but is hampered by world economic conditions, as well as domestic political upheaval, making the country's future unpredictable. Thailand is also currently beset by political confusion, but less seriously, and hope remains that the nation's corps of competent technocrats and traditional economic openness will allow it to recover as the world economy shows strength again. Malaysia also has excellent technocratic manpower, and a similar tradition of openness which should

make for the type of resilience called for to cope with the challenge of the 1980s, despite worrisome debt problems and Mahathir's *dirigiste* inclinations.

The question that haunts discussions of this type is whether the opportunity of which the original Gang of Four took such expert advantage will recur. Will the rapid rate of growth of world trade that made their rapid progress possible resume? The volume of world exports expanded at 8.2 percent per annum, 1965–73, but slowed down to 4.9 percent, 1973–80. In the early 1980s world-trade growth has fallen to 2.3 percent. If stagflation has gripped the major economies of the world more or less permanently, and if protectionism in the larger markets is extended rather than curbed, the ASEAN other four will find it difficult to follow in the footsteps of their fast-paced Asian neighbors.

The World Bank's "central case" projection is for recovery of world-trade growth to a level slightly better than that of 1973–80—to 5.1 percent growth per annum. If that prediction proves true, the ASEAN other four will have to expand their *shares* of world exports—as did the original Gang of Four—in order to succeed with export-led growth. They can only do that by following strategies that make exports attractive to both their own entrepreneurs and to foreign buyers. This cannot be done if a heavy load of the trappings of an import-substitution strategy is maintained.

The only alternative to rapid growth through exploitation of external markets is through the exploitation of internal markets, and within that strategy is a catch-22. Rapid growth of internal markets in a closed economy can only be obtained within the confines of domestic productivity growth, once one has used up the growth potential that comes from crowding out the foreign competitor. Moreover, one of the most effective ways to enhance productivity is to expose protected domestic producers increasingly to competition in the world marketplace and to world standards of efficiency.

Expanded international trade is not a cure-all. To be effective, increased economic openness must be supported by appropriate economic policies on a broad front, including those that stimulate agricultural growth, avoid serious price distortions, maintain reasonable price stability, expand the supply and variety of financial services, strengthen and improve the equity and revenue-generating capability of the tax system, and expand employment opportunities. Few governments manage to perform superlatively in all these areas. However, steady progress across this spectrum is essential, and liberal international trade policy is both supportive of and supported by good domestic economic management, as the experience of the trade-oriented Asian economies has shown.²⁴

²⁴ Cf. Hughes, 1983—a very useful paper addressing many of the same questions discussed here.

Bibliography

- Arndt, H. W. 1983a. "Oil and the Indonesian Economy." *Southeast Asian Affairs*, 1983. Institute for Southeast Asian Studies, University of Singapore.
- . 1983b. "Survey of Recent Developments." *Bulletin of Indonesian Economic Studies* Vol. XIX, No. 2, August.
- Awanohara, S., and M. Habir. 1983. "Shaking the Industrial Cocktail." *Far Eastern Economic Review*, August 18.
- Bank of Indonesia, various dates. *Indonesian Financial Statistics*, various issues (published monthly).
- Bautista, Romeo. 1980. "Industrial Growth, Employment, and Investment." In *ASEAN in a Changing Pacific and World Economy*, ed. Ross Garnaut. Canberra: Australian National University Press.
- Bautista, Romeo, and John H. Power and Associates. 1979. *Industrial Promotion Policies in the Philippines*. Manila: Philippine Institute for Development Studies.
- Bertrand, Trent. 1980. *Thailand: Case Study of Agricultural Input and Output Pricing*. Washington, D.C.: World Bank.
- Boediono. "Manufacturing Protection in Indonesia." Paper for the workshop Trade in Manufactures, Subproject 3: Protection. ASEAN-Australia Economic Relations Research Project, Canberra, August.
- David, Cristina C. 1982. "The Impact of Economic Policies on Agricultural Incentives." National Economic and Development Authority, Manila. Mimeo.
- Garnaut, Ross. 1979. "Survey of Recent Developments." *Bulletin of Indonesian Economic Studies* Vol. XV, No. 3, November.
- Glassburner, Bruce. 1983a. "Oil, Public Policy, and Economic Performance: Indonesia in the 1970's." Unpublished study for World Bank.
- . 1983b. "Survey of Recent Developments." *Bulletin of Indonesian Economic Studies* Vol. XIX, No. 3, December.
- Gray, Clive. 1982. "Survey of Recent Developments." *Bulletin of Indonesian Economic Studies* Vol. XVII, No. 3, November.
- Hughes, Helen. 1983. "The Political Economy of Growth in East and Southeast Asia." Development Studies Centre, Australian National University, Canberra. Mimeo.
- Indonesia, Department of Finance. 1983. *Nota Keuangan, 1983/84* (Financial Note, 1983/84). Jakarta, Indonesia.
- International Monetary Fund. 1982. *International Financial Statistics Yearbook*. Washington, D.C.
- . 1983. *International Financial Statistics*. June. Washington, D.C.
- McCawley, Peter. 1980. "Discussion of M. Arsjad Anwar, 'Trade Strategies and Industrial Development in Indonesia.'" In *ASEAN in a Changing Pacific and World Economy*, ed. Ross Garnaut. Canberra: Australian National University Press.

- . 1983. "Survey of Recent Developments." *Bulletin of Indonesian Economic Studies*, March.
- Malaysia, Ministry of Finance. 1982. *Economic Report, 1982/83*. Kuala Lumpur: National Printing Department.
- Meerman, Jacob. 1979. *Public Expenditure in Malaysia*. New York: Oxford University Press.
- Richter, H. V. 1970. "Problems of Assessing Unrecorded Trade." *Bulletin of Indonesian Economic Studies* Vol. VI, No. 1, March.
- Rosendale, Phyllis. 1981. "The Balance of Payments." In *The Indonesian Economy During the Soeharto Era*, ed. Anne Booth and Peter McCawley. Kuala Lumpur: Oxford University Press.
- Rowley, Anthony. 1982. "ASEAN's Dark Horse." *Far Eastern Economic Review*, October 22.
- . 1983. "The Two M's: Mexico and Malaysia?" *Far Eastern Economic Review*, August 11.
- Shepherd, Geoffrey. 1980. "Policies to Promote Industrial Development." In Young, Bussink, and Hasan, eds., *Malaysia: Growth and Equity in a Multiracial Society*.
- Simkin, C. G. F. 1970. "Indonesia's Unrecorded Trade." *Bulletin of Indonesian Economic Studies* Vol. VI, No. 1, March.
- Smith, Patrick, 1983. "Malaysia's Great Leap Forward." *Far Eastern Economic Review*, June 16.
- U.S. Embassy. 1983. "*Productivity and Participation—Keys to Growth in Indonesia: Country Development Strategy Statement for FY 85*." Jakarta.
- . 1984. *World Development Report, 1984*. New York: Oxford University Press.
- . 1983a. *World Development Report, 1983*. New York: Oxford University Press.
- . 1983b. *Indonesia: Policies for Growth with Lower Oil Prices*. Report No. 4279-IND.
- World Bank. 1976. *The Philippines: Priorities and Prospects for Development*. Washington, D.C.
- . 1980. *Thailand: Coping with Structural Change in a Dynamic Economy*. Washington, D.C.
- . 1982. *The Philippines: Selected Issues for the 1983-87 Plan Period*. Report No. 3861-PH. Washington, D.C.
- Young, F., E. C. F. Bussink, and P. Hasan, eds. 1980. *Malaysia: Growth and Equity in a Multiracial Society*. Baltimore: Johns Hopkins University Press.

8. Southeast Asian Economies in Transition

Konosuke Odaka

INTRODUCTION

The growth performances of the Southeast Asian countries, specifically Indonesia, West Malaysia, the Philippines, and Thailand (hereinafter referred to as “the four countries”), have been good in the years 1960–80, particularly in view of the prolonged, worldwide stagflation in the 1970s. Their annual geometric rates of change in per capita real gross domestic product (GDP) averaged 3.1 percent in 1960–70 and 4.9 percent in 1970–80 (Oshima 1982, Table 1). According to the World Bank’s *World Development Report, 1982* (Table 2), the corresponding rates for the entire period of 1960–80 were 4 percent per annum for Indonesia, 4.3 percent for Malaysia, 2.8 percent for the Philippines, and 4.7 percent for Thailand. Although these figures did not quite compare with the impressively high rates (7 percent) of South Korea and Taiwan,¹ they were, on the whole, better than the average growth rates of the industrialized market economies (3.6 percent). A similar conclusion may be drawn by using other macro-indicators pertaining to improvements in standard of living.

Accompanying the growth of GDP per capita have been increasing percentages of GDP allocated to savings. In 1960, 8, 27, 16, and 14 percent of GDP were accounted for by gross domestic savings in Indonesia, Malaysia, the Philippines, and Thailand, respectively. The figures went up to 30, 32, 25, and 22 percent in 1980—levels either equal to or higher than those in industrialized market economies (World Bank’s *World Development Report, 1982*, Table 5). This helped reduce the countries’ dependence on foreign capital.

However, despite the impressive growth in per capita real income in all the four countries, some structural problems exist. The purpose of the present contribution is to

¹ The growth rate of Taiwan cited here is the arithmetic average of the 1960–70 and 1970–80 figures reported by Oshima (1982, Table 1).

review the economic development of the four countries after World War II, in a broad historical context and with occasional reference to the Japanese experience. The aim is ambitious, and so I will have to be content here with providing a rough sketch of my interpretations by way of a survey of selected documents and economic data.

NATURAL RESOURCES AND POPULATION INCREASES

The four countries faced more or less similar factor endowments at the beginning stages of their modern economic growth. That is to say, they were all rich in natural resources and in labor supplies, but typically short of capital.

A resource-rich underdeveloped country will respond to the challenge of industrialization when it feels that it can no longer depend entirely on natural resources to provide a continued good livelihood. The idea is often brought home by a series of major sociopolitical incidents and is usually accompanied by a surge of nationalism. The need is often accentuated by the population explosion triggered by a rapid decline in infant mortality and an increase in the birth rate (Wrigley 1969, VI).

Industrialization is chosen as a solution to the problems of poverty and unemployment because (1) manufacturing can yield much higher value added per unit of land, (2) too volatile fluctuations of primary goods prices are said to cause recurrent balance-of-payments difficulties, (3) man-made substitutes for primary goods, such as synthetic fibers and artificial rubber, do well, effectively threatening the market share of the primary goods, and (4) successful industrialization is believed to enhance national prestige.

The four countries had little chance or desire to respond to the challenge of industrialization until around the 1950s. The man/land ratios were still at fairly low levels, and increased returns from natural resources could be expected with limited effort. Competition from man-made substitutes was not keen. Above all, the colonies were allowed little initiative to start their own economic programs under the prevailing political arrangements, although it was only a matter of time for the Philippines (excepting the brief period under Japanese rule, 1942–45). Even Thailand, which retained its political sovereignty throughout, apparently felt little desire to launch industrialization until the end of the Second World War (Ingram 1971, chap. 10).

The lack of a strong drive toward industrialization must be understood in relation to historical circumstances. In Indonesia, for example, the Dutch merchants were satisfied to obtain much-desired commodities for trade. In the early part of the twentieth century (1913), the archipelago's principal exports consisted of sugar (23 percent of the total export value, which was U.S.\$268 million equivalent in 1913), petroleum (17 percent), tobacco (14 percent), and copra (8 percent). In the same year, imports amounted to U.S.\$175 million equivalent, thus leaving a handsome surplus to the traders. The leading import was cotton products (17 percent), followed by iron and steel (8 percent), machinery and tools (8 percent), and rice and paddy (7 percent). (Statistics are from J. S. Furnivall as quoted by Leeuwen 1970, pp. 258, 260.)

Some basic characteristics of the postindependence Indonesian economy were already discernible in the late nineteenth and early twentieth centuries. First, the native population of Java and Madura increased roughly at the annual compound rate of 3 percent from 19.5 million in 1880 to 32.2 million in 1913. Already, in the early twentieth century, labor was quite plentiful and land scarce in Java; the reverse was the case in the outer islands. Second was the dominance of the Chinese in commercial operations. Because the Chinese controlled the inland commerce (trading and money-lending) of the archipelago, their economic power was resented by both the Indonesians and the Dutch. Third, petroleum gained growing importance as a tradable commodity. This new promising source of wealth was first tapped in the 1890s. The Royal Dutch Oil Company was established in 1890. Finally, the foreign-domestic division was reflected in the geographic contrast between Java and the outer islands. On Java, where land was scarce, it was more profitable to grow sugar for export, whereas the indigenous cultivators in the outer islands were freer to grow rubber, coconuts, and coffee in addition to rice. Rubber and coconuts required little care and could be planted simultaneously with shorter-yield food and cash crops. Hence the small holder cultivation of rubber and coconuts gained economic momentum as the world demand became greater. Consequently, native development was more successful in those early days (1880–1930) in Sumatra and other islands than it was in Java (Leeuwen 1970, pp. 259, 265, 275–278).

When the four countries launched into modern economic growth, they initially attempted to take advantage of their rich natural endowments. As of 1960, for instance, their largest two export items (in value) were sugar and rubber for Indonesia, tin and rubber for Malaysia, rice and maize for Thailand, and wood products and copper ore for the Philippines. Even when an early import-substitution drive was introduced in the Philippines (1957–62), its target was mainly the food-processing industry, which presumably enjoyed stronger comparative advantage vis-à-vis industrialized countries abroad (Castro 1974).

Japan, too, made extensive use of its natural endowments for material advance at the earliest stages of its economic development. Premodern Japan was rich in mineral deposits and some agricultural products.

In Japan, gold and silver were most actively extracted for fifty years around 1600, whereas copper production hit its peak in 1697 at the rate of 6,000 tons per year, then the highest in the world (Kobata 1968, p. 7). With the increased mining outputs, the country briefly dominated the world as a major exporter of the metals. In the early seventeenth century, for instance, the annual export of silver probably reached a peak of 130–165 tons, a surprisingly high level in light of the estimated annual world production of silver (400 tons) in 1601–40 (Iwao 1966, p. 223; Kobata 1968, p. 6).²

In return for the metal exports, Japan imported various commercial goods such as ceramic ware, raw cotton, raw and fabricated silk, sugar, tea, and tobacco. These

² Even during the seclusion, Japan continued to export considerable quantities of silver and copper through the officially designated, albeit restricted, ports of Nagasaki, Satsuma, and Tsushima (Tashiro 1981, chaps. 10 and 11).

newly introduced products were subsequently adopted for domestic production. The "import substitution" of these goods was practically complete by the early eighteenth century and enormously enriched the life of the common citizen (Kawakatsu 1983, pp. 24–25).

Japanese farming land was (and remains) severely limited. This is the fundamental reason that the small-land-holding system has prevailed in Japanese agriculture since the seventeenth and eighteenth centuries (Thomas Smith 1959, chaps. 1, 4, 9). Also, premodern Japan fed its population reasonably well, a population which grew from about ten million in 1600 to about thirty-five million in 1875 (Hayami 1968, pp. 37–39).³ During the same period the arable land is also said to have increased two-and-a-half times and agricultural production by at least four times (*ibid.*). This implies that the production efficiency of food recorded slight gains during the 275 years (average labor productivity at 0.05 percent per annum, and average land productivity at 0.18 percent per annum), thus enabling the gradual accumulation of a surplus as well as a meager improvement in the standard of living.⁴

These, then, were among the factors that helped the country sustain its economic self-sufficiency for 200-plus years while it secluded itself from the rest of the world (1639–1853). However, this does not exclude the possibility that, without seclusion, Japan could have staged a much faster and more autonomous process of modernization than was actually achieved.

Natural resources also played an important role after the seclusion because the early phases of Japanese industrialization depended heavily on them. First, most Japanese exports then consisted of processed agricultural products (such as silk and tea) and mineral goods (such as coal and copper), which were overtaken only later by cotton textiles. On the average, 68 percent of the silk products were exported between 1889 and 1913 (Allen 1972, p. 67). Smooth export advances were facilitated by the continuous devaluation of the yen between 1874 and 1896 (Nakamura 1971, pp. 31–32). Second, the Meiji government had no choice but to rely on the land tax to support its various new programs, such as the construction of transportation and telecommunication facilities (Teranishi 1982, chap. 4). Furthermore, accelerated improvement in agricultural efficiency helped the country keep the price of wage goods at reasonably low levels, thus indirectly encouraging the accumulation of industrial profits. In sum, Japanese industrialization owed a good deal to the successful exploitation of its natural endowments.

As for population trends, the difference between the four countries and Japan was a matter of both timing and magnitude. Although labor was abundant in Japan most of the time until the mid-1960s, the rate of population increase was moderate, comparable with the Western European experience: 1.7 percent per annum between 1872 and 1940 and 1 percent per annum between 1950 and 1970 (Ohkawa and

³ However, the population grew at a much slower rate (at about 0.1 percent per annum) between 1750 and 1872 (Shimbo, Hayami, and Nishikawa 1975, pp. 42–51).

⁴ For instance, in Chōshū, the southwest end of the Honshū island, per capita calorie intake increased from 1,664 kcal (kilo calories) in the 1840s to 1,902 kcal in 1887 (Nishikawa 1982, p. 144).

Shinohara 1979, pp. 392–393). But in the four countries, the population explosion preceded the start of modern economic growth and its magnitude was much greater than that in Japan.

In the Philippines, the population probably stayed more or less unchanged during Spanish rule. As evidence of this, one may cite the parish records of three localities in the nineteenth century, Ilocos Sur, Cebu, and Laguna, which show that the significant increase in the number of baptisms was largely canceled out by the corresponding increase in the number of burials (P. C. Smith 1978, p. 64). Assuming that infant mortality and average life expectancy remained unchanged, these data suggest a stable population. The same records indicate that the number of marriages per year was either constant or had only a very slight upward trend.

The rate of population increase was higher after the Americans took over. The size of the population was about 7 million in 1898, at the start of the American occupation (Golay 1961, p. 50), and 7.6 million in 1903. After that time, the rate of increase never went below 2 percent: it was 2.1 percent between 1903 and 1939 (16 million), and 2.9 percent between 1948 (19.2 million) and 1980 (48.1 million; *The 1982 Philippine Statistical Yearbook*, pp. 24–25).

Similarly, in Thailand, the estimated population in 1850 was between 4.5 and 6 million, which increased to 8.3 million by 1911, representing an annual compound rate of 0.5 to 1 percent per annum. Growth was still around 1.4 percent per annum between 1911 and 1919 (9.2 million), after which it rose to 2.6 percent between 1919 and 1937 (14.5 million), 1.8 percent between 1937 and 1947 (17.3 million), and 3.1 percent between 1947 and 1979 (46.1 million). (The data are from Ingram 1971, pp. 7, 46, and *The Statistical Yearbook of Thailand*.)⁵

In the Indonesian archipelago, Java had already experienced a fairly rapid population increase in the nineteenth century. In the mid–nineteenth century, Java had a much more modern, Westernized center in Batavia (Jakarta of today) than any big city in Japan. Java's population in 1800 was less than 4 million, growing to 28 million in 1900, a 2 percent increase per annum! The rate receded to 1.4 percent per annum from 1900 to 1940 (48 million) but was again fairly high in the decades after World War II: 1.9 percent per annum between 1961 (63.1 million) and 1971 (76.1 million), and 2 percent between 1971 and 1980 (91.3 million).

The population of all Indonesia increased at even higher rates than that of Java after the war. Its size, of 68.4 million in 1938 and 77.4 million in 1951, grew at the rate of 2.3 percent per annum between 1951 and 1961 (97.1 million), at 2.1 percent between 1961 and 1971 (119.2 million), and at 2.4 percent between 1971 and 1980 (147.5 million; Higgins 1957, p. 177, and Biro Pusat Statistik, *Statistik Indonesia 1980/1981*, p. 34).

Finally, Peninsular Malaysia experienced higher rates of increase in population

⁵ However, the growth rate of population has subsided since the 1970s in Malaysia, the Philippines, and Thailand.

after the war than the three other countries: 2.5 percent per annum between 1947 (4.9 million) and 1957 (6.3 million), and 3.2 percent between 1957 and 1968 (8.9 million; Lim 1973, p. 70).

To summarize, a basic difference between Japan and the four countries may exist in that the stock of natural resources ran out early and faster in Japan, whereas the shortage never became serious in the four countries, despite the population explosion that began long before the onset of modern economic growth. Consequently, Japan was forced to find a way out of its difficulties.

BALANCE-OF-PAYMENTS DIFFICULTIES AND DETERIORATING INCOME DISTRIBUTION

The postwar economic development of the Philippines (1950–80) has been characterized by chronic shortages of foreign exchange and peso devaluations, together with rumors of corruption and abuses in government circles.

In the period 1945–49, the effect of the war dislocation was reflected in the slow pace of recovery in the country's export performance. The Filipinos had long been exposed to a Western life-style, which induced import propensities, distinct from the experience of prewar Japan, where the strong indigenous consumption pattern persisted to keep its consumption-to-income ratios at fairly low levels (Rosovsky and Ohkawa 1961). The enactment of the Philippine Trade Act of 1946, which extended the country's free-trade status with the United States through 1954, symbolized the country's eagerness for easy, cheap imports of American merchandise, which for a while outweighed its desire for its own industrialization. This eagerness was partly responsible for trade restrictions, which were made mandatory.

The erroneously overvalued peso worsened the situation. In the period 1945–49, consequently, each year renewed the previous record of deficits in the balance of payments. Although the deficits were mainly met by United States government expenditures, the balance had to be met by reductions in the foreign-exchange reserves (Valdepeñas and Bautista 1977, pp. 161, 165–167). This contrasted with the period from 1899 through 1941, when the country's balance of payments showed a big surplus except for the brief periods of 1899–1904 and 1910–13 (*ibid.*, pp. 114, 166–171). Not by design but by lack of choice, the government resorted to trade and foreign-exchange controls. The balance-of-payments problems were probably intensified by the policies initiated by the Magsaysay administration in 1954, which aimed at active import substitution backed by economic nationalism.

Import substitution had long historical antecedents in the Philippines. In the late 1930s, the people dreamed of domestically producing popular commodities such as cotton textiles, radios, and automobiles, products then imported (Valdepeñas and Bautista 1977, pp. 172). Experience with tight trade controls as well as recurrent balance-of-payments difficulties in the postwar years strengthened this inclination.

In any event, it has been suggested that the decade of exchange and trade controls (1950–60) taught the native entrepreneurs too easy ways to earn a profit.

Instead of painstakingly upgrading their productive efficiency, they became rich quickly through manipulating the bureaucracy, taking advantage of credit allocation and other transaction maneuvers, and indulging in graft and corruption (Carrol 1965, pp. 34–37). Personal ties are among the most important elements in Philippine culture. Personal favoritism is commonplace, even in daily factory life (Stifel 1963, pp. 115–117; Golay 1961, pp. 15–16).

The structure of production was gradually transformed as the drive for localization proceeded. Of the total value added originating from manufacturing, the share of food processing declined between 1938 and 1961 from 52 to 27 percent, whereas the shares of textile and metalworking industries grew from 0.8 to 5.1 percent and from 1.3 to 14.4 percent, respectively. (Metalworking refers here to the industries manufacturing metal products, machinery, and transport equipment.)

The shortage of foreign exchange remained, however, even after the period of trade liberalization under President Macapagal (1962), which symbolized the end of the import-substitution drive. Subsequently, emphasis has been placed instead on the building of social-overhead capital and agrarian-development projects, supported by large foreign loans. Even short-term loans were often used to cover long-run projects (Castro 1974).

Characteristically, foreign financing has been essential for the Philippines not only to support external trading activities but also to foster much-needed capital formation; between 1946 and 1958, on the average, 28 percent of gross domestic capital formation (or 56 percent of net domestic capital formation) was channeled from nondomestic sources (Valdepeñas and Bautista 1977, p. 181). Moreover, many government projects have been underwritten by international organizations (such as the World Bank) and by foreign governments through bilateral agreements. One suspects, however, that substantial portions of the foreign borrowings have been siphoned into nonproductive uses, such as fueling land speculation and sponsoring certain current operations of the government, which is a form of government consumption (*ibid.*, pp. 218–223).

In short, international debts have been accumulating to a point unknown in other ASEAN nations in spite of the continuous efforts to promote exports. The effects of the two “oil shocks” were most damaging. The debt-service ratio in 1982 was 58 percent for the Philippines; it was 20.6 percent for Indonesia, 19.6 percent for Thailand, 14.2 percent for South Korea, 9.9 percent for India, and 4.3 percent for Malaysia (*Asian Wall Street Journal*, 10 November 1982).

Basically, the Philippines’ drive for industrialization had not borne enough fruit by the end of the 1970s. Perhaps the country had been too eager in promoting highly capital-intensive, expensive projects. In view of increasing worldwide competition for the market share and of rapidly advancing technologies in these industries, however, the future of such projects is not bright.

A related finding is that the Philippine manufacturing sector in the 1960s and the 1970s failed to show much improvement in production efficiency, although investment activities and joint ventures flourished. The unweighted average real labor

productivity of manufacturing advanced only at the average annual rates of 0.5 percent between 1956 and 1965 and -0.02 percent between 1966 and 1975, thus yielding the average of 0.3 percent over the period 1956–75 (Sanchez 1983, p. 84). Moreover, the average annual rate of change in total factor productivity of Philippine manufacturing was -0.9 percent between 1969/70 and 1977/78.⁶

It should be added here, for the sake of comparison, that significantly positive changes were observed in the total factory productivities of a selected twenty-one Thai manufacturing concerns in 1971–80; the average annual rate was 7.3 percent (Yasuba 1982, p. 216).

Finally, there are problems of income distribution. Some observers have argued that the economic well-being of the farming population in the four countries has fallen behind that in the urban districts. Because of the labor-saving nature of manufacturing technology, the rural population has faced great difficulties in locating new employment opportunities outside the villages. The average land-holding has become smaller and an increasing number of the rural residents have become landless (Watanabe 1982).

In Philippine manufacturing, real wages have failed to increase for a long period extending from (around) 1960 to 1980. They declined slowly between 1954 and 1967, moved slightly upward between 1967 and 1969, rapidly deteriorated from 1969 to 1974, and then became somewhat stationary between 1974 and 1977, thus yielding an annual compound rate of -1.3 percent between 1954 and 1977 (Lal 1979, p. 50, seventh column).⁷

Moreover, an independent source suggests that the average real family income declined in the Metro-Manila district between 1965 and 1975, although the reduction was less obvious in the rural regions. Using the statistics on average family income reported in the *1982 Philippine Statistical Yearbook* and the consumer price indices of Manila and of outside Manila prepared by the Central Bank of the Philippines (quoted by Lal 1979, p. 167), it is easy to show that the real family income declined at an average geometric rate of -2.3 percent per annum between 1965 and 1975; it had risen 2.8 percent per annum between 1957 and 1965. The corresponding figures for Metro Manila were -5.4 percent and 2.0 percent, and those for rural areas -0.8 percent and 3.1 percent.

In the Philippines, the open unemployment rate declined from the 1956–60 average of 8.3 percent to the 1974–78 average of 4.9 percent (Lal 1979, p. 7), and the overall labor-force-participation rate declined between 1956 and 1976 (from 73 to 68 percent for males and 41 to 36 percent for females; *ibid.*, p. 9). The movement of these two variables is accompanied by an improvement in the real income of working households, constituting a puzzle of contemporary Philippine economic statistics.

⁶ Total factor productivity of Philippine nonagriculture as a whole declined at the annual compound rate of -2.0 percent between 1960 and 1980, whereas it increased in agriculture at the rate of 1.3 percent (Oshima 1982, Table 5).

⁷ There are indications that real wages have been more or less constant in the other three countries during the same period.

In any case, real wages should fail to improve as long as the labor market is in excess supply. Parenthetically, the real wages of unskilled labor were virtually constant in labor-abundant, prewar Japan, with only a slight increasing trend (about 0.45 percent per annum) until around 1905 when the initial investment spurt took place (Yasuba 1980, pp. 160–161). The Philippine situation has been more unfavorable, partly because of the stronger population pressures and partly because of newly adopted technologies that were increasingly laborsaving (or capital using). In these circumstances, an increase in effective demand may have accrued largely to nonwage incomes or in nonpersonal savings, thus turning the functional distribution of income unfavorable to labor, as indicated by the data (Lal 1979, p. 63). It is also logical that the distribution of income has become more skewed and less equitable with the passage of time.

ENGINEERING INDUSTRY

For the success of industrialization, the implementation of an engineering industry is a necessary condition. In the four countries, deficiencies in the domestic engineering industry have not been recognized as a major handicap in the past because the manufacturing industry itself accounted for only an insignificant portion of the national economy and, furthermore, because the engineering industry contributed only marginally to total manufacturing value added. But the situation will change drastically in the future as economic development proceeds. The deficiencies, unless soon corrected, will constitute a formidable obstacle to the smooth growth of the manufacturing sector.

The four countries do have cost advantages in some metal and machine products. To illustrate, the cost of infant industry can be measured by the domestic resource cost (DRC), namely, the ratio of social opportunity cost of domestic production to the value of foreign exchange saved or earned. According to one such calculation attempted for Philippine manufacturing in 1969 and 1974, the country enjoyed a comparative advantage (low values of DRC compared to the overall average) not only in textile and natural-resource-based industries, which are contained in the upper two-thirds of Table 1, but also in the light-engineering industries (that is, some metal fabrication and simple machine building, whose production processes involve basic but labor-intensive operations; see the latter half of the table).⁸

By the same token, the following products have been identified by engineering experts as those having comparative advantage in Thailand as of 1979: foundry products; hand tools and cutlery; small industrial engines; pumps and valves; architectural and construction hardware; shipbuilding and repairing (small coastal

⁸ The figures in Table 1 probably underestimate the social desirability of promoting the metalworking activities, because the calculation of the domestic resource costs has ignored the effects of scale economies and of externalities in these industries (Bautista and Tecson 1979, p. 301).

Table 1
Philippine Manufacturing with Relatively Low Domestic
Resource Cost (DRC) Values in 1969 and 1974

Product	DRC values	
	1969	1974
Evaporated and condensed milk	2.0	1.7
Electrical distribution and control apparatus	2.3	5.4
Batteries	2.6	5.5
Ready-made clothing	2.7	5.1
Insecticides and germicides	3.1	4.0
Desiccated coconut products	3.0	4.7
Plastic materials	3.2	7.5
Embroidering products	3.6	5.7
Coconut oil	3.6 ^a	3.5
Lumber	3.7	6.1
Medical and pharmaceutical products	3.9	6.3
Fertilizer and lime	4.0	7.0
Basic nonferrous metal products	4.1	5.1
Agricultural machinery and equipment	4.6	5.9
Plywood and veneer plants	4.7	6.5
Hydraulic cement	4.8	7.1
Other special industrial machinery and equipment	4.8	4.8
Sugar milling and refining	5.0	6.4
Corn milling	5.1	7.5
Prepared feeds for animals and fowl	5.1	8.1
Metal cans, boxes, and containers	5.1	4.8
General industrial machinery and equipment	5.2	6.0
Fabricated wire products	5.5	6.5
Knitting-mill products	5.8	6.9
Stamped, coated, and engraved products	6.3	7.3
All manufacturing ^b	6.4	9.8

SOURCE: Extracted from Bautista and Tecson 1979, pp. 296–299.

^a Inclusive of other oils and fats.

^b Weighted average of all the manufacturing, including the sectors not contained in this table but excluding those with unusually high values.

vessels only); some standard metalworking and woodworking machinery; transformers (up to 100 KVA) and switchgears; compressors; and selected automotive components, not complex, high-precision items (Moore et al. 1979, p. iii).

Both hard- and software technologies of the engineering industries, once assimilated and made operational by domestic industrialists, will help upgrade the country's manufacturing capabilities. This will continue to be true for some time because the basic technological value of the industry has not yet diminished, despite various new developments such as the introduction of computerized machine tools and industrial robots. The proliferation of new products or new processes will ensue as soon as machine building is solidly established (Pack and Todaro 1969). In addition, industrial development provides ample opportunity to teach the labor force the significance in modern industrial production of precision requirements, production control, the orderly maintenance of machine shops, et cetera.

The capacity to provide proper machine care and maintenance is essential in keeping up with manufacturing production. Conversely, the inability to supply one's own producers' durables (or parts thereof) implies that a substantial portion of domestic resources flows out of the country. In Thailand, for instance, approximately two-thirds of its capital formation is expended on machinery and equipment. Assuming that only one-fourth of such producers' durables can be accommodated locally (which approximates the case of Thailand in the late 1970s, according to Moore et al. 1979, p. 8), and that gross investment amounts to 20 percent of GDP, it follows that about one-tenth of the country's annual GDP leaks out on this account ($\frac{2}{3} \times \frac{3}{4} \times \frac{1}{5} = \frac{1}{10}$). This figure at the same time indicates the extent to which the country's domestic machine sales could expand in the future.

The growth of the metalworking and machine-building industries will assist the creation of additional work opportunities, because these industries offer wide choices of techniques and can make use of relatively labor-intensive methods of production. In fact, a growing number of empirical studies suggest that there is sufficient room for substitution of labor for capital, provided that the factor markets supply appropriate price signals that reflect actual market conditions (see, for instance, White 1979).

However, not much conscious effort was made in the 1960s and the 1970s to foster the development of such light-engineering industries in the four countries. If anything, the government policy was in the reverse direction, tending to favor more capital-intensive industrialization, which was regarded as a better choice because it was more "advanced." The establishment of industries embodying such "high technologies" was unduly encouraged by investment-incentive measures such as accelerated depreciation allowances, reductions in corporate tax on reinvested earnings, loans at subsidized interest rates, and minimum wages (White 1979, pp. 327-330). In effect, the technologies in use were not appropriate. According to a computation made on the 1973/74 Philippine data of metalworking industries, for instance, with the elimination of the government's incentive measures "the light engineering industry

could have generated no less than 5,000 more jobs," or about a 10 percent increase of employment (Kerdpibule 1978, p. 75).⁹

Aside from the government policy, internal factors delay the pace of development of the engineering industry. In Table 2 a summary is provided of the more conspicuous technological deficiencies discerned in the average indigenous metalworking shops in Thailand in the late 1970s. Significantly, one notes that most problems cited here may be boiled down to the shortage of properly trained human capital. Below are three characteristic symptoms recorded by World Bank experts (Moore et al. 1979).

Observation 1: A major barrier to development is the shortage of engineers with both theoretical knowledge *and* practical experience of handling technical problems and developing and introducing improved operating practices. Added to the difficulty is the severe shortage of skilled employees at shop floor. Professional technicians (for example, draftmen, industrial engineers) are also in short supply.

Observation 2: The work morale seems high in Thailand. Nevertheless, the productivity of machine shops is on the whole poor because of "poor control and assignment of labor, inadequate operating practices, poor layout and handling methods." "The overriding impression was that productivity was lower than it need be because of lack of management control and knowledge in the initial assignment of labor to tasks."

Observation 3: A wide variety of machines are used in a single plant partly because of the popularity of secondhand machinery in the smaller engineering firms. This is good in reducing the unit price of the product, but it also creates difficulties in ensuring proper maintenance because the crew are required to be familiar with a great number of machines, and replacement parts are sometimes not readily available.

The same situation prevails in the other countries under consideration. In Table 3, some findings from field surveys pertaining to the levels of technological practices in the medium- and small-scale indigenous metalworking firms in the region are presented. According to this table, the four countries were very alike in their technological capabilities. (This finding confirms my impressions.) The Philippines and Thailand lead, followed closely by Malaysia and Indonesia.

It is common, particularly among newly industrialized countries, that high-cost industries enjoy generous privileges because they are considered "infant industries" (one of the rare instances where international trade theory justifies outright government intervention). But economists have often felt that governments are overly liberal to the heavy industries while providing too little encouragement to the sectors where the country's comparative advantage lies. For example, in the Thai machinery industry, the effective rate of protection (ERP) on motor vehicles was 497 percent (in Cordon's sense) in 1978; that on agricultural machinery was - 10 percent (Moore et al. 1979, p. 67).

⁹ Too rapid introduction of foreign know-how through licensing agreements or joint ventures and other arrangements may impair the autonomous growth of indigenous capabilities for devising appropriate technology or developing appropriate goods (Moore et al. 1979, p. 35).

Table 2

Specimen Problems of Metalworking Industries in Thailand (1979)

Area	Trouble spots	Effects
Plant and equipment	Poor plant layout	Excessive time and effort spent on materials handling and transporting
	Outdated equipment	Wide use of shaping machines instead of milling machines
	Inappropriate selection of machinery	Use of a center lathe in instances where a copy lathe would reduce machine time and improve accuracy
	Inappropriate choice of tools	Use of tools of HSS (high-speed steel) instead of carbide tools or throwaway tooling
	Poor design or absence of jigs and fixtures	
	Poor condition of machinery and tools	Lack of preventive maintenance such as lubrication and servicing of hydraulics
	Poor working conditions	Lack of proper lighting and ventilation, insufficient attention to work safety, and the like
Operating practices	Insufficient knowledge/training of production workers	Inability of machinists to read engineering drawings easily; ignorance by forging operators on metal composition of castings, and the like
Products	Substandard quality	Need for 100% inspection
Management practices	Lack of managerial control	Absence of production, quality, and cost controls

SOURCE: Based on Moore et al. 1979, pp. 16–42.

One would expect that a product's weak competitiveness in the world market (equals high DRC values) would be associated with tighter control on its importation (equals high ERP values). In fact, in Table 4 it is demonstrated that for 1974 in the Philippines, the lower the value of DRC, the smaller also was the figure for ERP.

Table 3
Levels of Technologies in Medium- and Small-Scale Metalworking Shops in Southeast Asia

Country	Years of survey	Engineering processes							Weighted average
		Casting	Forging	Sheetwork/ welding	Pressing	Machining	Plating	Assembly	
Philippines	1978/79	2.4	2.4	2.5	2.7	2.3	3.1	2.5	2.6
Thailand	1978/79	2.2	2.6	2.5	2.4	2.2	3.6	2.5	2.6
Malaysia	1980/81	2.3	2.4	2.2	2.6	2.5	3.3	2.6	2.5
Indonesia	1980/81	2.0	1.8	2.1	2.3	2.1	2.8	2.4	2.1

SOURCE: Technonet Asia, *Small and Medium Scale Metalworking Industries*, Singapore, Phase I Report (August 1978–March 1979), p. 138, and Phase III Report (August 1980–March 1981), p. 169.

NOTE: Average scores on materials, facilities, and production technologies. Larger values indicate higher levels.

Table 4

Effective Rates of Protection (ERP) and Comparative Advantage Positions of Philippine Manufacturing (1974)

Product group	Types of manufactured commodities								
	Goods with comparative advantage (DRC < 8)			In-between cases (8 < DRC ≤ 10)			Goods with comparative disadvantage (10 < DRC)		
	Number of items	Mean ERP (%)	Mean DRC (₱/\$)	Number of items	Mean ERP (%)	Mean DRC (₱/\$)	Number of items	Mean ERP (%)	Mean DRC (₱/\$)
Foods and beverages	6	-18	5.4	8	44	9.1	10	2,688 ^a	16.4
Textiles and apparels	5	-11	6.1	1	36	8.2	2	76	11.2
Woods and wooden products	3	11	6.1	0	--	--	2	-1	10.9
Chemical products	9	11	6.0	4	132	9.4	8	215	14.7
Ceramics	2	-24	7.5	1	31	8.7	1	45	11.1
Metal and machinery	13	29	5.6	4	71	9.5	7	95	16.8
Total	38			18			30		
Weighted Average		8	5.9		68	9.2		982	15.2

SOURCE: Prepared from Tan 1979, pp. 139–143 and Bautista and Tecson 1979, pp. 296–299.

NOTE: This table has been prepared in the following manner: first, pick up the manufactured goods that had comparative advantage in 1974 (i.e., DRC < 8) and find their corresponding effective rates of protection; second, repeat the same procedure for those goods with comparative disadvantage (10 > DRC), and also for the goods that fall in between these two cases (8 < DRC < 10). The critical values (DRC = 8 and 10) have been chosen because the shadow rate of foreign exchange in 1974 was in the range of 8.9–9.2 pesos per U.S. dollar (Bautista and Tecson 1979, p. 300).

^a The particularly high value of ERP is largely due to flour milling, bakery products, cocoa and chocolate products, and cigarettes.

However, one may question the wisdom of placing too much (or too early) emphasis on a particular industry unless the long-run benefits exceed the social costs of protection.¹⁰ To be sure, this question remains unresolved.¹¹

Moreover, a problem of cognition underlies the development of the industry. The methodology of modern engineering, although taken for granted in the West, requires an intellectual break with the traditional pattern of thinking in Southeast Asia. What makes a good mechanic is as much analytical capability as manual dexterity. In machine maintenance, for example, a mechanic's job is to observe carefully and, on the basis of his observation and experience, engage in precise thinking that may be likened to the testing of scientific hypotheses. A good mechanic is able to formulate proper hypotheses as to where problems lie and to devise methods of analysis that save time and money. In order to carry out this task, the mechanic needs a logical frame of mind, capable of structured induction. This requires education. The making of a mechanic thus involves problems not only of industry but of culture. "The physical labor is the smallest and easiest part of what the mechanic does" (Pirsig 1974, p. 111).

Not every production worker has to (or needs to) be trained as a mechanic. But the presence of a sufficient number of such minds is essential for the successful development of the engineering industry—that is, if the industry is to develop as it did in Western Europe, the United States, and Japan.

According to observations made by several experts (mostly engineers), the shortage of skilled workmanship was common in all the four countries through the 1970s. In Thailand and the Philippines, for instance, indigenous metalworking factories were often characterized by inefficient shop layout, inappropriate choice of machine tools, lack of preventive maintenance, and poor housekeeping. All these were indicative of a shortage of personnel exposed to basic engineering discipline. Psychologically, the average Filipino machinist seemed passive in work attitude and unaccustomed to the mental procedures required by the industry (Odaka 1983, pp. 15, 18, 23). Transformation in such cognitive characteristics of blue-collar workers is difficult in an environment where production workers do not command high social prestige, and where the social esteem of top management is so high that few people are willing to take the middle-management jobs seriously, as in the Philippines (Stifel 1963, pp. 109–111, 138). Also lacking in the region is a network of technical information to use in combination with the existing wisdom on industrial production.

¹⁰ "The additional cost associated with developing an infant industrial activity . . . is equal to the discounted value of the cumulative difference between domestic production and import costs from the initiation of production to the time of maturation, when domestic and import costs are the same. The gross benefit of developing an infant industrial activity includes, correspondingly, the discounted value of the cumulative difference between domestic production and import costs after the time of maturation, when domestic production costs are lower than import costs. Added to this benefit are the nonpecuniary externalities typically invoked in the infant-industry argument" (Bell, Ross-Larson, and Westphal, 1982, p. 1). However, benefits accruing to externalities are extremely difficult to impute and usually ignored in computation.

¹¹ According to Table 4, however, the mean ERP on the fairly competitive metal and machine products was high (ERP = 29). Does this reflect official recognition that some of these products warrant extra boosts from the government in view of their dynamic growth potentials?

The Technological Production Association (Thai-Japan) has been identifying the technologies needed by the local industries, finding the most appropriate Japanese engineering literature (or author) on the topic, and then commissioning either an authentic translation or an original compilation (in Japanese, later to be translated into the local language) of materials designed for the Thai audience. Similar efforts are being made by other organizations; for example, the Jakarta office of Japan International Cooperation Agency (JICA) has sponsored the preparation of booklets on technical education in Indonesian agriculture.

Such projects, requiring expertise and painstaking effort by the staff, are economical and have a far-reaching impact on a large number of industrialists. The Technological Promotion Association has published more than eighty titles in ten years (1973-83), but its annual running cost for the fiscal year 1982/83, for example, amounted to only 8.3 million baht (roughly equivalent to U.S.\$340,000), 74 percent of which was covered by a subsidy from the Japanese government and private donations.

FUTURE PROSPECTS

A myth exists asserting a widening technological gap between the North and the South that the developing nations will never be able to fill. This may become true if the developing nations simply follow every step their advanced brothers have taken. But they may not pursue such a course. With the advancement of technology and the discovery of new industrial materials and of new production processes, various shortcuts may be devised.

One may also count on a more mature and innovative leadership's emerging from the new generations of entrepreneurs and professionals, individuals capable of charting new directions for policy directions. Despite mismanagement and the waste of resources, some progress has been made: social infrastructures have been built, advances in agricultural productivity have been realized, the quality of production has been improved. With the increase in per capita real income, the relative size of the middle class will gradually expand, and one hopes, form a basis for increased popular participation in political decision making.

An important choice facing the four countries is what industries should be promoted and in what sequence. This choice is crucial inasmuch as comparative advantage in manufacturing is artificially created; it is not automatically bestowed.

There has been criticism that not only the choices of industry but also the choices of techniques were ill conceived in Southeast Asia. But the interest of governments in large-scale, capital-intensive manufacturing projects, their emphasis on heavy-industry complexes, is not new in economic history. It characterized nineteenth-century Germany and Russia (Gerschenkron 1962, chap. 1). Moreover, it has taken years of effort for the manufacturing industries to mature in the advanced industrialized countries. For example, not until 1935 did the Japanese government finally decide to support domestic automobile production, and it was only in the

mid-1960s that the industry finally began to turn out internationally acceptable products. Thus, it took at least thirty years for the Japanese automobile industry to outgrow its infancy.

Experts increasingly realize, moreover, that labor-intensive industrialization (as well as agriculture) should be stressed. This probably explains the interest in government circles since the late 1970s in policy measures supporting the development of small-scale enterprises.

Problems also exist relating to the political systems. To the extent that government intervention (sometimes even coercion) is needed to tap the domestic fund for industrialization, the existence of a strong government may be a necessary evil. As long as the citizens are generally content with the fruits of economic growth, history may lend some time to authoritarian political leadership. This, in fact, has been the case in all the four Southeast Asian countries, although its degree has varied from one country to another. The question is how long citizens will tolerate such forms of government.

Bibliography

- Allen, G. C. 1972. *A Short Economic History of Modern Japan*. 3d edition. London: Allen and Unwin.
- Bautista, Romeo M., and Gwendolyn R. Tecson. 1979. "Domestic Resource Costs in Philippine Manufacturing: 1969 and 1974." In *Industrial Promotion Policies in the Philippines*, Romeo M. Bautista and John H. Power and Associates. Manila: Philippine Institute for Development Studies.
- Bell, Martin, Bruce Ross-Larson, and Larry E. Westphal. 1982. "The Cost and Benefit of Infant Industries: A Summary of Firm-Level Research." Paper presented at the 1982 meeting of the American Economic Association, December.
- Carroll, John S. J. 1965. *The Filipino Manufacturing Entrepreneurs, Agent and Product of Change*. Ithaca: Cornell University Press.
- Castro, Amado. 1974. "Import Substitution in the Philippines, 1954–1961: A Historical Interpretation." Discussion Paper No. 74–21. School of Economics, University of the Philippines (Diliman), December.
- Gerschenkron, Alexander. 1962. *Economic Backwardness in Historical Perspective: A Book of Essays*. Cambridge: Harvard University Press.
- Golay, Frank H. 1961. *The Philippines: Public Policy and National Economic Development*. Ithaca: Cornell University Press.
- Hayami, Akira. 1968. *Nihon keizai shi e no shikaku* [A Perspective on Japanese Economic History]. Tokyo: Tōyō Keizai Shimpōsha.
- Higgins, Benjamin. 1957. *Indonesia's Economic Stabilization and Development*. New York: Institute of Pacific Relations.
- Ingram, James C. 1971. *Economic Change in Thailand, 1850–1970*. London: Oxford University Press.
- Iwao, Seiichi. 1966. *Sakoku* [Seclusion]. Tokyo: Chūō Kōron sha.
- Kawakatsu, Heita. 1983. "Kokusai kōryū no keizai-shiteki sekkīn: kokusai kōryū to Nippon" [An Economic Historian Views International Exchange: International Exchange and Japan]. *Kokusai kōryū* [International Exchange], No. 34, pp. 20–33.
- Kerdipibule, Udom. 1978. *Planning Development of the Light Engineering Industries*. Honolulu: Center for Cultural and Technical Interchange between East and West.
- Kobata, Jun. 1968. *Nihon kōzan shi no kenkyū* [A Study on the History of Japanese Mines]. Tokyo: Iwanami Shoten.
- Lal, Deepak. 1979. *Wages and Employment in the Philippines*. Studies in Employment and Rural Development No. 57. Development Economics Department. World Bank, October.
- Leeuwen, Robert J. van. 1970. "Indonesia." In *Tropical Development, 1880–1913: Studies in Economic Progress*, ed. W. Arthur Lewis, pp. 250–282. London: Allen and Unwin.
- Lim, David. 1973. *Economic Growth and Development in West Malaysia, 1947–1970*. London: Oxford University Press.

- Moore, F. T., B. Cu Kok, D. Loevner, D. Blore, and J. Hammer. 1979. *Development of the Engineering Industries in Thailand*. Mission report, East Asia and Pacific Regional Office, Industrial Development and Finance Department, World Bank, November.
- Nakamura, Takafusa. 1971. *Senzenki Nippon keizai seichō no bunseki* [An Analysis of the Prewar Economic Growth in Japan]. Tokyo: Iwanami Shoten.
- Nishikawa, Shunsaku. 1982. "Ikōki no Chōshū ni okeru kokumotsu shōhi to jimmin no jōshoku" (Grain Consumption and the People's Staple Food in the Tokugawa-Meiji Transition Period). *Mita Shōgaku kenkyū* (Mita Business Review) Vol. 25, No. 4 (October) pp. 130–154.
- Odaka, Konosuke. 1983. "Skill Formation in Development: Case Studies of Philippine Manufacturing (I)." *Hitotsubashi Journal of Economics* Vol. 24, No. 1 (June) pp. 11–24.
- Ohkawa, Kazushi, and Miyoei Shinohara, eds. 1979. *Patterns of Japanese Economic Development: A Quantitative Appraisal*. New Haven: Yale University Press.
- Oshima, Harry T. 1982. "Postwar Philippine Economic Growth in Comparative Perspective: An Overview." Paper presented at the Philippine Society for International Development, 16 December.
- Pack, Howard, and Michael Todaro. 1969. "Technological Change, Labour Absorption, and Economic Development." *Oxford Economic Papers* Vol. 21, No. 3 (November) pp. 395–403.
- Pirsig, Robert M. 1974. *Zen and the Art of Motorcycle Maintenance: An Inquiry into Values*. New York: William Morrow.
- Rosovsky, Henry, and Kazushi Ohkawa. 1961. "The Indigenous Components in the Modern Japanese Economy." *Economic Development and Cultural Change* Vol. IX, No. 3 (April) pp. 476–501.
- Sanchez, Aurora. 1983. "Capital Measurement and Total Factor Productivity Analysis." Ph.D. dissertation, School of Economics, University of the Philippines (Diliman), January.
- Shimbo, Hiroshi, Akira Hayami, and Shunsaku Nishikawa. 1975. *Sūryō keizaishi nyūmon: Nippon no zen-kōgyōka shakai* [An Introduction to Quantitative Economic History: The Preindustrialized Society in Japan]. Tokyo: Nihon Hyōron sha.
- Smith, Peter C. 1978. "Crisis Mortality in the Nineteenth Century Philippines: Data from Parish Records." *Journal of Asian Studies* Vol. XXXVIII, No. 1 (November) pp. 51–76.
- Smith, Thomas C. 1959. *The Agrarian Origin of Modern Japan*. Stanford, Calif.: Stanford University Press.
- Stifel, Lawrence David. 1963. *The Textile Industry: A Case Study of Industrial Development in the Philippines*. Data Paper No. 49. Ithaca: Southeast Asia Program, Department of Asian Studies, Cornell University.
- Tan, Norma A. 1979. "The Structure of Protection and Resource Flows in the Philippines." In *Industrial Promotion Policies in the Philippines*, Romeo Bautista and John H. Power and Associates. Manila: Philippine Institute for Development Studies.
- Tashiro, Kazui. 1981. *Kinsei nitchō tsūkō bōeki shi no kenkyū* (Studies on the History of Diplomatic Relations and Trade between Japan and Korea in the Seventeenth and Eighteenth Centuries). Tokyo: Sōbunsha.
- Teranishi, Jūrō. 1982. *Nippon no keizai hatten to kinyū* (Money, Banking, and Capital in Japanese Economic Development). Tokyo: Iwanami Shoten.
- Valdepeñas, Vincente B., Jr., and Germelino M. Bautista. 1977. *The Emergence of the Philippine Economy*. Manila: Papyrus Press.

- Watanabe, Toshio. 1982. "Kōseichō Azia shinwa no ura no hinkon" [Poverty in Asia: The Other Side of Rapid Growth in Asian Economies]. *Chūō kōron*, No. 1157 (November) pp. 222–236.
- White, Lawrence J. 1979. "Appropriate Factor Proportions for Manufacturing in Less Developed Countries: A Survey of the Evidence." In *Appropriate Technologies for Third World Development*, ed. Austin Robinson, pp. 300–341. London: Macmillan.
- World Bank. 1982. *World Development Report, 1982*. New York: Oxford University Press.
- Wrigley, E. A. 1969. *Population and History*. London: Weidenfeld and Nicolson.
- Yasuba, Yasukichi. 1980. *Keizai seichō ron* [On Economic Growth]. Chikuma Shōbō.
- . 1982. "Tai kōgyō kigyō no seisensei" [Productivity of Thai Manufacturing Industries]. *Osaka daigaku keizaigaku* (Osaka Economic Papers) Vol. 32, No. 2/3 (December) pp. 212–218.

9. Sources of ASEAN Economic Growth and Change

Jesus P. Estanislao
Alejandro A. Aquino

The above-average economic growth rates of the Association of Southeast Asian Nations for the past two decades have fascinated observers within and outside the region. The impressive growth record has been achieved despite the instability of the world economy and the prolonged recession during the first three years of the 1980s. Regional gross domestic product (GDP) grew at an average rate of 7.3 percent between 1970 and 1980—a performance which is 30 percent higher than the 5.6 percent record of middle-income countries taken as a group, and 128 percent higher than the 3.2 percent registered by the industrial-market economies. Even during the recession-plagued 1980–82 period, ASEAN as a whole managed to chalk up an average real GDP growth of 6.3 percent. This was coupled with a remarkable achievement in bringing down inflation from an average of 16.1 percent in 1980 to 7.3 percent in 1982.

DIMENSIONS OF ECONOMIC GROWTH AND CHANGE

Traditional economic yardsticks suggest that, indeed, economic growth in real terms has been posted by each of the ASEAN countries from year to year during the past two decades. Within the group, performance varies considerably because the countries of the region are different in many ways. Nevertheless, changes in economic structure have been effected in each country, and they were in general developmental.

Between 1960 and 1980, the per capita income of the ASEAN economies grew by 4.1 percent per year; this figure was 3.8 percent for middle-income countries and 3.6 percent for the industrial-market economies. The Philippines is the slowest of the five in terms of its per capita income growth, which is even lower than the average performance of a middle-income country for the same period. Indonesia and Malaysia

are slightly above the performance of both the middle-income and the industrial-market economies. These patterns are neither unusual nor unexpected in development theory, if one takes into account the natural-resource endowments, the quality of government administration, and the economic-policy regime in each country.

Production growth for the ASEAN economies, as a whole and by sectors, was generally faster in the 1970s than in the 1960s. The industrial sector suffered the most in terms of decline in the growth rate in the industrial economies and the middle-income group of countries, but in ASEAN this sector achieved the greatest improvement in growth for the decade of the 1970s, largely because of the rapid expansion of the manufacturing sector. A review of the ASEAN countries' industrial development indicates that trade has been an important component of their industrial strategy (Bautista 1983). Although the early phase of their industrial development stressed the replacement of imports, the leaders of the ASEAN countries soon realized the need for more manufacturing for export—especially given the enviable experience of the developing countries that followed such a strategy (Bhagwati 1978; Krueger 1978; Krueger et al. 1981, 1982, 1983). Lacking a sizable domestic market, Singapore and Malaysia quickly shifted to the export of manufactured goods in the mid-1960s and late 1960s, respectively. The Philippines and Thailand focused on the export of manufactures in the early 1970s. More recently, the Indonesian government has recognized the need to expand nonoil exports, including manufactured-goods exports, because of the uncertain prospects of oil price, production, and exports. Overall, the industrialization efforts pursued in the late 1960s and throughout the 1970s have been regarded as rewarding in terms of a decline in the dependence on the primary sector, as evidenced by the jump in the share of industry to total value added.

Significant shifts in demand also took place in the ASEAN economies between 1960 and 1980. From about 77 percent of GDP in 1960, the share of private-consumption expenditures went down to about 60 percent in 1980. The most significant shifts are those of Indonesia (from 80 percent to 57 percent) and Singapore (95 percent to 59 percent). The shifts are in line with an increase in per capita incomes of the countries in the region, which averaged 4.1 percent during the period.

The share of public consumption for ASEAN likewise increased from 10 percent to 12 percent for the same period. Although the increase is moderate, it indicates a conscious effort by the governments of these countries to promote growth, especially during the 1970s, when the growth of this component averaged 9.1 percent annually; it averaged only 7.1 percent in the 1960s. The most significant shifts were those of Malaysia and Singapore.

Capital formation jumped from 12 percent in 1960 to 27 percent in 1980 for the whole ASEAN region. The leap is matched by an almost corresponding jump in gross domestic savings, the share of which rose from 13 percent in 1960 to 28 percent in 1980. This implies that a greater portion of total income is being directed toward infrastructure activities and capital formation, a sign that the economies are building up their productive capacities for the future. From the savers' standpoint, this could be taken as a response to more favorable returns on savings, and from the investors' standpoint, a response to greater availability of investment funds.

ASEAN linkages with the foreign sector have been high and rising during the two decades. The share of exports to GDP for the whole region rose from 22 percent in 1960 to 30 percent in 1980. Among the five countries, the most dependent on the external sector are Malaysia and Singapore, whose export-to-GDP ratios range from over 50 percent to more than 160 percent. The high foreign linkages of the ASEAN economies suggest that they rely heavily on foreign markets to buoy up demand for goods produced locally and to help meet requirements (such as materials and capital inputs) not easily met at home. Whether one conditions the other, however, is difficult to say.

Although the export structure of the ASEAN countries is still heavily based upon fuels, minerals and metals, and other primary commodities, a shift toward manufactured-goods exports has occurred. In 1960, only about 8 percent of ASEAN exports were manufactured products. By the end of the 1970s, this share had gone up to 25 percent. These patterns of export orientation appear to conform to the ASEAN countries' comparative advantage in international trade. All ASEAN countries except Singapore have rich natural resources, and in the early 1970s also had abundant labor. Their factor endowments, therefore, favored the production and export of natural-resource-based products and labor-intensive goods requiring lower levels of technology and capital. In the 1960s, when wages were low, Singapore concentrated on the latter type of products, but concentrated more on technology-intensive and more-capital-using export products in the 1970s, when labor cost increased and full employment was reached (Pang 1982).

As for ASEAN imports, other manufactured products constitute the most important category, followed by machinery and equipment. The share of machinery and equipment in total imports was bigger in the 1970s than in the 1960s in all except one of the ASEAN countries. In the Philippines and Thailand, the doubling of the fuel share from 1960 to 1978 largely reflects the difficulty of developing indigenous energy sources and substituting them for imported oil after the drastic price hike in 1974, further exacerbated by the second round of OPEC price hikes in 1979.

While the region's industrial sector has been boosted, agriculture has not lagged behind. The average annual rate of agricultural growth for the ASEAN region as a whole in the 1970s is around 4.1 percent—higher than the average for the 1960s. Also, the index of food production has increased beyond 100 within the past decade. Indonesia managed to push food production slightly ahead of its population growth. Malaysia, the Philippines, and Thailand made some headway by tilting the growth race between food production and population in favor of the first. Singapore went furthest in raising its index of food production per capita to more than 150 from a base of 100 just a decade earlier, although the base was small. Thus the ASEAN region seems to have successfully hurdled the first two critical challenges that face developing countries.

The other challenge—in which the region also seems to be doing rather well—is energy. In 1980, the region produced almost 690 million barrels of oil equivalent (MBOE) and consumed a little over 400 MBOE of petroleum energy. The situation in individual countries varies significantly, but on the whole the region is a

net provider of energy to the rest of the world. As for substituting indigenous energy sources for petroleum, a number of recent developments can be cited, such as the much-acclaimed success of the Philippine energy program and the liquefied-natural-gas (LNG) finds in Malaysia, Indonesia, and Thailand. Another reflection of the seriousness with which ASEAN countries are taking the energy issue is the imposition of stringent discipline, commensurate with the scarcity and high value of energy resources, through the price mechanism.

From our discussion, it looks as if the countries in the region can simply continue to do what they have been doing because they seem to have been doing well, at least in the 1960s and 1970s, and doing better than virtually all others. However, the experience of the past three years seems to cast doubt on the continued effectiveness of past strategies, given present-day realities. Although trade strategies can be broadly said to have contributed substantially to past performance, it is unreasonable to expect that such strategies will account for all differences in performance among developing countries (Srinivasan 1983). But even before such definitive statements can be made, it is necessary to examine the degree to which such factors—trade strategies or otherwise—have contributed to growth in the past. The following section is an attempt to do that for the Association of Southeast Asian Nations.

SOURCES OF GROWTH AND CHANGE

The Framework

Successful development in virtually all countries has been characterized by an increase in the share of manufacturing in total output. This phenomenon is both a cause and an effect of rising income. Industrialization results from an interplay of rising demand for manufactured goods, changing factor proportions, trade policies, and advances in technology. Because of the complexity of these interactions, detailed studies have been made only in individual countries. Although the increasing importance of the industrial sector of an economy suggests a development trend, more meaningful insights can be gathered if an examination of the elements responsible for such change is made. Demand-and-supply analysis provides a guide to identifying the probable elements that contribute to a country's industrial growth. Because there is a tendency to emphasize either one or the other set of elements, it is necessary that both are examined in a country's experience.

A basic idea often overlooked in discussions about economic growth is the pull of market forces upon the level of industrial production. Chenery (1979), however, has long insisted on this facet, and the importance of market forces upon industrial growth in particular has been highlighted in several earlier works (Chenery 1960, 1969; Chenery and Watanabe 1958; Chenery and Syrquin 1975). The term "market forces," however, is too vague. Chenery has tried to give it a specificity that permits quantitative analysis of the interaction between the pull of various demand forces on industrial growth. He adopted the framework afforded by the Input-Output (I-O)

tables and used it to account for the sources of industrial growth over time and across countries. The formulas needed to quantify the relative contribution of various demand elements have been stated in Chenery (1979) and in Chenery and Syrquin (1975).

The I-O tables suggest that absolute growth of various sectors and industries can be directly accounted for by intermediate demand, final demand, export expansion, and import substitution. Thus, the demand by other production sectors and industries in the economy, the demand by domestic investors and consumers in the public and private sectors, and other demands imposed by import substitution can have an influence on the production of an industry that must respond to such demands. It is in this sense that the growth of output in a given industry can be traced back to the different demand elements that pull it up, and the sources of industrial growth from the demand side can be identified; furthermore, their relative contributions can be quantified.

The demand by other production sectors and industries comes from within the production system of an economy such that it is endogenous to it. Chenery has shown that if one wishes to focus only on the exogenous demand elements, one can do so with an added advantage: the demand by other production sectors and industries can be removed and substituted by changes in technical coefficients (this sometimes being referred to as technological change). Thus, one is left with only exogenous demand elements as sources of industrial growth. Moreover, through the operation of the I-O tables and the substitution of one endogenous demand element (by an exogenous one), the direct as well as the indirect effort of all exogenous demand elements can be accounted for.

The total impact from such changes arising from exogenous demand elements varies from one industry to another. It is natural, therefore, that the growth between industries differs. The lack of proportionality between the differing growth rates in various industries on the one hand and the whole economy on the other provides evidence of structural change. Chenery has shown the intimate connection between industrial growth and structural change.

In much the same way that industrial output growth can be traced to specific demand elements, it can also be traced by highlighting the different factors of production; the latter has an even longer history in economics. The framework used by growth accounting from the supply side reaches back into conventional marginal productivity analysis and into standard analysis under competitive conditions in microeconomics. Indeed, the elegance of analysis under competitive conditions is shown by the proof given for equilibrium whereby factors of production are paid according to their marginal productivities. The empirical results of Douglas, which gave rise to the Cobb-Douglas production function, added quantitative substance to the analytical elegance (Jones 1976). Such a framework invites further work—and work has been done on two fronts. Conceptual and mathematical refinements have been introduced, and empirical testing has been undertaken, as exemplified by the work of Nadiri (1970 and 1972).

The relation between the changes in factors of production and the resulting output volume is the basis for growth accounting from the supply side. This leads to the specification and quantification of a production function. The coefficients yielded by the production function are indicative of the change in total production that can be traced to changes in the factors of production. Thus, such coefficients are useful, at least conceptually. Given what they are supposed to be, these coefficients can be used as weights against the measured changes in factor inputs.

Both conceptual and empirical considerations have suggested that normally, after one tries to account for output growth on the basis of the growth of the different factor inputs, a residual is left unexplained by the growth of the inputs. Griliches and Jorgenson (1967) have shown that the size of the residual is determined by the failure to account for changes in the quality of the different factor inputs. In general, there is a smaller residual labeled “disembodied technological change” when a greater effort is made to account for quality improvements in the different factor inputs. This is best shown in the work of Denison (1974) for the American economy.

In this analysis, where sectors are actually broad industry groups, sectoral production functions need to be specified. The coefficients taken from the production functions can be used as “ideal” weights in order to arrive at the contribution of factor input increases under competitive conditions, but it is also necessary to use actual factor shares to arrive at the contribution of such increases to output growth. In this regard, the shares of the different inputs in total output from the I-O tables can be taken to represent the actual shares. The differences between the two sets of results can be taken as indicative of the biases in factor markets and of the distance from the ideal, of actual conditions prevailing in a particular sector or industry.

Comparative Results for ASEAN

In the “direct method” of decomposing sectoral output growth, intermediate demand expansion emerges as the most important factor. This could be taken as an indication of increasing interindustry linkages over time in the ASEAN countries. Because these countries were highly agricultural (at the beginning of the period covered here)—with the exception of Singapore—the natural orientation was to go into processing of agri-based inputs. This, however, is an area where, again, diversity in ASEAN is shown. The degree to which such linkages have been developed differs in the region. But despite this, a priori and empirical results have highlighted the importance of intermediate demand expansion as a source of growth because even in the sectors where most inputs are imported—specifically those in the manufacturing sector—providing for the input requirements of other sectors has always been a priority. This is also the apparent reason for the recent efforts at developing heavy, basic industries in these countries (Bautista 1983).

Domestic final-demand expansion is the next major source of sectoral output growth in the “direct” and “total” methods. Lacking the competitive advantage in the area of exportable manufactured products—especially during the first decade—most

Table 1

ASEAN: Comparative Summary Results for Decomposition of Growth from the Demand Side, Two Periods

Factor	First Period (1960s)			Second Period (1970s)		
	Direct	Total	Deviations ^a	Direct	Total	Deviations ^a
Domestic demand expansion						
Indonesia	64.64	79.80	110.40	n.d.	23.70	57.40
Malaysia	49.14	61.76	-80.35	89.15	84.82	89.09
Philippines	45.00	68.00	53.00	57.00	63.00	53.00
Singapore	n.d.	n.d.	n.d.	10.50	18.70	-49.40
Thailand	59.05	82.81	-400.58	48.12	79.50	-128.93
Export expansion						
Indonesia	11.16	20.50	26.10	n.d.	70.70	24.20
Malaysia	17.66	25.92	-52.60	38.29	32.19	49.96
Philippines	13.00	14.00	21.00	9.00	12.00	12.00
Singapore	n.d.	n.d.	n.d.	55.30	87.20	157.70
Thailand	6.57	10.15	210.01	20.70	34.83	64.76
Import substitution						
Indonesia	-1.46	-1.10	-4.70	n.d.	6.00	63.60
Malaysia	10.52	17.51	46.83	-55.86	-4.62	-10.61
Philippines	9.00	11.00	15.00	9.00	10.00	13.00
Singapore	n.d.	n.d.	n.d.	6.40	7.30	-23.80
Thailand	0.84	2.34	96.73	-6.99	-19.08	-44.67

Table 1 continued

Factor	First Period (1960s)			Second Period (1970s)		
	Direct	Total	Deviations ^a	Direct	Total	Deviations ^a
Intermediate demand expansion/ technological change ^b						
Indonesia	25.66	0.80	-31.80	n.d.	-0.40	-45.20
Malaysia	22.68	-5.19	-13.88	28.42	-12.39	-28.44
Philippines	33.00	7.00	11.00	25.00	15.00	22.00
Singapore	n.d.	n.d.	n.d.	27.80	-13.20	15.50
Thailand	33.54	4.70	193.84	38.17	4.75	8.84

SOURCE OF BASIC DATA: Input-Output Tables of Indonesia, Malaysia, Philippines, Singapore, and Thailand.

NOTES: Weighted totals of growth decomposition results.

n.d. = no data

^a Short for deviations from proportional growth.

^b Direct method considers intermediate demand independent of the other factors.

ASEAN countries had to rely on their large domestic market base. Although the contribution of this factor is still substantial for the second decade, it has declined as practically all of these countries have jumped into promoting production for exports—a strategy that had been neglected in the previous period, with the possible exception of Singapore.

With the bulk of output growth accounted for by domestic demand in the first period, it can only be expected that the export market had not contributed that much, except in the primary sectors in most countries. Although practically all ASEAN countries have been traditional exporters, such exports have generally been either agri-based in particular or primary-based in general, so that the overall effect on industrial growth had not been as significant as when such exports were manufactured products. However, export expansion as a source of growth has increased its share dramatically in the 1970s, and in Singapore it was the single most important propellant for growth in most sectors.

The industrialization efforts of most ASEAN countries have generally been tagged as of the import-substitution type, but this is only partly true—both because of the way the concept had been defined in Chenery's methodology and because of the policy package adopted by individual countries in following such a development path. Although efforts at bringing down sectoral import ratios have been quite successful in terms of the final products, this success has been achieved with the use of imported inputs—specifically raw materials. Thus, import dependence has continued to be substantial, and in some cases, even increased—a serious problem that some countries in the region continue to face because of foreign-exchange difficulties.

The “total method” identifies and ranks the different demand elements as sources of growth, but a third method, referred to as the method of “deviations from proportional growth,” identifies and ranks the different demand elements as sources of changes in the composition of output and resource allocation. In other words, the third method analyzes structural change, the second analyzes growth. The two most important factors responsible for effecting structural change—which in this case refers to a faster or slower growth of sectoral output relative to the growth of the economy—have been domestic demand and export expansion. Import substitution made substantial contributions only in Malaysia and Thailand during the first period and in Indonesia for the second period. With the exception of Indonesia, the contribution of import substitution to structural change has generally been negative during the second period.

Technological change in Chenery's formulation is fairly unimportant for most countries as a source of either growth or structural change, with the exception of Indonesia and Thailand during the first period and Indonesia again for the second period. As it appears in the formula, technological change could be taken to mean the effect of a change in the production structure of the interindustry system on either the output of a particular sector or the growth of such a sector relative to GDP. A negative contribution of this factor would then mean that the change in the economy's production structure served to lessen the demand of other sectors for that particular industry's output. In the case of deviations from proportional growth, a negative contribution

would mean that the change in the production structure tended to retard the growth of a particular sector's output relative to the whole economy. Technology in this sense then can be understood as the extent of use of a sector's product relative to the output of other sectors. The demand for a sector's output by the rest of the economy may increase in absolute terms, but the development or adoption of a more efficient transformation process may lead to a decline in the share of the input sector to the output of the producing sector. This then would give rise to a decline in the technical coefficient, which leads to a negative contribution of technological change. A negative contribution coming from this factor therefore is a welcome development, if understood in this sense.

When one looks at the relative effects of trade strategies, the results for ASEAN seem to support earlier findings (Krueger 1978; Krueger et al. 1981, 1982, 1983; Bhagwati 1978) that liberalization is beneficial and that the outward-oriented countries do better than not only their own performances under restrictive regimes in earlier periods but also those of inward-oriented countries. The contribution of export expansion to both growth and structural change for all countries was generally greater than that of import substitution, and such contribution increased in the second period—the time when all countries in the region focused on outward orientation. Like most developing countries, those in ASEAN started out with an import-substitution strategy, which was implemented through a regime of quantitative restrictions on the imports and exports of goods, domestic and foreign investments, import of technology, and so on, through tariffs and other price interventions. By the late 1960s, if not earlier, it became apparent in most of these countries that such strategies, far from alleviating their chronic balance-of-payments problems, seemed to accentuate them. This led many to experiment hesitatingly with a liberalized foreign-trade regime. Singapore, which went all out with an outward-oriented strategy, is now classified as a newly industrializing country (NIC) and regarded by many developing countries as a model.

Shifting the focus to the supply side, most of the growth in sectoral output can be accounted for by increases in factor inputs, namely, labor, capital, and raw materials. This means that total factor productivity (TFP) has not been a major contributor to ASEAN economic growth. This comes as a surprise to many, especially in Singapore. Tsao (1982) found that total factor productivity during the period 1971–80 was either negligible or even negative—specifically for the manufacturing sector. Although such results are counterintuitive for any observer, some tenable explanations have been put forward. One is that because about 70 percent of Singapore's manufacturing is controlled by multinational corporations (MNCs), which bring in the most updated and sophisticated technology, no real technology transfer takes place because no efforts are made to adapt such technology to domestic conditions and factors.

Although the magnitudes of TFP growth have generally been low—lower than Korea and Taiwan—the Thai experience provides a consolation: there was a tendency for Thailand's TFP in export-promoting industries to increase over time while the reverse was true for import-substituting industries (Wiboonchutikula 1982). This is understandable since import-substituting industries are also characterized by imported

inputs, which are purchased at highly subsidized rates as far as the exchange rate is concerned, such that there is little pressure for such sectors to be efficient. On the other hand, such cost-effectiveness is a *sine qua non* for export-oriented industries if they are to survive international competition.

For the same reasons as those cited above concerning imports, most growth of output for practically all ASEAN countries has been accounted for by the growth of capital stock, followed by intermediate inputs and finally labor. Some attempts at breaking up the contribution of labor to output growth indicate that an increase in labor productivity—where it is shown—is also attributable to the availability of more units of capital per unit of labor.

The Philippines

Considering how Philippine industrialization policy in the past has been characterized as import substituting, the quantified results—following the formula originally suggested by Chenery (1979) and subsequently used by him and others—show a surprisingly low contribution from import substitution. The complaints made by Sicut (1968), Ranis (1974), Cheetham (1976), and many others about the domestic-market orientation of Philippine industrialization policy are borne out by the results. Their complaints, to the extent that they include the relative neglect of the export markets, are further substantiated. If such complaints had included the relative neglect of productivity increases, these would be supported too.

For the whole economy, it was found that under the “direct method,” the expansion of domestic final demand accounted for 45 percent of all output growth; an additional 33 percent can be accounted for by the growth of intermediate demand (Estanislao 1983a; Estanislao, Agdamag, and Lim 1981). Thus, approximately three-fourths or even four-fifths of total output growth can be attributed to the expansion of the home market alone. Export expansion accounted for only about 13 percent of total output growth, and import substitution was responsible for some 9 percent. The dependence of total output growth on the expansion of the domestic market is also highlighted by the results of the “total method.” Slightly more than two-thirds of the expansion in output can be traced to the direct and indirect effects of domestic final-demand expansion. On the other hand, the relative neglect of export markets is highlighted by the small contribution to output growth of total effects of export expansion. Moreover, from the first decade to the second, there is no evidence that this small contribution has increased—which is generally true for technological change. Such change contributed little (around 7 percent only) during the first decade, doubling during the second decade, but remaining a relatively small factor. Similar results can be cited from the use of the last formula where structural change is given the focus.

Such results provide further quantitative evidence for what has been said about the pattern of the Philippine economic growth. The marketing orientation of Philippine economic operations has been largely inward; the need for thrusting outward in order to get a boost from export markets has not been keenly felt; technological

Table 2
 Relative Contribution of Different Elements to Output Growth and Structural
 Change in the Philippines by Decades
 (Percentages)

Method	Final domestic demand	Exports	Import substitution	Intermediate demand ^a /Technological change ^b
Direct				
1957-67 ^c	45	13	9	33 ^a
1967-77 ^d	57	9	9	25 ^a
Total				
1956-67	68	14	11	7 ^b
1967-77	63	12	10	15 ^b
Nonproportional Growth				
1957-67	53	21	15	11 ^b
1967-77	53	12	13	22 ^b

SOURCE: J. P. Estanislao, 1983a.

^a Intermediate demand appears as an element only under the direct method. Thus, only the percentage listed in the direct method can be attributed to it.

^b Technological change takes the place of intermediate demand in the total method and in the method involving nonproportional growth.

^c Average of 1956-58 to average of 1966-68.

^d Average of 1966-68 to average of 1976-78.

change, which is associated with the prospects of increases in productivity levels, although moving upward, has been too small a factor to make a significant difference as yet; and import substitution is a process that may have boosted output growth in decades past, but much of the push it may have given the economy has long been gone.

In the manufacturing sector, results point to the same general conclusions. Taken as a whole, and as a broad frame of reference, the growth of output in manufacturing can be traced to the following: some 50 percent to the increase in domestic demand, another 25 percent to the increase in intermediate demand, still another 15 percent to import substitution, and only about 10 percent to export expansion.

In sum, domestic final demand is by far the most significant element behind the growth of sectoral output as well as structural change in the Philippines. Although export promotion contributed significantly to output growth in a few sectors (mining, wood, and chemicals during the first decade; agriculture, textiles, nonmetallic minerals, basic metals and machinery, in addition to mining and wood, in the second decade), still these sectors were too few to make the difference between the moderate

results noticed in the economic record of the Philippines and the more dramatic results in the record of other more successful East Asian countries. Import substitution was also a factor to consider in the growth and change of a few sectors, but its impact was neither widespread nor uniformly positive. In the critical sector, machinery, import substitution does not appear to have started in a noticeable way, even in the second period. Technological change in the economy appears to have increased during the second decade and led to a relative decline in the demand for the product of an increased number of sectors.

Despite the limitations of the approach used, however, the conclusions coincide with those that have generally been advanced on the basis of a more partial analysis of growth and change. For instance, the Philippines is said to have followed a more inward-oriented industrialization than Korea (Cheetham 1976). This statement can now be specifically quantified, given the results obtained here and those that are available for Korea (Kim and Roemer 1979).

Table 3

Comparison of the Percentage Contributions of Export Expansion to Manufacturing Output Growth in the Philippines and Korea under the Total Method

	First period ^a		Second period ^b	
	Philippines	Korea	Philippines	Korea
Food processing	6.9	4.7	9.5	11.5
Textiles and clothing	(3.9)	13.7	24.7	72.9
Chemicals, rubber, and petroleum	30.0	3.4	4.9	41.4
Nonmetallic minerals	1.3	1.4	43.8	21.2
Basic metals	1.8	19.1	16.7	59.2
Machinery	2.9	6.7	16.6	51.5
Wood and paper	42.5	7.8	26.0	49.1

SOURCES: J. P. Estanislao 1983a, for the Philippines, and Kim and Roemer 1979, for Korea.

^a For the Philippines, 1957-67; for Korea, 1955-63.

^b For the Philippines, 1967-77; for Korea, 1963-73.

In the first period, the contribution of export expansion is much bigger for the Philippines than for Korea in chemicals, rubber, and petroleum, and in wood and paper. This is an expected result because of the natural endowments of the Philippines: coconut is processed into oil; wood is processed into lumber, plywood, and veneer. However, for textiles and clothing, basic metals, and machinery, the contribution of export expansion to output growth is higher in Korea than in the Philippines.

In the second period, export expansion contributed a higher percentage to the growth of industrial output in Korea for almost all manufacturing sectors. The sole exception is nonmetallic minerals, in which the Philippines had a fairly successful export drive. But in textiles, basic metals, and machinery, the figures for Korea are much higher than those for the Philippines. Even in the manufacturing sectors where the Philippines could have been expected to have a high contribution of exports to output growth (food; chemicals, rubber, and petroleum; wood and paper) Korea leads the Philippines. In these, the outward orientation of Korean manufacturing is clearly shown. Even where Korea's natural-resource endowment is less propitious, by bringing in imported raw materials, processing them, and then exporting some of the processed goods, Korea has managed to base a larger percentage of its industrial expansion on exports than the Philippines.

With some modifications on the formulas, it is possible to compare the results from the Philippines with those from the other countries under the aspect of nonproportional growth or structural change, following the changes introduced by Chenery and Syrquin (1977). For all sectors, the contribution of export expansion to structural change is only 16.5 percent in the Philippines. This is within the range cited for Japan (15.4 percent) and Mexico (13.3 percent). However, it is much lower than the corresponding figures for Korea (34.8 percent) and Taiwan (34.1 percent). These comparative results are reassuring because those reported for the Philippines are not out of line; moreover, they support the common knowledge that the Philippines has relied less on exports for growth and structural change than Korea and Taiwan.

On the other hand, the contribution of domestic demand to structural change in the Philippines, 67 percent of nonproportional growth, is not matched by any country included in the Chenery and Syrquin study. Import substitution and technological change appear to have contributed less structural change in the Philippines than in any of the countries included in the sample. The figure of 7.3 percent for import substitution in the Philippines is lower than the 10 percent in Taiwan, 12–14 percent in Japan and Korea, and 18 percent in Mexico. This appears to support the comment of Golay (1961) that the first phase of import substitution was completed early and quickly in the Philippines, that the subsequent phases involving semiprocessed materials and supplies for industry have just been started, and that the country has been going slow in this regard. Furthermore, the 9.2 percent figure for technological change in the Philippines is lower than the 15 percent for Korea and the 22 percent for Japan, Taiwan, and Mexico.

From the supply side, for the 1956–78 period as a whole the growth of output can be explained by the growth of the three production factors—labor, capital, and raw materials—and the unexplained “residual,” although important, is fairly small. The growth of labor during the period can be placed at around 3 percent, capital has risen at an annual rate of almost 4.2 percent, and raw materials grew fastest, at 6.7 percent. Following the factor intensity bias of Philippine industrialization (Hooley 1968) and the expected relative shift of labor away from agriculture, agriculture showed the slowest employment growth of 2 percent; industry grew at just under 3 percent and services had the highest rate of just over 4 percent. The growth of capital

can be broken down into 4.4 percent for industry, 4.2 percent for services, and 3.9 percent for agriculture. The highest rate of growth among the three factors was registered by raw materials, at an average of 6.7 percent per year for all sectors. This means that, of the two contrasting tendencies concerning raw materials in relation to the volume of production, the first (which tends to increase the ratio between the former and the latter) has been more weighty than the second (which tends to decrease such a ratio). The first is the natural tendency toward modernization where the value-added ratio declines, signifying that as intersectoral interdependence is deepened and thickened, more intermediate inputs would be required to come out with a unit of output. The second refers to the direct technical coefficients that have a tendency to decline in many sectors of the economy.

Table 4
Ideal Contribution of Factor Input to Output Growth, 1956-77
(Percentages)

Sector	Contribution of factor input				
	Capital	Labor	Raw materials	Total	Residual
Agriculture	77.34	26.64	19.41	123.39	(23.39)
Mining	27.93	18.31	9.37	55.61	44.39
Manufacturing	31.27	3.90	41.79	76.96	23.04
Construction	31.55	9.38	29.78	70.71	29.29
Utilities	33.24	3.47	25.92	62.63	37.37
Industry	31.04	6.18	36.88	74.10	25.90
Transport, storage, and communication	40.95	11.48	25.69	78.12	21.88
Commerce	37.57	6.91	7.38	51.86	48.14
Other services	28.61	32.44	13.87	74.92	25.08
Services	39.67	13.78	10.68	64.13	35.87
All	42.68	11.48	24.52	78.68	21.32

NOTE: "Ideal" means the contributions are weighted by the production elasticities of the three factor inputs.

By applying the estimated parameters from the production functions to these observed growth rates for the different production factors, 78 percent of output growth can be accounted for by the growth of the factor inputs during the period. This leaves a residual of only 22 percent. If the actual shares of the factors of production in gross value of output are used as weights against these same observed rates of increase, 90 percent of total output growth can be accounted for by the factor input increases,

leaving only a small residual of 10 percent. These comparative results are reflected at the sectoral level, where in all cases the total contribution of factor inputs is lower if the "ideal" rather than the actual weights are used.

Table 5
Actual Contribution of Factor Input and Productivity Growth to Output Growth,
1956–77
(Percentages)

Sector	Contribution of factor input			Total	Residual
	Capital	Labor	Raw materials		
Agriculture	73.28	30.80	40.07	144.15	(44.15)
Mining	23.57	11.58	32.00	67.15	32.85
Manufacturing	15.07	3.57	65.13	83.77	16.23
Construction	14.13	10.63	62.06	86.82	13.18
Utilities	17.38	7.26	45.25	69.89	30.11
Industry	15.33	5.52	61.52	82.37	17.63
Transport, storage, and communication	22.99	18.14	48.04	89.17	10.83
Commerce	30.33	10.66	21.73	62.72	37.28
Other services	15.05	37.06	30.45	82.56	17.44
Services	24.80	19.65	27.70	72.15	27.85
All	22.17	12.16	55.93	90.26	9.74

NOTE: "Actual" means the contributions are weighted by I–O shares to output. The average of the 1965, 1969, and 1974 I–O shares was used.

The contribution of increased labor input is low, at only 12 percent. Although by the use of the actual weights a slightly higher contribution is obtained, still the difference is so small that the two results can be taken as virtually the same. However, at the sectoral level, there appears to be a bias in favor of labor in agriculture, utilities, and services, that is, the wage rate is probably higher than the marginal productivity of labor. But in the key industrial sectors, such as manufacturing and construction, labor appears to have been paid a wage rate commensurate with its marginal product, although this has not been the case in mining, where the bias appears to be against labor.

The contribution of increased capital input is high, at 42 percent, if the ideal weight is used, but this is almost halved (brought down to 22 percent) if the actual weight is used instead. This pattern holds true for all sectors, which suggests that everywhere the rate paid to capital is less than what would have been warranted by

its marginal productivity. In only three sectors is the divergence fairly narrow—agriculture, mining, and commerce. In manufacturing, for instance, the calculated contribution if the ideal weight is used is twice that obtained if the actual weight is used.

For raw materials the reverse situation holds, and this is true for all sectors without exception. Thus, by using the calculated parameters as weights, one arrives at a result of only 24 percent; it is 55 percent if the actual share in total product value is used instead.

Qualitatively, there is support for the results showing that the actual shares going to the factors of production are not the same as the shares suggested by their respective marginal productivities. Such support is given by the observed distortions in the factor markets.

The difference between the share actually going to capital and what may be warranted by its marginal productivity can be traced at least partly to the price of capital allowed to prevail in the capital market. The Philippines has a tradition of keeping the rates of interest somewhat low, with a long-standing anti-usury law specifying 12–14 percent ceilings. The operation of such a law, at least in the organized credit market, has kept the price of capital low relative to its marginal product. This has resulted in keeping the demand for capital funds high, bringing in bias for capital-intensive processes, rationing the scarce supply of capital, and in the process, favoring big corporations, who have easier access to financial institutions than small- and medium-scale ones.

In many sectors, the actual share going to labor is higher than the share warranted by the marginal productivity of labor. Although the difference between actual and ideal shares for labor is much smaller than that for the other two production factors, still the lack of differentiation between sectors in the implementation of minimum wages can distort wages upward. Normally such legally decreed minimum wages are considered in the context of the more visible and more organized segments of the economy. Although strict adherence is spotty, and exemptions can be obtained at least in theory, once decreed, minimum wages become a reference level for all. As a consequence, in a number of sectors the growth of employment has been slow, particularly in manufacturing (Cheetham 1976); a bias against the use of labor has been introduced (Sicat 1968).

Similarly, the much higher shares going to raw materials than would be warranted by their marginal productivity may be traced to the extensive protection given by high tariffs to the Philippine market (Bautista, Power et al. 1979). Tariffs look attractive to the government and to domestic industry on the surface, but over time, as their effects work through the economy, they have an inhibiting effect on growth. Materials and supplies—75–80 percent of Philippine imports—that must be brought into the country to be processed by local industry become expensive because of the tax and tariff margins imposed on them. Because these constitute the most important cost of domestic manufacturing industries, such expensive materials and supplies render these industries uncompetitive in outside markets. Thus, they orient themselves mainly to the domestic market, whose growth is often inhibited by the lack of foreign

exchange (Ranis 1974). Indeed, the sets of distortions decried in the Philippine economy appear to support the general comparison between actual and ideal shares. As cited earlier, the contribution of unexplained residual is fairly small. In comparing such a small contribution of the residual for the Philippines with the contribution for Korea (Kim and Roemer 1979), another country where analysis of growth from the supply side considered three factors of production, one finds that the range of 10–21 percent for the Philippines encompasses the minimum 15 percent indicated for Korea, and that such a range is lower than Korea's maximum residual of 44 percent.

The small contribution of the residual to the growth of output that is suggested by the results for the Philippines is not immediately comparable with the corresponding results for other countries because three factors of production have been included in the production function specified, whereas only two factors are included in the international studies cited by Nadiri (1970). To make the comparison, a two-factor production function for the Philippines needs to be estimated. If this is done, the contribution of capital to output growth in the Philippines compares with the corresponding percentages listed for Argentina, Japan, and Mexico. On the other hand, the contribution of labor to output growth in the Philippines is similar to that listed for Peru. Thus, in the Philippines, labor's contribution to output growth is low, and it becomes lower still if the coefficients from fitted production functions are used as weights. Moreover, the relative contribution to output growth of capital and labor is heavily tilted toward capital. Of the countries listed for comparison, only Japan shows a similar pattern. On the other hand, the figure for the Philippines is not high; nor is it out of line with the figures cited for the other countries.

More significant insights can be gathered if the whole period is divided into two as in the decomposition of growth from the demand side. Irrespective of the weights used, the contribution of all factors to total output does fall significantly between the first and the second decade. As a consequence, the residual rose from almost nil during the first decade to between 33 percent (if actual weights are used) and 45 percent (if ideal weights are used). This result suggests that there has been greater room for technical change during the second decade. Another hopeful development is the probable shift in the agriculture sector. Whichever weight is used, the residual factor in agriculture is negative during the first decade but becomes positive during the second. This is in accord with the positive productivity developments in rice culture observed in the Philippines since 1968.

Less hopeful is the development in the contribution of the capital input. Whichever weights are used, the measured contribution of the increase in capital to total output has been cut during the second decade to about a third of the level observed for the first decade. Moreover, actual payment to capital input appears to be much less than its corresponding marginal productivity, and the gap between the two has not narrowed significantly from one decade to the next. This probably slowed down the growth of capital during the second decade. Although no definitive statement on the relation between such a gap and the slowdown in the growth of capital can be made here, it is an issue that deserves closer scrutiny.

Table 6
 Contribution of Traditional Factors of Production to Growth
 of Output in Selected Countries
 (Percentages)

Country ^a	Labor	Capital	Residual
Argentina	49.5	44.8	5.7
Mexico	40.4	47.2	12.4
Japan	30.7	47.7	21.6
India	41.6	34.7	23.7
Brazil	44.4	30.2	25.4
Venezuela	33.5	26.4	40.1
Peru	24.9	24.9	50.2
Philippines ^b	24.9	45.5	29.6
	15.6	58.2	26.2

SOURCES: For the Philippines, Estanislao 1983a; for other countries, Nadiri 1972.

^a The period cited in the compilation made by Nadiri is 1950–62 for most countries. The period for Japan is longer, 1952–67; for India, it is shorter, 1950–60.

^b The figures listed on the first line for the Philippines use actual factor shares as weights whereas those on the second line use the estimated coefficients obtained from the fitted two-factor production function. The first set would be more comparable with the figures listed by Nadiri. Also, the time coverage is longer, 1957–77.

The contribution of increased raw-materials input to total output growth has not significantly changed between the two decades in the two periods included here. Nor has the gap between actual shares paid to raw materials and what is suggested by the factor's marginal productivity changed significantly.

However, the production functions that were constructed and became the basis of the above statements are subject to the limitations inherent in factor-productivity analysis. Furthermore, the difference between recorded shares of factor inputs and their parameters resulting from the estimation of the production functions by major sectors has yet to be used as a basis for refining the analysis, as suggested by Bruno (1968). Finally, the residual factor, especially during the second decade, has yet to be decomposed and reduced, an undertaking that has not been possible in this work.

Despite the limitations, a set of tentative statements can be put forward. These can be modified or refined later as more work is done in this area. The first of these statements is the growing importance of the residual, an indication that productivity is probably becoming a positive issue in the Philippines. This development is not seen if one takes the whole period from 1956 to 1978, but emerges once the period is divided into two decades. The second statement refers to the different production factors. Relative to their marginal productivities, labor does not appear to have been underpaid, and capital does not appear to have been overpaid. Until harder evidence

coming from more refined analysis based on better data becomes available, the results here require caution. It may not be proper, as it is in two-factor production functions, to deduce from tentative suggestions concerning labor being underpaid that capital must be overpaid. When a third factor is introduced, it is entirely possible that the two traditional factors of production might be underpaid while the third factor is not. Even this last point concerning the third factor cannot be made with positive assurance in this work. All that can be said about raw materials is that there is no evidence as yet to suggest that they are underpaid in the Philippines.

CONCLUSIONS

Considering the strong affinity among the Philippines, Thailand, and Indonesia in terms of natural-resource endowments, trade and industrialization strategy, domestic policy mix, and to some extent sociopolitical setting, the statements made for the Philippines may apply generally to the other two countries' overall performance during the past two decades. Such fairly general arguments can be gleaned not only from the aggregate comparative results cited here but also from country-specific studies from a similar approach that were done for Thailand (Samart 1977; Wiboonchutikula 1982; Akrasanee 1975; Akrasanee, Thamruanglerd, and Iamkamala 1983) and Indonesia (Poot 1981; CSIS 1983; Aquino and Dacanay 1981).

Among the three countries in ASEAN that continue to lag behind Singapore and Malaysia—with the possible exception of Thailand—wide differences in performance can be observed, whether covering the period considered here or the past three years. This is true despite the present similarities in overall development strategy that depends strongly on trade, a mix of inward and outward orientation that many in these countries find undesirable. Such an observation confirms Srinivasan's view (1983) that because international trade forms only a part of the whole spectrum of economic activities, it would be unreasonable to expect that trade strategies will account for all differences in growth performance among countries.

In search, then, of the most promising economic system that developing countries—specifically those in the Asia-Pacific region—can adopt, caution must be taken in prescribing “trade-based” development models that have worked in several developing countries. The capacity of export-oriented policies to yield similar success in other countries is not automatic for such reasons as the “fallacy of composition”—that is, policy beneficial for one country or a few countries can be ineffective or even detrimental when every country adopts it at the same time—and one has to reckon with growth recession and the revival of protectionism in industrial countries.

Although economic interdependence among countries is too important to be ignored (Estanislao 1983b), there can still be ample room for flexibility among developing countries in mapping their development paths. Such interdependence has not yet come to the point where there is no difference between saying that the rate of economic growth in industrial countries has an important positive effect on the rate of

growth in nonoil developing countries and saying that the growth of the former is the overriding determinant of the growth rate of the latter; this has been empirically proved by Goldstein and Khan (1982).

Much hinges on domestic economic policies formulated and implemented by a country adopting a particular trade strategy. In general, such policies must make sure that the “right prices,” or at least prices very close to such, prevail in the system. As experience in many countries has shown, those that have allowed market forces to work have done better than those that have allowed price distortions to coexist with policies that work best in free-market situations.

In ASEAN, a great effort has been made in precisely setting prices right. Depending on how the broad international environment behaves in the future, such efforts could work for better overall performance through the already proved routes that the more advanced countries have previously taken. Singapore has shown that a determination to get things done generally results in positive achievements despite formidable constraints. Other countries might follow the proven paths, at least until such time as differences in performance can be accounted for by the differences in the will to succeed and the congruity of domestic economic policy with the model being followed and the goals that have been set.

In the long run, it would not be presumptuous to expect that the ASEAN countries will continue to grow—perhaps not as rapidly but still appreciably—pushed by the “four wheels of growth”: an active export drive, committed governments, rising levels of investment spending, and a rapidly expanding consumer mass market. These have been the major contributors to growth during the past two decades.

The export wheel will have to turn under the weight of international economic instabilities brought about by widening economic interdependence. Strong central governments can be expected to give a push to the economies in the region because their strengths are based on the promise to deliver economic goods. For as long as they can deliver they stay, whether the style of rule is “hard” or “soft”—to use Johnson’s terminology (Chapter 3).

The push that would come from the consumer mass market is dictated by international development. More than 260 million people with per capita incomes ranging from \$500 to \$5,000 indicate a rapid increase in demand for new products, which modernization and industrialization make available and affordable. This demand fuels the expansion of production and income, and eventually also of purchasing power and savings.

The other three wheels rolling in unison can make the investment wheel turn in the move forward. When investment-demand signals come from both the domestic and the export markets, in a stable environment made possible by the ruling class, investment in productive capacity and other support facilities can be expected as a natural consequence.

To be sure, the climb up the steep portion of the development curve is not going to be easy for all ASEAN countries. But as long as the four wheels continue to function as they should, it is just a matter of time before the easier portion is reached.

APPENDIX

I. Formulas:

1. Direct Decomposition Formula

$$\Delta X_i = \underbrace{u_i^1 \Delta W_i}_{\text{intermediate demand}} + \underbrace{u_i^1 \Delta D_i}_{\text{final domestic demand}} + \underbrace{\Delta E_i}_{\text{export expansion}} + \underbrace{\Delta u_i (W_i^2 + D_i^2)}_{\text{import substitution}}$$

2. Total Decomposition Formula

$$\Delta X_i = \underbrace{\sum_j \bar{r}_{ij}^{-1} u_j^1 \Delta D_j}_{\text{final domestic demand}} + \underbrace{\sum_j \bar{r}_{ij}^{-1} \Delta E_j}_{\text{export expansion}} + \underbrace{\sum_j \bar{r}_{ij}^{-1} \Delta u_j (D_j^2 + W_j^2)}_{\text{import substitution}} + \underbrace{\sum_j \bar{r}_{ij}^{-1} u_j^1 \sum_k \Delta a_{jk} X_k^2}_{\text{technological change}}$$

3. Total Decomposition Formula: Deviation from Proportional Growth

$$\delta X_i = \underbrace{\sum_j \bar{r}_{ij}^{-1} u_j^1 \delta D_j}_{\text{final domestic demand}} + \underbrace{\sum_j \bar{r}_{ij}^{-1} \delta E_j}_{\text{export expansion}} + \underbrace{\sum_j \bar{r}_{ij}^{-1} \Delta u_j (D_j^2 + W_j^2)}_{\text{import substitution}} + \underbrace{\sum_j \bar{r}_{ij}^{-1} u_j^1 \sum_k \Delta a_{jk} X_k^2}_{\text{technological change}}$$

II. Legend:

$$X_i = \text{Total Output in sector } i = W_i + D_i + E_i - M_i$$

$$W_i = \text{Intermediate Demand in sector } i$$

$$D_i = \text{Final Domestic Demand in sector } i = C_i + I_i + G_i$$

$$C_i = \text{Private Consumption Expenditures in sector } i$$

$$I_i = \text{Gross Domestic Capital Formation in sector } i$$

$$G_i = \text{Government Consumption Expenditures in sector } i$$

$$E_i = \text{Exports in sector } i$$

$$M_i = \text{Imports in sector } i$$

$$u_i = \text{Domestic Content in sector } i = \frac{W_i - E_i}{W_i + D_i} \text{ or } \frac{1 - M_i}{W_i + D_i}$$

$$a_{jk} = \text{Matrix of Technical Coefficients}$$

$$\bar{r}_{ij} = \text{Domestic Inverse Matrix} = (I - u_i a_{jk})^{-1}$$

$$\Delta = A^2 - A^1 \quad \text{where } A = D_i, W_i, X_i, E_i, u_i, \text{ and } a_{jk},$$

$$\delta = A^2 - \lambda A^1 \quad \text{where } \lambda = \frac{\text{GDP}^2}{\text{GDP}^1} \quad (\text{in real terms})$$

Superscripts refer to periods, and subscripts i and j refer different industries in the I-O table.

Source: Chenery (1979).

Bibliography

- Akrasanee, N. 1975. *The Structure of Effective Protection in Thailand: A Study of Industrial and Trade Policies in the Early 1970s*. A report prepared for the Ministry of Finance of the Thailand Government and the International Bank for Reconstruction and Development (March).
- Akrasanee, N., S. Thamruanglerd, and C. Iamkamala. 1983. "Sources of Industrial Growth in Thailand." A paper prepared and presented in a technical workshop in Bangkok, Thailand, in connection with the project Comparative Economic Growth and Structural Change in ASEAN (March).
- Aquino, A. A., and A. E. Dacanay. 1981. "Economic Growth and Structural Change in Indonesia in the 1960s and the 1970s." *ASEAN Country Studies Series*. Manila: Center for Research and Communication.
- Balassa, B., et al. 1979. *Industrial Development Strategy in Thailand: A World Bank Country Study*. Washington, D. C.: The World Bank.
- Bautista, R. 1983. "Industrial Policy and Development in ASEAN Countries." *Discussion Paper 8303*. Manila: School of Economics, University of the Philippines (February).
- Bautista, R., J. Power, and Associates. 1979. *Industrial Promotion Policies in the Philippines*. Manila: Philippine Institute for Development Studies.
- Bhagwati, J. N. 1978. *Foreign Trade Regimes and Economic Development: Anatomy and Consequences of Exchange Control Regimes*. Cambridge, Mass.: Ballinger.
- Bhagwati, J. N., and T. N. Srinivasan. 1979. "Trade Policy and Development." In *International Economic Policy*, ed. R. Dornbusch and J. A. Frenkel. Baltimore: Johns Hopkins University Press.
- Bruno, M. 1968. "Estimation of Factor Contribution to Growth Under Structural Disequilibrium." *International Economic Review* 9 (February): 49–62.
- Cheetham, R. 1976. *The Philippines: Priorities and Prospects for Development*. Washington, D. C.: International Bank for Reconstruction and Development.
- Chenery, H. B. 1960. "Patterns of Industrial Growth." *American Economic Review* 50 (September): 624–654.
- . 1969. "The Process of Industrialization." *Economic Development Report* 146 (December). Cambridge, Mass: Harvard University Center for International Affairs.
- . 1979. *Structural Change and Development Policy*. New York: Oxford University Press.
- Chenery, H. B., and M. Syrquin. 1975. *Patterns of Development: 1950–70*. London: Oxford University Press.
- . 1977. "A Comparative Analysis of Industrial Growth." A paper presented at the Fifth World Congress of the International Economic Association in Tokyo, Japan. Mimeographed. Centre for Strategic and International Studies (CSIS, Jakarta).
- . 1983. "Sources of Growth and Structural Change in Indonesia." A paper presented in a technical workshop in connection with the project Comparative Economic Growth and Structural Change in ASEAN. Mimeographed.

- Denison, E. F. 1974. *Accounting for U.S. Economic Growth: 1929–1969*. Washington, D.C.: Brookings Institution.
- Estanislao, J. P. 1983a. *Economic Growth and Structural Change in the Philippines, 1956–1978*. Manila: Center for Research and Communication.
- . 1938b. “A Forum for Interdependent Development.” Summary Report of Panel IV of the IEA World Congress in Madrid, Spain (September).
- Estanislao, J. P., F. Agdamag, and M. Lim. 1981. *Sources of Philippine Industrial Growth, 1956–1978*. Manila: Philippine Institute for Development Studies.
- Golay, F. 1961. *The Philippines: Public Policy and National Economic Development*. Ithaca, N.Y.: Cornell University Press.
- Goldstein, M., and M. S. Khan. 1982. *Effects of Slowdown in Industrial Countries on Growth in Non-Oil Developing Countries*. International Monetary Fund, Occasional Paper No. 12.
- Griliches, Z., and D. V. Jorgenson. 1967. “The Explanation of Productivity Changes.” *Review of Economic Studies* (July).
- Hooley, R. W. 1968. “Long-Term Economic Growth of the Philippine Economy, 1902–1961.” *Philippine Economic Journal* 8 (First Semester). Manila: Philippine Economic Society, pp. 1–24.
- Hughes, H. 1982. “Private Enterprise and Development: Comparative Country Experience.” *Finance and Development* (March).
- Jones, H. 1976. *An Introduction to Modern Theories of Economic Growth*. New York: McGraw-Hill.
- Kim, K. S., and M. Roemer. 1979. *Growth and Structural Transformation*. Cambridge, Mass.: Harvard University Press.
- Krueger, A. 1983. *Trade and Employment in Developing Countries, 3: Systems and Conclusions*. Chicago: University of Chicago Press.
- . 1982. *Trade and Employment in Developing Countries, 2: Factor Supply and Substitution*. Chicago: University of Chicago Press.
- . 1978. *Foreign Trade Regimes and Economic Development: Liberalization Attempts and Consequences*. Cambridge, Mass.: Ballinger.
- Krueger, A., H. B. Lary, T. Monson, and N. Akrasanee, eds. 1981. *Trade and Employment in Developing Countries, 1: Individual Studies*. Chicago: University of Chicago Press.
- Krueger, A., and B. Tuncer. 1980. *Estimating Total Factor Productivity Growth in Developing Countries*. Washington, D.C.: World Bank Staff Working Paper No. 422 (October).
- Lampman, R. J. 1967. “The Source of Post-War Economic Growth in the Philippines.” *Philippine Economic Journal* 6.
- Nadiri, M. I. 1972. “International Studies of Factor Inputs and Total Factor Productivity: A Brief Survey.” *Review of Income and Wealth* 18 (June): 129–154.
- . 1970. “Some Approaches to the Theory of Measurement of Total Factor Productivity: A Survey.” *Journal of Economic Literature* 8 (December).
- Pang, E. F. 1982. “Industrial Policy and Economic Restructuring in Singapore.” Paper presented at the Symposium on Industrial Policies and International Industrial Restructuring. (March 21–24), Senar Springs Center, New York.

- Poot, H. 1981. "The Development of Labour-Intensive Industries in Indonesia." In *The Development of Labour-Intensive Industries in ASEAN Countries*, ed. R. Amjad. Bangkok: ILO-ARTEP.
- Ranis, G. 1974. *Sharing in Development: A Programme of Employment, Equity, and Growth for the Philippines*. Geneva: ILO.
- Samart, M. 1977. "Sources of Industrial Growth in Thailand." Master's thesis, Thammasat University, Bangkok.
- Sicat, G. 1968. "Industrial Production Functions in the Philippines." *IEDR Discussion Paper*. No. 68-81 (May). Manila: Institute of Economic Development and Research, University of the Philippines. Mimeographed.
- Srinivasan, T. N. 1983. "International Trade at Developing Countries in the Nineteen Eighties: Problems and Prospects." Paper presented at the International Economic Association World Congress in Madrid, Spain (September).
- Syrquin, M. 1970. "Production Functions and Regional Efficiency in the Manufacturing Sector in Mexico, 1965." Ph.D. dissertation, Harvard University.
- Tsao, Y. 1982. "Growth and Productivity in Singapore: A Supply Side Analysis." Ph.D. dissertation, Harvard University.
- Wiboonchutikula, P. 1982. *The Total Factor Productivity Growth of the Manufacturing Industries in Thailand, 1963-1976*. Seminar Paper Series, 1982/83. Department of Economics and Statistics, National University of Singapore.
- World Bank. *World Development Report*. Various Issues.

INSTITUTE OF EAST ASIAN STUDIES PUBLICATIONS SERIES

CHINA RESEARCH MONOGRAPHS (CRM)

6. David D. Barrett. *Dixie Mission: The United States Army Observer Group in Yanan, 1944*, 1970 (\$4.00)
15. Joyce K. Kallgren, Editor. *The People's Republic of China after Thirty Years: An Overview*, 1979 (\$5.00)
16. Tong-eng Wang. *Economic Policies and Price Stability in China*, 1980 (\$8.00)
17. Frederic Wakeman, Jr., Editor. *Ming and Qing Historical Studies in the People's Republic of China*, 1981 (\$10.00)
18. Robert E. Bedeski. *State-Building in Modern China: The Kuomintang in the Prewar Period*, 1981 (\$8.00)
21. James H. Cole. *The People Versus the Taipings: Bao Lisheng's "Righteous Army of Dongan,"* 1981 (\$7.00)
22. Dan C. Sanford. *The Future Association of Taiwan with the People's Republic of China*, 1982 (\$8.00)
23. A. James Gregor with Maria Hsia Chang and Andrew B. Zimmerman. *Ideology and Development: Sun Yat-sen and the Economic History of Taiwan*, 1982 (\$8.00)
24. Pao-min Chang. *Beijing, Hanoi, and the Overseas Chinese*, 1982 (\$7.00)
- sp. Lucie Cheng, Charlotte Furth, and Hon-ming Yip, Editors. *Women in China: Bibliography of Available English Language Materials*, 1984 (\$12.00)
27. John N. Hart. *The Making of an Army "Old China Hand": A Memoir of Colonel David D. Barrett*, 1985 (\$12.00)
28. Steven A. Leibo. *Transferring Technology to China: Prosper Giquel and the Self-strengthening Movement*, 1985 (\$15.00)
29. David Bachman. *Chen Yun and the Chinese Political System*, 1985 (\$15.00)
30. Maria Hsia Chang. *The Chinese Blue Shirt Society: Fascism and Developmental Nationalism*, 1985 (\$15.00)
31. Robert Y. Eng. *Economic Imperialism in China: Silk Production and Exports, 1861-1932*, 1986 (\$15.00)
32. Judith M. Boltz. *A Survey of Taoist Literature, Tenth to Seventeenth Centuries*, 1987 (\$20.00)
33. Yue Daiyun. *Intellectuals in Chinese Fiction*, 1988 (\$10.00)

KOREA RESEARCH MONOGRAPHS (KRM)

5. William Shaw. *Legal Norms in a Confucian State*, 1981 (\$10.00)
6. Youngil Lim. *Government Policy and Private Enterprise: Korean Experience in Industrialization*, 1982 (\$8.00)
7. Q. Y. Kim. *The Fall of Syngman Rhee*, 1983 (\$12.00)
8. Robert A. Scalapino and Jun-yop Kim, Editors. *North Korea Today: Strategic and Domestic Issues*, 1983 (\$20.00)
9. Helen Hardacre. *The Religion of Japan's Korean Minority: The Preservation of Ethnic Identity*, 1985 (\$12.00)
10. Fred C. Bohm and Robert R. Swartout, Jr., Editors. *Naval Surgeon in Yi Korea: The Journal of George W. Woods*, 1984 (\$12.00)
11. Robert A. Scalapino and Hongkoo Lee, Editors. *North Korea in a Regional and Global Context*, 1986 (\$20.00)
12. Laurel Kendall and Griffin Dix, Editors. *Religion and Ritual in Korean Society*, 1987 (\$15.00)

JAPAN RESEARCH MONOGRAPHS (JRM)

2. James W. White. *Migration in Metropolitan Japan: Social Change and Political Behavior*, 1983 (\$12.00)
3. James Cahill. *Sakaki Hyakusen and Early Nanga Painting*, 1983 (\$10.00)
4. Steven D. Carter. *Three Poets at Yuyama*, 1983 (\$12.00)
5. Robert A. Scalapino. *The Early Japanese Labor Movement: Labor and Politics in a Developing Society*, 1984 (\$20.00)
6. Masumi Junnosuke. *Postwar Politics in Japan, 1945-1955*, 1985 (\$25.00)
7. Teruo Gotoda. *The Local Politics of Kyoto*, 1985 (\$15.00)

8. Yung H. Park. *Bureaucrats and Ministers in Contemporary Japanese Government*, 1986 (\$15.00)
9. Victoria V. Vernon. *Daughters of the Moon: Wish, Will, and Social Constraint in Fiction by Modern Japanese Women*, 1988 (\$12.00)

RESEARCH PAPERS AND POLICY STUDIES (RPPS)

1. James C. Abegglen et al. *U.S.-Japan Economic Relations: A Symposium on Critical Issues*, 1980 (\$5.00)
3. Ronald A. Morse, Editor. *The Politics of Japan's Energy Strategy*, 1981 (\$7.00)
4. Nguyen Long with Harry H. Kendall. *After Saigon Fell: Daily Life Under the Vietnamese Communists*, 1981 (\$8.00)
5. Jonathan D. Pollack. *Security, Strategy, and the Logic of Chinese Foreign Policy*, 1982 (\$5.00)
6. *The Japanese Challenge and the American Response: A Symposium*, 1982 (\$6.00)
7. Robert A. Scalapino and Jusuf Wanandi, Editors. *Economic, Political, and Security Issues in Southeast Asia in the 1980s*, 1982 (\$10.00)
8. C. I. Eugene Kim and B. C. Koh, Editors. *Journey to North Korea: Personal Perceptions*, 1983 (\$10.00)
9. George DeVos, Editor. *Institutions for Change in Japanese Society*, 1984 (\$15.00)
10. Yaacov Y. I. Vertzberger. *Coastal States, Regional Powers, Superpowers and the Malacca-Singapore Straits*, 1984 (\$10.00)
11. Karl D. Jackson and M. Hadi Soesastro, Editors. *ASEAN Security and Economic Development*, 1984 (\$20.00)
12. R. Sean Randolph. *The United States and Thailand: Alliance Dynamics, 1950-1985*, 1986 (\$15.00)
13. Leo E. Rose and Noor A. Husain, Editors. *United States-Pakistan Relations*, 1985 (\$17.00)
14. Robert A. Scalapino, Seizaburo Sato, and Jusuf Wanandi, Editors. *Asian Economic Development—Present and Future*, 1985 (\$20.00)
15. Robert A. Scalapino, Seizaburo Sato, and Jusuf Wanandi, Editors. *Asian Political Institutionalization*, 1986 (\$20.00)
16. Robert A. Scalapino, Seizaburo Sato, and Jusuf Wanandi, Editors. *Internal and External Security Issues in Asia*, 1986 (\$20.00)
17. Robert A. Scalapino and Chen Qimao, Editors. *Pacific-Asian Issues: American and Chinese Views*, 1986 (\$20.00)
18. Karl D. Jackson, Sukhumbhand Paribatra, and J. Soedjati Djihadono, Editors. *ASEAN in Regional and Global Context*, 1986 (\$20.00)
19. Robert A. Scalapino and Han Sung-joo, Editors. *United States-Korea Relations*, 1986 (\$20.00)
20. Karl D. Jackson and Wiwat Mungkandi, Editors. *United States-Thailand Relations*, 1986 (\$20.00)
21. Joyce K. Kallgren and Denis Fred Simon, Editors. *Educational Exchanges: Essays on the Sino-American Experience*, 1987 (\$15.00)

INDOCHINA RESEARCH MONOGRAPHS (IRM)

1. William J. Duiker. *China and Vietnam: The Roots of Conflict*, 1986 (\$10.00)
2. Allan E. Goodman. *The Search for a Negotiated Settlement of the Vietnam War*, 1986 (\$10.00)

SPECIAL PUBLICATIONS

- sp. Harry H. Kendall, Editor. *The Changing Security Environment in Northeast Asia: Problems and Prospects* (conference report), 1986 (\$5.00)
- sp. Robert A. Scalapino, Editor. *Economic Development in the Asia-Pacific Region*, 1987 (\$8.00)