



ASIA'S NEW GIANT

HOW THE JAPANESE ECONOMY WORKS

HUGH PATRICK / HENRY ROZOVSKY

EDITORS

THE BROOKINGS INSTITUTION

HUGH PATRICK AND HENRY ROSOVSKY

Editors

ASIA'S NEW GIANT

How the Japanese Economy Works

HUGH PATRICK AND HENRY ROSOVSKY

EDWARD F. DENISON AND WILLIAM K. CHUNG

GARDNER ACKLEY AND HIROMITSU ISHI

HENRY C. WALLICH AND MABLE I. WALLICH

JOSEPH A. PECHMAN AND KEIMEI KAIZUKA

LAWRENCE B. KRAUSE AND SUEO SEKIGUCHI

RICHARD E. CAVES WITH THE COLLABORATION OF MASU UEKUSA

MERTON J. PECK WITH THE COLLABORATION OF SHŪJI TAMURA

WALTER GALENSON WITH THE COLLABORATION OF KONOSUKE ODAKA

EDWIN S. MILLS AND KATSUTOSHI OHTA

PHILIP H. TREZISE WITH THE COLLABORATION OF YUKIO SUZUKI

NATHAN GLAZER

THE BROOKINGS INSTITUTION

Washington, D.C.

Copyright © 1976 by
THE BROOKINGS INSTITUTION
1775 Massachusetts Avenue, N.W., Washington, D.C. 20036

Library of Congress Cataloging in Publication Data:

Main entry under title:

Asia's new giant.

Includes bibliographical references and index.

1. Japan—Economic policy—1945—
2. Japan—Economic conditions—1945—
3. Japan—Social conditions—1945—
 - I. Patrick, Hugh T.
 - II. Rosovsky, Henry.

HC462.9.A84 330.9'52'04 75-42304

ISBN 0-8157-6934-2

ISBN 0-8157-6933-4 pbk.

ASIA'S NEW GIANT

Board of Trustees


Robert V. Roosa
Chairman

Louis W. Cabot
Chairman, Executive Committee

Vincent M. Barnett, Jr.
Lucy Wilson Benson
Barton M. Biggs
Edward W. Carter
George M. Elsey
John Fischer
Kermit Gordon
Huntington Harris
Roger W. Heyns
Luther G. Holbrook
William McC. Martin, Jr.
Robert S. McNamara
Arjay Miller
Barbara W. Newell
Herbert P. Patterson
J. Woodward Redmond
H. Chapman Rose
Warren M. Shapleigh
Gerard C. Smith
Phyllis A. Wallace
J. Harvie Wilkinson, Jr.

Honorary Trustees

Arthur Stanton Adams
Eugene R. Black
Robert D. Calkins
Colgate W. Darden, Jr.
Douglas Dillon
Marion B. Folsom
John E. Lockwood
John Lee Pratt
Robert Brookings Smith
Sydney Stein, Jr.

 THE BROOKINGS INSTITUTION is an independent organization devoted to nonpartisan research, education, and publication in economics, government, foreign policy, and the social sciences generally. Its principal purposes are to aid in the development of sound public policies and to promote public understanding of issues of national importance.

The Institution was founded on December 8, 1927, to merge the activities of the Institute for Government Research, founded in 1916, the Institute of Economics, founded in 1922, and the Robert Brookings Graduate School of Economics and Government, founded in 1924.

The Board of Trustees is responsible for the general administration of the Institution, while the immediate direction of the policies, program, and staff is vested in the President, assisted by an advisory committee of the officers and staff. The by-laws of the Institution state: "It is the function of the Trustees to make possible the conduct of scientific research, and publication, under the most favorable conditions, and to safeguard the independence of the research staff in the pursuit of their studies and in the publication of the results of such studies. It is not a part of their function to determine, control, or influence the conduct of particular investigations or the conclusions reached."

The President bears final responsibility for the decision to publish a manuscript as a Brookings book. In reaching his judgment on the competence, accuracy, and objectivity of each study, the President is advised by the director of the appropriate research program and weighs the views of a panel of expert outside readers who report to him in confidence on the quality of the work. Publication of a work signifies that it is deemed a competent treatment worthy of public consideration but does not imply endorsement of conclusions or recommendations.

The Institution maintains its position of neutrality on issues of public policy in order to safeguard the intellectual freedom of the staff. Hence interpretations or conclusions in Brookings publications should be understood to be solely those of the authors and should not be attributed to the Institution, to its trustees, officers, or other staff members, or to the organizations that support its research.

Foreword

IMAGES of one country usually change very slowly in the mind of another. Thus it is remarkable that in a span of a decade or so, the popular image of Japan has changed from that of a struggling country requiring U.S. economic help and protection to that of the leading challenger of American economic prowess and competitive strength. Furthermore, the reality of change was even more dramatic than the perception. Japan emerged from the widespread destruction of the Second World War to become the world's third largest industrial country in less than twenty-five years. In a span of only five years, from 1965 to 1970, Japan actually doubled its industrial capital stock—a feat never before accomplished by an advanced industrial country. In international trade, Japan shifted from being mainly a provider of labor-intensive products, such as textiles, pottery, and Christmas tree ornaments, to being the world's leading exporter of steel, ships, optical equipment, and consumer electronics and a leading contender in heavy machinery and sophisticated business machines. Similarly, Japan changed from being a country with a weak international balance of payments to being one with the strongest, from a borrower in international money markets to a considerable lender to other countries.

The Japanese miracle clearly invites detailed economic analysis. Though the studies leading to the publication of this book began in 1972, the Institution's interest in the subject can be traced back to a 1969 visit to Japan by one of its senior economists to attend a conference and his astonishment at what he found about him. Vast and detailed literature on the Japanese economy does exist, but it is in the Japanese language and well-nigh inaccessible to the Western world. Consequently, Americans, Europeans, and others interested in understanding one of the most significant developments in postwar economic history have had to rely on translations (often of poor quality),

the writings of a few Western specialists, and sketchy newspaper and magazine coverage.

This book helps to fill the gap. It adds to the literature on the Japanese economy accessible to readers of English by explaining how the Japanese have managed their economy during the last twenty years and assessing Japan's present and future economic prospects. Its main purpose is to contribute to better informed policymaking toward Japan in both the public and the private sectors.

This book is in some ways similar to an earlier Brookings study published in 1968, *Britain's Economic Prospects*, by Richard E. Caves and ten associates. In that project, as in this, a group of leading U.S. social analysts was assembled to make an intensive study, each in his own field of expertise, of recent developments in a single nation and to evaluate that nation's performance. Unlike Caves and his associates, however, the group that prepared the present volume includes members not previously familiar with the country in question. Although the project directors, Hugh Patrick of Yale University and Henry Rosovsky of Harvard University, are noted experts on the Japanese economy, the other American authors were without earlier exposure to Japan or specialized knowledge of the structure and behavior of its economy. The impossibility of assembling in the United States a group consisting entirely of experts on Japanese economic affairs of a stature matching that of the project directors is evidence of the lag between Japanese economic accomplishment and Western understanding.

The project was organized with the cooperation of a Japanese Advisory Committee comprising Dr. Saburo Okita, then president and now chairman of the board of the Japan Economic Research Center, Professor Kazushi Ohkawa of Hitotsubashi University, and Professor Tsunehiko Watanabe of Osaka University. Also, with three exceptions, each U.S. author was paired with a younger Japanese scholar to encourage cooperative research and to enable the American partners to overcome obstacles, such as the language barrier, associated with working in an unfamiliar cultural setting. Each U.S. author made at least one extensive research trip to Japan, and several of the Japanese scholars visited their collaborators in the United States.

Apart from the contribution to knowledge represented by the publication of this study, the project has added eleven American scholars to the roster of those well acquainted with Japan. This diffusion of expertise among U.S. economists constitutes a by-product of the project whose value will increase as time passes.

The Brookings Institution and the authors express their appreciation to the Japan Economic Research Center for its cooperation throughout the

project. The Center was host to the U.S. authors during their visits to Japan, helped select and organize the Japanese collaborators, and assisted in arranging interviews for the authors with knowledgeable Japanese government officials and private citizens. The authors' research benefited greatly from the close association between Brookings and the Center.

The authors also acknowledge with gratitude the cooperation they received from various organizations and from many persons in government, business, labor unions, and the universities. (Individual acknowledgements appear in each chapter.) Without such assistance, the authors could not have carried out their tasks.

The book was edited by Ellen A. Ash, with the assistance of other members of the Brookings publications staff. The risk of factual error was reduced by Genevieve B. Wimsatt, who verified source data and references. The indexes were prepared by Florence Robinson.

The project was supported by a grant from the Andrew W. Mellon Foundation. Funds were also provided by the Bureau of Economic Analysis of the U.S. Department of Commerce for preparing the estimates of the sources of Japanese economic growth presented in Chapter 2.

The views expressed in this book are those of its contributors, and should not be ascribed to the staff members, officers, or trustees of the Brookings Institution, to the Andrew W. Mellon Foundation, or to the Bureau of Economic Analysis.

KERMIT GORDON
President

*December 1975
Washington, D.C.*

ASIA'S NEW GIANT

Contents

1. Japan's Economic Performance: An Overview <i>Hugh Patrick and Henry Rosovsky</i>	1
2. Economic Growth and Its Sources <i>Edward F. Denison and William K. Chung</i>	63
3. Fiscal, Monetary, and Related Policies <i>Gardner Ackley and Hiromitsu Ishi</i>	153
4. Banking and Finance <i>Henry C. Wallich and Mable I. Wallich</i>	249
5. Taxation <i>Joseph A. Pechman and Keimei Kaizuka</i>	317
6. Japan and the World Economy <i>Lawrence B. Krause and Sueo Sekiguchi</i>	383
7. Industrial Organization <i>Richard E. Caves with the collaboration of Masu Uekusa</i>	459
8. Technology <i>Merton J. Peck with the collaboration of Shūji Tamura</i>	525
9. The Japanese Labor Market <i>Walter Galenson with the collaboration of Konosuke Odaka</i>	587
10. Urbanization and Urban Problems <i>Edwin S. Mills and Katsutoshi Ohta</i>	673
11. Politics, Government, and Economic Growth in Japan <i>Philip H. Trezise with the collaboration of Yukio Suzuki</i>	753
12. Social and Cultural Factors in Japanese Economic Growth <i>Nathan Glazer</i>	813
13. Prospects for the Future and Some Other Implications <i>Hugh Patrick and Henry Rosovsky</i>	897
Index of Names	925
General Index	931

CHAPTER ONE

Japan's Economic Performance: An Overview

Hugh Patrick, Yale University
and
Henry Rosovsky, Harvard University

Historical Summary	6
Tokugawa Japan	7
Modern Economic Growth	7
The Occupation	9
Independence	11
Japan's Economic Performance	14
Growth and the Structure of Production	15
Full Employment and Price Stability	24
The Welfare Effects of Growth	28
Income and Wealth Distribution	35
The Government and the Economy	43
Japan: A Business-Oriented Society	43
Government Economic Policies	44
Government and Economic Growth	47
Who Governs?	48
Government and Big Business	52
Japan's Expanding Presence in the World Economy	54
U.S.-Japan Alliance	54
Japan's Postwar Role	55
Japan and the World Crisis	58
In Sum	61

Tables

1-1. International Comparisons of Economic Performance, Japan and Major Western Industrialized Countries	4
1-2. Japan's Gross Domestic Product and Labor Force, by Sector, 1956 and 1971	17
1-3. Gross Saving in Japan, by Components, 1952-54 and 1970-72	19
1-4. Social Indicators, Japan, 1960-71	32
1-5. Social Indicators, Japan and Selected Western Industrialized Countries	36

Figure

1-1. Average Annual Rates of Change in Selected Japanese Price Indexes, 1953-74	26
--	----

JAPAN'S SURGE over the past quarter-century, seemingly from nowhere, to join the vanguard of the world's economies has been an unprecedented, exciting, and at times disruptive event. By any economic criteria Japan is now an immense, rich nation. Since the mid-1960s it has ranked third in total gross national product (GNP), still substantially behind the United States and Russia, but somewhat ahead of West Germany, France, and all other nations; in 1973 its GNP was about \$400 billion. This output was produced and used by some 108 million Japanese citizens, a figure that is about double the population of major European nations. Thus, by 1973 GNP per capita was about \$3,700, more than that of Italy and the United Kingdom, though still somewhat less than that of West Germany and France, and only three-fifths that of the United States level.¹ Living standards were relatively lower in Japan, where a smaller proportion of production is devoted to private consumption and to the provision of public services, yet certainly in most respects they are comparable to those in Western Europe.

In a historical perspective, wealth and economic strength have been achieved rapidly indeed. The Japanese postwar rate of growth is unprecedented, though the economic performance during the 1960s of such developing countries as South Korea, Taiwan, and Brazil suggests that the Japanese rate may not be unique. Nonetheless, between 1951 and 1973 the Japanese economy grew at an average annual rate of 10 percent in real terms, which represents a seven-and-a-half-fold increase in the size of real GNP. What makes this economic performance even more impressive is that it has occurred in a nation geographically small relative to its population,² and with very limited natural resources. Data comparing Japan's overall economic performance with that of Western Europe and the United States appear in Table 1-1.³

Note. We have benefited from the research assistance of Robert Feldman, especially in the preparation of the tables.

1. Computed at an exchange rate of ¥280 = \$1. Direct comparisons are difficult owing to differences in purchasing power and spender preferences. The rapid changes in relative prices that began in 1973 also obstruct international comparisons. See *International Economic Report of the President, February 1974*, p. 91.

2. Japan's area, 377,420 square kilometers, is about 10 percent smaller than California and two-thirds the size of France; it is, however, one and a half times the size of the United Kingdom or West Germany. For a good introductory geography, see Toshio Noh and Douglas H. Gordon (eds.), *Modern Japan: Land and Man* (Tokyo: Teikoku-Shoin, 1974).

3. It should be noted that problems in international comparability arise in the defini-

Table 1-1. *International Comparisons of Economic Performance, Japan and Major Western Industrialized Countries^a*

Item	Japan	West			Italy	
		United States	Germany	United Kingdom		France
(1) Population, 1972 (millions)	107.0	208.8	61.7	55.9	51.7	54.3
(2) Gross national product (billions of current dollars)						
1952 ^b	16.3	348.2	31.9	44.3	40.4	17.1
1972 ^c	299.2	1,159.3	260.2	153.0	197.7	117.6
(3) Gross national product per capita (current dollars)						
1952	188	2,181	643	870	947	359
1972	2,823	5,551	4,218	2,472	3,823	2,164
(4) Gross domestic investment as percent of gross national product						
1952 ^d	27.2	17.1	22.8	10.6	18.9	19.5
1971 ^e	36.3	17.4	27.5	18.1	28.0	20.4
(5) Government current expenditure as percent of gross national product						
1952 ^f	10.9	20.1	16.2	19.1	15.9	12.1
1971 ^g	14.4	24.7	22.0	34.2	21.1	25.1
(6) Exports and imports ^h as percent of gross national product						
1952	26.6	9.0	31.5	45.1	29.8	25.0
1971 ⁱ	21.2	11.7	41.8	44.4	32.9	38.0
(7) Share of world trade (percent) ^j						
1952	2.2	17.1	5.2	11.0	5.4	2.5
1972 ^k	6.2	12.5	10.2	6.2	6.3	4.5
(8) Percent of labor force in agriculture						
Early 1950s ^l	41.7	12.2	23.2	5.1	27.7	32.8
1972 ^m	19.1	4.2	8.2	3.1	12.3	17.5

(9) *Average annual rate of price change (percent)*^a

1953-62: Wholesale price index	-0.1	0.9	0.9 ^o	0.1 ^o	3.4	0.2
Consumer price index	2.8	1.3	1.9	3.0	4.1	2.4
1963-72: Wholesale price index	1.3	2.6	1.6	3.7	3.2	2.7
Consumer price index	5.2	3.5	3.3	5.2	4.3	3.9
1972-73: Wholesale price index	14.8	12.2	8.0	6.7	13.1	15.4
Consumer price index	11.1	6.0	6.7	8.8	7.1	10.2
July 1973-July 1974: Wholesale price index	34.2	20.4	15.3	25.0	32.5	41.8
Consumer price index	25.2	11.8	6.9	17.1	14.4	16.8

Sources: Item (1): Organisation for Economic Co-operation and Development, *OECD Observer*, no. 68 (February 1974), Item (2): United Nations, *Yearbook of National Accounts Statistics, 1957*; UN, *Statistical Yearbook, 1957*, p. 494, and 1973, table 183, Item (3): GNP data same as for item (2); population data from UN, *Statistical Yearbook, 1957*, table 1, and 1973, table 183, Item (4): UN, *Yearbook of National Accounts Statistics, 1957 and 1972*, Item (5): *ibid.*, Item (6): *ibid.*, Item (7): UN, *Yearbook of International Trade Statistics, 1954*, table A, pp. 12-19, and 1972-73, table A, pp. 14-21, Item (8): International Labour Office, *Year Book of Labour Statistics, 1957*, table 4, and 1973, table 2, Item (9): UN, *Statistical Yearbook, 1962*, tables 161, 168, and 1973, tables 172, 173; OECD, *Main Economic Indicators*, September 1974, pp. 144-48.

a. It should be noted that not all economic indicators are internationally comparable; for example, the United States classifies as government current expenditure certain items included in gross domestic investment by other nations.

b. Currencies converted into dollars at official exchange rates.

c. Gross domestic product in purchasers' values.

d. Ratio of gross domestic capital formation to gross national product.

e. Ratio of gross capital formation to gross domestic product in purchasers' values.

f. Ratio of general government consumption expenditure to gross national product.

g. For all countries except Japan, ratio of current disbursements of central, state, and local governments to gross domestic product; for Japan, disbursements of general government only.

h. Exports and imports of goods and services.

i. Ratio of exports and imports to gross domestic product.

j. Share of world trade = (import + export)/(world import + world export) × 100.

k. World trade in U.S. dollars: imports are \$427.5 billion; exports are \$412.4 billion. Excludes trade among China, Mongolia, North Korea, North Vietnam, and the two Germans.

l. Data are for 1950 for the United States and West Germany, 1951 for the United Kingdom and Italy, 1954 for France, and 1955 for Japan.

m. Data are for 1966 for the United Kingdom, 1970 for Japan, 1971 for West Germany, and 1972 for the remainder.

n. Compound annual rate of growth for the periods indicated.

o. 1954-62.

To many observers, Americans and others, this economic performance has appeared virtually miraculous. Some have sought to locate the source of this "miracle" in allegedly unique Japanese features—government policy or leadership, labor-management practices and institutions, or more vaguely defined cultural attributes. We gently suggest that Japanese growth was not miraculous: it can be reasonably well understood and explained by ordinary economic causes. Part of the problem for the foreign observer has been that most of us have been ignorant of Japan, which makes us particularly susceptible to the use of stereotypes and ideal-types, both as applied to Japan and in making comparisons with other countries.

This book attempts to cut through simplistic stereotypes in order to provide interpretations of major specific aspects of the Japanese economy, as seen through American eyes. In this introductory chapter we provide a broad overview, without attempting to summarize the major points or conclusions of the succeeding chapters. We begin with a brief historical summary, which then is amplified in sections on the postwar domestic economic performance, the evolving role of the government, and Japan's expanding presence in the world economy.⁴

Historical Summary

Although the purpose of this volume is to provide an overview of the contemporary Japanese economy and its remarkable growth since World War II, a few paragraphs must be devoted to describing historical developments up to that time. Although in doing so we cannot avoid superficiality, it is necessary to remind ourselves that Japan's modern economic history did not begin with the end of the war. By the end of World War II, Japan had experienced nearly a century of modernization, and even one hundred years ago it was not a typical underdeveloped country.

tion and measurement of these economic indicators. There are also minor differences between some data used here and those used in other chapters in this volume, depending on their purposes and sources.

4. For a more detailed treatment in historical perspective see Kazushi Ohkawa and Henry Rosovsky, *Japanese Economic Growth: Trend Acceleration in the Twentieth Century* (Stanford University Press, 1973). Certain of the approaches taken in this chapter were foreshadowed in Hugh Patrick, "The Phoenix Risen from the Ashes: Postwar Japan," in James B. Crowley (ed.), *Modern East Asia: Essays in Interpretation* (Harcourt Brace and World, Inc., 1970). Good contemporary surveys of the Japanese economy, published annually, include Economic Planning Agency, *Economic Survey of Japan* (Tokyo: The Japan Times), and Organisation for Economic Co-operation and Development, *Economic Surveys: Japan* (Paris: OECD).

Tokugawa Japan

From the early seventeenth century until 1868, Japan was under the feudal rule of the Tokugawa family. During that period, the economy can certainly be described as traditional. Approximately three-quarters of the working population was engaged in peasant agriculture. This group paid a heavy annual harvest tax that supported a hereditary warrior class, the samurai. Western technology was nearly entirely unknown; indeed, with a few insignificant exceptions, all contacts with foreigners were strictly forbidden and the Japanese themselves were not allowed to go abroad. Non-agricultural economic activity consisted of the usual crafts and services, all employing typical labor-intensive methods. Population growth was very slow: in 1600 there may have been 25 million Japanese; by 1868 there were perhaps 30 million.

Some other features of Tokugawa Japan deserve mention. Japan at that time was a *country*, almost in the contemporary sense of that word: it possessed functioning local and central governments that had preserved peace for about two hundred years, a system of courts, and other administrative services. By the standards of the time it was also relatively urbanized, containing three of the largest cities in the world: Edo (now Tokyo), Kyoto, and Osaka. The educational levels of its citizens were also unusual, in that some formal schooling was available to about half the male population. This leads to an important conclusion: "In Tokugawa Japan the gap between economic and 'other' backwardness was unusually large, and this made the prospect of modern economic growth all the more promising. This gap between the technology actually applied and the capability of borrowing and absorbing more advanced methods based on a well-functioning sociopolitical infrastructure deserves particular stress because it has been a fundamental factor in Japan's success."⁵

Modern Economic Growth

In 1868, under a variety of internal and external pressures, the Tokugawa regime yielded power to the restored imperial dynasty; the Meiji restoration was to see a series of revolutionary changes. The old social and economic order was discarded, frontiers were opened to foreign commerce and know-how, and the new rulers set themselves the task of building a modern country on the basis of an industrialized economy. Japan became

5. Ohkawa and Rosovsky, *Japanese Economic Growth*, p. 8.