

**BANGLADESH'S DEVELOPMENT :
LESSONS FROM JAPAN**

A thesis submitted to the Dhaka University in Partial
Fulfillment of the Requirements for the Degree of " Master
of Philosophy" in Political Science

By
SAROWAR HOSSAIN

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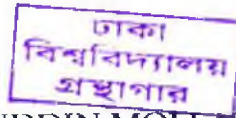
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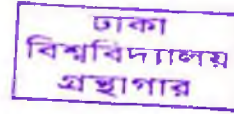
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DECLARATION

I do hereby declare that the thesis entitled "Bangladesh Development: Lessons from Japan" prepared and presented by me to the Dhaka University in partial fulfillment of the requirements for the Master of Philosophy degree is an original work of mine which has been done during the study period. The thesis has not been presented in any form to any other academic institutions for any degree or any other purpose.

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Sarowar Hossain
28-06-06

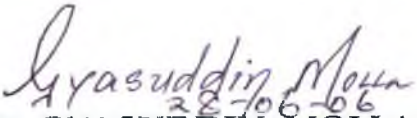


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CERTIFICATE

This is to certify that the thesis entitled “Bangladesh Development: Lessons from Japan” in partial fulfillment of the requirement for the award of the Degree of MASTER OF PHILOSOPHY in Political Science prepared under my direct supervision by SAROWAR HOSSAIN has been completed during the period prescribed under M. Phil Ordinance.

In preparation of the Thesis, he has widely consulted relevant library materials. The thesis is in no way a joint work.


28-06-06
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PREFACE

Contrary to earlier common impression of Japan as the only Far East Asian country that was devastated in World War II and once flooded the world market with cheap textiles and other cheap and low quality products, the reality of today is that there is hardly any country in the world that does not have some form of economic relation with Japan. Most of the industrialized countries suffer trade deficits (Japan's trade surplus in the fiscal year ending March 1991 was US \$ 113.44 billion and that in 1992 was US\$ 136.051 billion). These figures would be much higher if the import of precious metals for reserve and stockpiling is included. With her, while many developing countries heavily depend on her for economic or technical assistance, or loans. Most households all over the world are foreign brands supplied by Japanese companies in the original equipment manufacturer (OEM) arrangement. Japanese spare parts and consumer products throughout the world. They are no more of low quality or cheap.

Intentional financial institutions are going to be more and more dependent on Japanese finance. The top five commercial banks of the world (as of 1990) in terms of assets and deposits are now the Japanese. The exchange rate of the Japanese currency fixed at Y90 to a dollar (as of 1 August 1995). The yen is now a powerful intentional currency which many countries are using in their reserves. Japan is now the single Digest purchaser of the United States (US) movement government deficit finance bonds (US budget deficit in the fiscal year 1991 was US \$ 269 billion, which was estimated to be above US\$ 375 billion in the fiscal year 1992.

Japan is now a prominent member of the powerful Group of Seven industrialized nations (G- 7). It is modestly aspiring for a top shareholder position in the World Bank and the International Monetary Fund (IMF). It exerts considerable influence over decisions of the Asian Development membership of the United Nations (UN) Security Council.

What is visible is largely a postwar development, and this phenomenal postwar economic development of Japan started drawing renewed attention of the developed and the developing countries alike since the early 1960, particularly after was surpassing the advanced European countries one after another, even the UK and the then West Germany, in GNP to become the second largest economy in 1968 in the free world after the USA, while the developing economy of China and the former USSR used to be shrouded in veil.

These days hardly any country will be found that does not take an interest in Japan for whatever reason it may be. The developed countries are worrying as to how they can compete with Japan. The developing countries are trying to find out whether they can emulate some of Japan's policies and strategies. There came out many best sellers on Japan. Many of them described Japan's development as miracle, some called it a postwar economic phenomenon, while others attributed it to a free ride, US security, and life-long employment. But hardly any research has devolved into the factors that made Japan grow to provide answers to both the developed and developing countries.

ACKNOWLEDGEMENT

First and foremost I express my sincere respect and profound gratitude to my guide Dr. Gyasuddin Molla, Professor in the Department of Political Science University of Dhaka, Bangladesh for his constant suggestions, guidance and help in the course of my research work. I am immensely benefited from stimulating advice, which I used to have with him otherwise it would not have been possible for me to complete this work. It was indeed my good fortune to have had such an able and devoted guide.

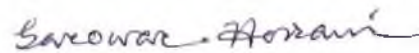
From the inception of the idea to the study Bangladesh development to the time of my submission of this thesis, I have received help from many people and institutions. Though I express my deep feelings and their names individually but I must mention a few names whose help and cooperation has been of immense help to me. I am extremely grateful to my teacher Professor Dr. Ataur Rahman, Department of political science, University of Dhaka, for his constant valuable suggestions and discerning comments on my thesis. I am also grateful to Japan Embassy library and Japan study center University of Dhaka for getting opportunity to study there. I am thankful to all teachers of Political Science Department, University of Dhaka for their encouragement in the completion of this work.

I have also discussed with many working people in this field and shared my ideas with them. Their suggestions, experiences and written materials on the subject have been very much helpful in giving me the insights into the problems and steer the thesis appropriately.

I am extremely grateful to my friend Md. Faisal, Lecturer, Department of International relations, University of Chittagong, who helped me a lot during the time of my thesis work. He has always been cooperative and provided every support to me. I shared many of my ideas with him.

Finally I am extremely grateful to my family for their moral support and blessings.

Dhaka



(SAROWAR HOSSAIN)

Date: 28-06-06

CHAPTER-ONE

Introduction

Today Japan is one of the most advanced and one of the most powerful nations in the world. Japan's industrial machine pours forth a flood of goods to the four corners of the globe; Japan's business men and women, diplomats, students, and ordinary citizens find their way to every major city and country in the world ceaselessly in pursuit of knowledge, profit, and pleasure; Japan's science and technology, as well as Japan's art and literature, enrich the higher culture of many other peoples. Yet to many outsiders Japan remains an unknown quantity, dimly on the edge of consciousness and hard to fit into familiar categories. The Japanese themselves are partly responsible for their relative invisibility. A generation ago they paid the price of being too truculently self-assertive, and memories of defeat and military disaster in World War II have made many Japanese reluctant to thrust themselves too boldly before the world public. Nonetheless, Japan has become increasingly visible over the past decade and will doubtless continue to be visible in decades to come.¹

When Commodore Matthew Perry sailed into Uraga Bay in July 1853, he carried a letter to the emperor of Japan assuring him that the United States had no intention of disturbing the tranquility of his realm. This comforting diplomatic assurance could hardly have been wider of the mark, for Perry's arrival set in motion a process of rapid and bewildering change that profoundly altered the course of Japanese history. Within the space of a generation the Japanese

¹ George Allen and Unwin, *Aspects of the history of the civilization of Japan*, 3 vol., London, 1930.

transformed themselves into the first country outside the West to build up a modern state, to set in motion a modern industrial economy, and to plunge into the exciting but uncertain waters of world politics. As one foreign observer noted in 1900, Japan was like a bright comet suddenly tracing a path across the sky, exploding into the vision of an outside world that for centuries had hardly taken notice of it.

From its beginning the remarkable transformation of Japan following the arrival of Perry excited the interest of Americans. For those of Perry's day the "opening" of Japan was seen as an event of great moment. It held out the prospect of converting a "backward and heathen" people into a "civilized and forward-looking" nation committed to progress, liberty, free trade, and Christianity. In 1861 one American publication reported that the Japanese, even though they were "Mongol," possessed "greater mental activity and capacity for acquisition of knowledge than they other nations belonging to that race", and ten years later it noted happily that Japan was progressing toward "civilization" with "a rapidity which challenges universal admiration" Japan during the past century has undergone many of the same kinds of change that the Western world experienced from the mid-eighteenth century. The interesting questions are: why and how? At first most historians, reflecting a general popular assessment, tended to regard Japan as a unique case, contrasted with China, India, and other "backward" areas of the world, which were unable to make a similar breakthrough into modernity. They tried to discover what was peculiar about Japan that enabled it to "succeed in doing what these other non-Western societies had not. Sometimes their answers were silly-when they cited the Japanese "capacity for imitation," for example. But the more perceptive, such as the brilliant Canadian

historian E. H. Norman, noted that the breakdown of traditional society before the advent of Perry prepared the way for the massive changes that came after it. This viewpoint, which suggests the unique social circumstances behind Japan's rapid modernization, continues to be suggestive even today.²

Since World War II Japan's modern experience has been placed in a slightly different perspective- The emergence of a welter of "new nations" in the postwar world made Japan seem less a unique case than as the first instance of a more general phenomenon: the modernization of the non-Western world. Some historians and social scientists tried to use the Japanese case as a testing ground for larger theories about what a "modern society" is and how it gets that way. More often than not they found these theories were an ill fit for Japan. Others, more oriented toward public policy, proposed Japan as a model or example for other non-Western nations to follow. This line of thought became pronounced as memories of World War II faded; and Japan became one of the staunchest allies of the United States in the struggle against "communist totalitarianism." Clearly there were advantages to be gained in cold war ideological debates by pointing out lessons to be learned from a country that not only had modernized itself early on but had done so within the framework of a free-enterprise economy under a non-Marxist and non-ideological leadership.

The prevailing popular image of modern Japanese history has picked up this stress on the positive aspects of Japan's modern transformation: Over the past few years, there has been a strong trend to view modern

² Harper and Row, *America Encounters Japan: From Perry to MacArthur*, New York, 1963, P-66.

Japanese history as a kind of success story.

Japan the third largest industrial power in the world. To be sure, there is much to commend this point of view. The Japanese today enjoy a degree of material comfort and security unknown to their great-grandparents or to their contemporaries in Korea, China, and India. As the Japanese boom has rolled on, Japanese living standards and technical achievements have come to be measured by standards of Western experience rather than by those of the non-Western world. Indeed, many observers have begun to wonder whether the "advanced" nations might not have something to learn from Japan too.³

By contrast, the postwar generation of Japanese has tended to stress the darker side of Japan's modern century. They do not deny the realities of Japan's economic growth, but they point out that other things came with it—the persistent feudal habits of mind, an authoritarian political order, an expansionist foreign policy, and the final tragedy of war. They look back beyond the remarkable Gross National Product of today to the circumstances that led to the leveling of Hiroshima and Nagasaki by atomic bombs. In the past decade, while some optimistic Americans looked forward to the emergence of a "Japanese century" in the near future, more pessimistic-Japanese observers feared the re-emergence of Japanese imperialism in new and subtler forms, a turn of events they regarded as ominous for the Japanese themselves as for the rest of the world. For them, the prime lesson of Japan's modern history is how *not* to modernize.

If one looks at the course of Japanese history during the last century, it is clear that whatever one's standards are, Japan's path to the present has

been strewn with both failures and successes. To sweep aside the failures as the price inevitably paid for the long-run achievements makes no more sense than to suggest that these achievements are nothing compared with the sufferings it has undergone. But before making a final judgment on the meaning of Japan's modern experience one ought to try to understand what happened and why. Not to do so means falling into an a historical praise-and blame approach to history, which judges people and nations of the past by standards they themselves did not accept or regard as appropriate. Human history, like human life, is ambiguous, and when one moves from description and analysis to moral judgment, its meaning becomes as varied as its observers are numerous.

Objectives of the Study

The objectives of the study are as follow:

1. To know how Japan became so modernized and developed country in the world.
2. To know full education system of Japan and what is it's difference from Bangladesh.
3. To know Japanese economic aspect and industry, their policy financial system etc.
4. To identify the problems and obstacle of Bangladesh.
5. And finally to suggest effective measure for Bangladesh in the light of Japanese System.

³ Puter Duus. The Rise of Modern Japan. Standford University. PP-1-3.

Rational Of The Study

Bangladesh is facing various problems i.e. Party system, leadership problem are the best. Corruption and violence, political in tolerances, gap between the citizen, psychology and historical enmity etc are also problems. There is no accountability in Bangladesh. There are no norms and system, no master plan, no solution about unemployment problem; higher study in another most important problem. Lack of real administration, lack of chain and command is also a major problem.

Japanese Government plays a key role in promoting economic growth in the country. The principle of peace, light standard education positive introduction of new technology, the financial system multilateral trading system, political stability Japan may be example for Bangladesh.

A systematic study on the overall economic development process can lead to a further understanding and find possible answer to this difficulty question.

Methodology of the Study

For an empirical study, relevant data and information have been collected both from the primary and the secondary sources. The data have been tabulated, analyzed and interpreted with use of standard statistical tools.

Primary Source

The relevant data and information of primary sources are not available.

Secondary Sources

Secondary sources (published materials) has been consulted for study. Non- documentary sources of information (exchange of views or ideas among the scholars) will also be taken into consideration.

Limitation of the study

There is a limitation of study because books, publications and articles of this relevant topic are not available so I had to face various problem for collecting information.

CHAPTER-TWO

Japan's Modernization

Japan is among the most successful example of modern economic growth. The Govt. of Japan played a key role in promoting economic growth in the country. The principle of peace, Light standards education, positive introduction of new technology, the financial system, multilateral trading system, political stability are key important for the economic miracle in Japan.⁴ It had been transformed from a mediaeval state into a modernized, industrialized, computerized, high-teach country in an extremely short period: Japan is the most remarkable images of the world for her rapid economic growth. Japan is now seen as a great power comparable with the United States in term of economic and competitive strength.⁵ The economic development which made Japan's GNP the second highest is the world in sometimes considered to be a post world war II phenomenon. It is quite often described as a miracle some forty five years ago Japan's phenomenal economic success aroused unprecedented interest in not only the international business community but also among researchers and scholars of diverse disciplines from both the developed and the third world countries⁶. Much of the research was however specialized and did not give complete and comprehensive picture of the *country*. In order to understand the Japan and its development process one should understand its

⁴ Japanese Economic Challenge P. 137

⁵ Japan Forum Vol. 3, No. 1, April 1991.

past first to comprehend what factors motivated the Japanese people to achieve so much in such a short time.⁷

In order to bring about a basic and permanent change in the attitude of the Japanese toward modernization, reforms in the field of education were of the first importance. A ministry of Education was setup on the western pattern in 1871. The school district and compulsory elementary education for boys and girls for three years of schooling, later increased to six. Here again a change in Japanese policy occurred, and more liberal ideas of education from America supplanted the rigid French pattern.⁸ Shipbuilding in a part, but on one part, of that powerful industrial advance which Japan had made from the world war II to the present, often know as "the economic miracle.

The year 1987 was a red letter one for the Japanese; in that year their per capita GNP exceeded that of the United States for the first time.⁹

The Figures are as follows in 1986, Japan \$ 16,330 U.S \$ 17,464 but in 1987 Japan \$ 19, 642 U.S 18,403. Economic development was doubtless promoted by changing political condition and institution after 1900. Tokugawa period that a strong sense of modern type nationalism, with very deep roots among the people, began to develop in Japan. Modern nationalism requires a high level of awareness of cultural distinctiveness¹⁰

⁷ Hironmitsu Ishi. Taxation and public debt in a growing economic: The Japanese experience p. 1.

⁸ Ibid

⁸ Japan a country Study ch. 3

⁹ W. scott Morton Japan its history and culture p. 154

¹⁰ Fact and figures of Japan 2001

Japanese in every traditional way of doing things and to adopt what appeared to be more modern and efficient ways of bringing the fruits of civilization to the Japanese, whether it was the constitution, the central government administration, the military, the school system or the technology industry.¹¹

In the Meiji period (1868-1912), leaders inaugurated a new Western-based education system for all young people, sent thousands of students to the United States and Europe, and hired more than 3,000 Westerners to teach modern science, mathematics, technology, and foreign languages in Japan.¹²

Japan has been come in dependent 28 April in 1952. There are about 13 cores people in Japan. Once upon a time 85% people of Japans was dependent on Agriculture and 15% people was dependent on industries. With in a short time the Authority of Japan has been changed the situation fully. Now 85% people are depended on Industries. How is it possible that is question to the scholar and research? Now the GDP of Japan is 21300 US\$ and Bangladesh GDP is 400 \$.¹³

The first and foremost condition for development is education. Japan is so developed because 100% people are educated. Japan's highly acclaimed post war education system contributed strongly to the modernizing process. The world's highest literacy rate and high education standards were major reasons for Japan's success in achieving a technologically advanced economy, Japanese schools also encouraged

¹¹ Ibid

¹² Vogel EFA non traditional view of Japanese Modernization

discipline an important requisite to produces an effective work force.

The number of people of Japan and Bangladesh is about same, (about 14 crore)¹⁴ but Bangladesh have only 21 public University and 52 private University only to name, on the other hand there are 800 University in Japan. This is the main factor.¹⁵

Japan with almost three million men and women enrolled in over 800 Universities and four years colleges, has the second largest higher educational system in the developed world. In Japan public University usually enjoy more prestige than their private counter part and only about 27 percent of all University bound students manage to gain admission to public University.¹⁶

Second condition for development is industrialization; Japan's economic success is not a temporary phenomenon. It is not a result of cheap labor, or of exports, or of copying. These simplistic explanations cannot explain the massive achievement of Japan rather Japanese industrial growth is the result of the functioning of a highly efficient system in which parts inter related to stimulate continued growth. Japanese business practice and the business system are far different from those of *any* western economy. This has obscured recognition of the near ideal condition that Japan has created for economic growth.

Japan is one the most developed country and Bangladesh is one of the least developed countries in the world. But the populations are same,

¹³ Statistical Handbook of Japan 2001

¹⁴ Ibid

¹⁵ Source BANBEIS

¹⁶ Lucien Ellington Japanese Education Japan Digest. Upadated September 2005

and area is one third. Japans philosophy, norms and system, accountability, political stability, governing system, local government structure are the best. The Japanese practice of using education as a tool for national development and population control *may* be universally adaptable.

The industrial and trade polices of Japan, now being criticized by the developed countries, may be adopted by Bangladesh. The banking system, fiscal and monitory system, legal system and taxation system of Japan may be valuable model for Bangladesh. It is doubtful whether any other system can pull our country out of poverty¹⁷

Samuel P. Huntington in his notable work on democratization observed, "Economic development makes democracy possible, political leadership make it real." In the same vein Dr. Ataur Rahman said, Bangladesh needs new roles and new behavior from its political leaders who should be more tolerant and performing for the people.¹⁸

¹⁷ Rahman Mustafizur *Japanese strategy*

¹⁸ Rahman Ataur Democratization and American Foreign Policy, Bangladesh perspective.

CHAPTER THREE

THE JAPANESE EDUCATION SYSTEM

Introduction

Japan is one of the highest standard of education and one of the highest literacy rates in the world. About 93% of children enter high school, and nearly all of them became graduate. At over 40% in 2000, Japan also has one of the highest university enrolment rates in the developed world, and a huge number of state and private universities to serve the population. The Japanese educational system is composed of 6 years of elementary education, 3 years of junior high school education, 3 years of senior high school. Education, and 4 years of undergraduate and 5 years of graduate education. There are also kindergarten prior to elementary schools, 5-year technical colleges on which students enter finishing junior high schools, and 2-year junior colleges after senior high schools. Everyone enters elementary school at the age of 6, and the 9 years of education from elementary school through junior high school are compulsory.¹⁹

THE STAGES OF THE EDUCATION SYSTEM

The basic education system was modeled on a mixture of the British, French and US systems, with the latter influence perhaps being the largest. School consists of the following basic route:

¹⁹ Japan Guide

- ❖ Kindergarten
- ❖ Elementary School
- ❖ Lower Secondary School
- ❖ Upper Secondary School
- ❖ University

There are many other options. A more detailed breakdown would be:

- ❖ Kindergarten
- ❖ Elementary School
- ❖ Lower Secondary School

Followed by any of the following, some of which can be followed on a part-time or correspondence basis:

- ❖ Upper Secondary School
- ❖ Colleges of technology
- ❖ Schools for the blind
- ❖ Schools for the Deaf
- ❖ Schools for Other Disabled
- ❖ Specialized Training College

This is followed by Higher Education, which may be at any of the following (again, correspondence and part-time options are often available):

Specialized training college (Nursing, Engineering, etc.)

- ❖ Junior college
- ❖ University
- ❖ Graduate school (Master's courses, Doctoral courses)
- ❖ Miscellaneous schools

School System

The modern school system of Japan began from the promulgation- of the school system in 1872. The Fundamental Law of Education and the School Education Law were enacted in 1947 and the 6-3-3-4-year system of school education was established aiming at realizing the principle of equal opportunity for education.²⁰

Upper secondary schools were first established in offering full-time and part-time courses, and in correspondence courses were added to the system.

The new system for universities began in 1949. The junior college system was established on a provisional basis in 1950 and on a permanent basis in 1964, following an amendment to the School Education Law

Colleges of technology were initiated as an educational institution in 1962 to provide lower secondary school graduates with a five-year consistent education (five-and-a half years in the case of mercantile marine studies).

²⁰ w.w.w. Japan Education System

Those pupils and students who are disabled are properly educated at special education schools (schools for the blind, deaf and other disabled), or in special classes at elementary , and lower secondary schools, depending upon the type and extent of disability, or attend both ordinary schools and special support services in resource rooms if the disability is a minor one.

In addition, there are kindergartens for pre-school children, and specialized training colleges and other miscellaneous vocational schools, which are offering technical courses or those for various practical purposes.

Also, pursuant to the amendments to the School Education Law and other legislation in June 1998, the six-year secondary school can be established to enable consistent education covering teachings at both lower and upper secondary schools from FY 1999.

Brief notes on each of the different type of educational institutions shown in the diagram are given below.

1. Kindergartens

Kindergartens aim at helping pre-school children develop their mind and body by providing a sound educative environment for them. Kindergartens cater for children aged 3, 4 and 5, and provide them with one-to three year courses.

2. Elementary Schools

All the children who have attained the age of 6 are required to attend

elementary school for six years. Elementary schools aim at giving children between the ages of 6 and 12 primary general education suited to the stage of their mental and physical development.

3. Lower Secondary

All the children who have completed elementary school are required to study in lower secondary school for three years until the end of the school year in which they reach the age of 15. Lower secondary schools give children between the ages of 12 and 15 general secondary education suited to the stage of their mental and physical development, on the basis of the education given in elementary school.

Upper Secondary Schools

Those who have completed nine-year compulsory education in elementary and lower secondary school may go on to, upper secondary school. Students must normally take entrance examination to enter upper secondary school. In addition to full-day courses, there are also part-time and correspondence courses. Full-day courses last three years, while both part-time and correspondence courses last three years or more. The last two courses are mainly intended for young workers who wish to pursue their upper secondary studies in a flexible manner in accordance with their own needs. All these courses lead to a certificate of the upper secondary education.

In terms of the content of teaching provided, the upper secondary school courses may also be classified into three categories: general, specialized and integrated courses.

General courses provide mainly general education suited to the needs of both those who wish to enter institutions of higher education and those who are going to enter employment but have chosen no specific vocational area.

Specialized courses are mainly intended to provide vocational or other specialized education for those students who have chosen a particular vocational area as their future career. These courses may be further classified into: agriculture, industry, commerce, fishery, home economics, nursing, science-mathematics, physical education, music, art, 'English language and other courses.

Integrated courses were introduced in 1994. These courses offer a wide variety of subject areas and subjects from both the general and the specialized courses, in order to adequately satisfy students' diverse interests, abilities and aptitudes, future career plans, etc.

5. Secondary Schools

In April 1999, a new type of six -year secondary education school, called "Secondary School" was introduced into their school system. Secondary schools combine lower and upper secondary school education in order to provide lower secondary education and upper secondary general and specialized education through 6 years. The lower division in the first three years provides lower secondary school education and the upper

division in the latter three years gives upper secondary school education.

6. Special Education schools

Special education schools aim at giving children with disabilities education suited to their individual needs.

There are schools for the blind, deaf and other disabled. Schools for the other disabled may be further classified into three types: those for the mentally retarded, those for the physically disabled and those for the health impaired.

Special education- schools comprise four levels of, departments namely, kindergarten, elementary, lower secondary and upper secondary departments.

Special classes in ordinary elementary, lower and upper secondary schools cater to disabled children whose disabilities are not so serious.

7. Institutions of Higher Education

Institutions of higher education in Japan include universities, Junior colleges and colleges of technology. In addition, specialized training colleges offering specialized may be regarded as one type of higher education institution.

a. **Universities** are intended to conduct teaching and research in depth in specialized academic disciplines and provide students with advanced knowledge. Universities require for admission the completion of upper secondary schooling or its equivalent, and offer courses of at least four years leading to a bachelor's degree (Gakushi).

Universities may set up a graduate school offering advanced studies in a variety of fields leading to master's (Shushi) and doctor's (Hakusbi) degrees. Graduate schools normally last five year's consisting of the first two-year courses leading to a master's degree and the following three year courses leading to a doctor's degree. However, there is a possibility for those how are especially successful in their studies to get a master's degree in one year, and a doctor's degree in two years.

b. **Junior Colleges** aim at conducting teaching and research in specialized subjects and at developing in students such abilities as are required for vocational or practical life.

Junior colleges require for admission the completion of upper secondary schooling or its equivalent, and offer two-or three-year programs in different fields of study, which lead to the title of associate (Jun-gadushi).

Most courses offered in these colleges are in such fields as humanities, teacher training and home economics. The great majority of the students in these colleges are women.

Those who have completed junior college may go on to university and their credits acquired at junior college may be counted as part of the credits leading to a bachelor's degree. Junior colleges are also allowed to offer advanced courses which may lead to bachelor's degree.

c. **Colleges of technology** universities or junior colleges, accept those

who have completed lower secondary schooling and offer (five-and a half years at colleges of maritime technology) consistent programs. They were established in 1962, intended to conduct teaching in specialized subjects in depth and to develop in students such abilities as are required for vocational life. Students who have completed colleges of technology are granted the title of associate (Jun-gakushi) and may apply for admission to the upper division of university. Colleges of technology are also allowed to offer a two-years advanced courses, which follow the five-year program in order to provide a higher level of technical education.

8. Specialized Training Colleges and Miscellaneous School

In addition to the above mentioned institutions of primary, secondary and higher education, there are educational institutions known as "specialized training colleges" and "miscellaneous schools" which offer a variety of practical vocational and technical education programs in response to diverse demands of people in a changing society. The great majority of these schools are privately controlled.

a. Courses provided in Specialized Training Colleges may be classified into three categories: upper secondary, specialized and general courses. Each course gives at least 40 students systematic instruction, lasting not less than one year, for 800 class hours or more per year.

Specialized training colleges offering upper secondary courses are called professional training colleges (Senmongakko)

The former require for admission the completion of compulsory education, while the latter accept those who have graduated from the upper secondary schools or upper secondary courses of specialized training colleges and award the title, "technical associate (Senmonshi)", to those who complete specialized courses that fulfill certain criteria, including a study period of at least two years. Students who have completed an upper secondary course lasting three years or more of specialized training colleges designated by the Minister are entitled to apply for a university place.

b. Miscellaneous Schools provide people with vocational and practical training such as dressmaking, cooking, book-keeping, typing, automobile driving and repairing, computer techniques, etc. Most courses in miscellaneous schools require for admission the completion of lower secondary schooling. These courses normally last one year or more with at least 680 class hours per year, but there are also shorter courses of three months or more.

Universities in Japan

Japanese universities are classified into three categories, national, public and private, according to their administration. They are all established on the basis of the government standard of education, so that the educational level of each is the same. One or more national Universities are located in each prefecture throughout the country. Many universities

have characteristics connected with the industries and traditions in their local areas.

Presently the number of universities and colleges totals more than 650.

About 74% of them have graduate schools.

Undergraduate Programs

(A) University Structure

Universities are organized into faculties, each of which specializes in a particular broad area of study. The faculties in turn are divided into departments for the study of specific subjects within the broad area.

(B) Qualification for admission

To be admitted to university, applicants must have successfully completed 12 years of school education in a regular program, or must demonstrate scholastic achievement equal to or better than those who have finished a regular 12 year education.

(C) Academic Year

The academic year starts on April 1 and ends on March 31 of the following year. Most universities divide the year into two semesters. The curriculum is largely based on 1-semester courses, with a few 2-semester sequences.

(D) Subjects of Instruction

Subjects of instruction in the undergraduate program are divided into subjects for general education and those for the student's major field of study. Some subjects are required and some are elective, according to faculty and department.

(E) Units

Except for medical science, dentistry, and veterinary science programs, the undergraduate program makes use of the unit system. To receive course units, students must either pass end-of-course examinations (usual) or complete some comparable task set by the course teacher.

(F) Requirements for Graduation

To graduate from a university, students are required to be in the university for 4 or more years (6 years in medical science, dentistry, and veterinary science) and to obtain at least the required number of units stipulated by the regulations of the university. The number of units slightly differs by university .

(G) Bachelor's Degree

A bachelor's degree is awarded in the major field to those who have successfully completed the prescribed program of studies.

Graduate Schools

(A) master's and Doctoral Programs

Graduate schools usually offer master's programs of 2 years and doctoral programs of 3 years succeeding the master's, medical science and

dentistry have no master's programs but rather doctoral programs of 4 years with few exceptions.

Some universities consider their master's studies the first stage (zenkikatei) and doctoral studies the second stage (kokikatei) of a doctoral program.

(B) Division

Graduate schools have several divisions according to the field of study.

(C) Qualifications for Admission

Applicants for a master's program must have finished 16 years of school education, in other words, must have already acquire a bachelor's degree, or its equivalent.

Applicants for a doctoral program in medical science, dentistry, and veterinary science must have finished 18 years of school education, and must have received a bachelor's degree, or its equivalent. Applicants for a doctoral program other than in the three areas just mentioned are limited to those who have a master's degree or its equivalent.

(D) Units

Graduate schools have adopted the same unit system as in the undergraduate program..

(E) Degrees

Those who have completed a master's program are awarded a 'master's degree ('Shushi' degree). The master's degree is conferred upon those

who have been enrolled in the master's program for 2 years or more, obtained at least the minimum number of units (30) in their major field, passed an examination on their master's thesis, and passed other prescribed examinations.

Those who have completed the Ph.D. program are awarded a doctoral degree ('hakushi' degree). The doctoral degree is conferred upon those who have followed the program for 5 years or more (3 years or more for those who have finished the master's program and 4 years or more for those in medical science and dentistry), obtained at least the required number of units in their major subject, passed an examination on their doctoral thesis, and passed other prescribed examinations.

Research Students (Non-degree Students)

Besides degree students, non-degree students may enroll in a graduate school. The qualifications for admission are the same as for degree students. Non-degree students are usually called (Research Students). In principle, Monbusho scholarship students will be enrolled in the beginning as non-degree students.

(Note) Section I has explained the Japanese school system and Japanese universities (undergraduate and program, etc.) in general. Because each university has its own characteristics, the exact time of the entrance examination, academic year, subjects of instruction, units, requirements for graduation, the system for research students, and so on differ somewhat. For particulars, contact the specific university or universities which you are interested in.

Daily life in Japanese High Schools

Understanding the Japanese people and culture requires understanding the factors that mold them. Particularly important are those components, which influence them in their formative years.

4. The Japanese education system is one of the most influential agents molding Japanese youth. Given the large amount of time that Japanese students spend in schools, it is little wonder that the education system plays a tremendous role in determining the fabric of Japanese society. An examination of the "typical" high school experience illuminates the function of the education system in Japanese society.²¹

Getting to School

Japanese high school students do not drive cars. Many either walk or ride bicycles if the distance is not too great. In other cases, students must take public buses and trains, often changing lines several times in order to reach their destinations. It is not uncommon for students to spend two or more hours each day on public transportation.

5. After junior high school students attend schools based on standardized high school entrance examination scores. As a result, some students travel a great distance to attend the school determined by their test scores. The school day begins at 8:30, so students may leave home as early as 6:30. While some student's sleep or study during their long

²¹ Marcia L. Johnson and Jessrey R. Johnson " Daily Life in Japanese high School October 1996.

commute, public transportation also provides a chance for socializing with peers. Student behavior on the way to school is regulated by school policies. These policies may prohibit certain activities in public-chewing gum, consuming snacks, reading books while walking-anything that might reflect badly on the reputation of the school. Each school has a unique uniform that makes its students easily identifiable to the public. School policies often require students to stand on buses and trains, leaving seats open for other passengers in order to demonstrate consideration. In practice, however, the behavior of students tends to relax as they move farther away from school.

At School

6. Once at school, the students usually enter an area full of small lockers in which they place their street shoes and don school slippers. These slippers may be color-coded: pink for girls and blue for boys. Many schools have a weekly school wide assembly. Then students assemble in their home room classes for the day's studies. The school day starts with classroom management tasks, such as taking attendance and making announcements. These activities usually are conducted by the students themselves on a rotating duty schedule called to ban. Each homeroom has an average of 40-45 students stay in their homeroom classrooms for most of the school day while the teachers move from room to room, operating out of a central teachers' room. Only for physical education, laboratory classes, or other subjects requiring special facilities do students move to different parts of the school. Between classes and at

lunchtime, classrooms can be noisy, lively places. Some schools may have a cafeteria, but most do not. Even in schools where a lunch is prepared and provided to the students, they usually eat together in their homeroom classrooms. In most schools, students bring a box lunch from home, almost always consisting of foods prepared by the mother in the early morning hours, such as rice, fish, eggs, vegetables, and pickles.

7. Japanese students spend 240 days a year at school, 60 days more than their American counterparts. Although many of those days are spent preparing for annual school festivals and events such as Culture Day, Sports Day, and school excursions, Japanese students still spend considerably more time in class than American students. Traditionally, Japanese students have attended school for half a day on Saturday; however, the number of required Saturdays each month is decreasing as the result of Japanese education reforms. Course selection and textbooks are determined by the Japanese Ministry of Education. Schools have limited autonomy in their curriculum development. Students in academic high schools typically take three years each of the following subjects: mathematics, social studies, Japanese, and English. Other subjects include physical education, music, art, and moral studies. All the students in one grade level study the same subjects. Given the number of required subjects, electives are few.

At the end of the academic day, all students participate in a *soji*, the cleaning of the school. They sweep the classrooms and the hallways, empty trash cans, clean restrooms, clean chalkboards and chalk erasers,

and pick up trash from the school grounds. After 0 soji, school is dismissed and most students disperse to different parts of the school for club meetings.

Extracurricular Activities

8. Club activities take place after school every day. Teachers are assigned as sponsors, but often the students themselves determine the club's daily activities. Students can join only one club, and they rarely change clubs from year to year. In most schools, clubs can be divided into two types: sports clubs (baseball, soccer, juo, kendo, track, tennis, swimming, softball, volleyball, rugby) and culture clubs (English, broadcasting, calligraphy, science, mathematics, yearbook). New students usually are encouraged to select a club shortly after the school year begins in April. Clubs meet for two hours after school each day and many clubs continue to meet during school vacations.- Club activities provide one of the primary opportunities for peer group socialization. Most college bound., students withdraw from club activities during their senior year to devote more time to preparation for university entrance examinations. Although that the fundamental relationships of senpai (senior) and kohai (junior) are established most solidly. It is the responsibility of the senpai to teach, initiate, and take care of the kohai. It is the duty of the kohai to serve and defer to the senpai. For example, kohai students in the tennis club might spend one year chasing tennis balls while the upperclassmen use the from them by observing and modeling their behavior. This fundamental relationship can be seen

throughout Japanese society, in business, politics, and social dealings.

"Cram Schools"

9. An interesting component of Japanese education is the thriving industry of *juku* and *yobiko*, after school "cram schools," where approximately 60% of Japanese high school students go for supplemental lessons. *Juku* may offer lessons in nonacademic subjects such as art, swimming, abacus, and calligraphy, especially for elementary school students, as well as the academic subjects that are important to preparation for entrance examinations at all levels. *Juku* for high school students must compete for enrollment with *yobiko*, which exist solely to prepare students for university entrance examinations. Some "cram schools" specialize in preparing students for the examination of a particular school. Although it would seem natural for students to dread the rigor of additional lessons that extend their school day well into the late evening hours and require additional homework, many students enjoy *juku* and *yobiko*, where teachers often are more animated and more interesting than some of the teachers in their regular schools. Also, in many cases, the lessons studied in "cram schools" provide an intellectual challenge for students bored with the standardized curriculum of their regular schools.²²

Juku and *yobiko* are primarily private, for-profit schools that attract students from a wide geographical area. They often are located near train stations, enabling students to transport themselves easily to *juku*

²² Marcia L. Johnson and Jeffrey R. Johnson. *Daily life in Japanese High School*. October, 1996.

directly from school. Juku and yobiko thrive in Japan, where it is believed that all people possess the same innate intellectual capacity, and it is only the effort of individuals, or lack thereof, that determines their achievement above or below their fellows. In Japanese schools, there is the tendency to pass students with their grade cohort. Therefore, without the supplemental juku lessons, some students could fall well behind their classmates. Yobiko also exist to serve ronin, "masterless samurai," students who have failed an entrance examination, but who want to try again. It is possible for students to spend a year or two as ronin after graduating from high school, studying at yobiko until they can pass a university entrance examination or until they give up. Cram school" tuition is expensive, but most parents are eager to pay in order to ensure acceptance into a selective junior high school, high school, or university, and thus, a good future for their children.

Entrance Examinations

10. In addition to university admission, entrance to high school also is determined by examination, and the subjects tested are Japanese, mathematics, science, social studies and English. Private high schools create their own examinations, while those for public high schools are standardized within each prefecture. Students (and their parents) consider each school's college placement record when deciding which examinations to take. Success or failure on an entrance examination can influence a student's entire future, since the prospect of finding a good job depends on the school attended. Thus, students experience the

pressure of this examination system at a relatively early age. But, practice tests at school and juku help teachers to direct students toward institutions whose examinations they are most likely to pass.

Free Time

11. Japanese students devote approximately two hours per weekday to homework, and about three hours on Sunday. They spend an average of two hours per day watching television, half an hour listening to the radio, an hour reading casually, and less than half an hour in social relations with peers outside of school. Japanese adults tend to perceive high school students in many ways as large children instead of young adults. And, while opposite sexes are interested in each other, parents and teachers strongly discourage teenage dating. Most young people do not begin to date until after high school. Finally, for a variety of reasons, there are few drug problems among Japanese adolescents.

Japanese Education

It is important for teachers and students to develop a broad understanding of Japanese education. Americans who are knowledgeable of teaching and learning in Japan gain insights about a different culture and are better able to clearly think about their own educational system. This Digest is an introductory overview of 1) Japanese educational achievements, 2) Japanese K-12 education, 3) Japanese higher education, 4) contemporary educational issues, and 5)

significant U.S.-Japan comparative education topics.²³

Japanese Educational Achievements.

Japan's greatest educational achievement is the high quality basic education most young people receive by the time they complete high school. Although scores have slightly declined in recent years, Japanese students consistently rank among world leaders in international mathematics tests.

Recent statistics indicate that well over 95 percent of Japanese are literate, which is particularly impressive since the Japanese language is one of the world's most difficult languages to read and write. Currently over 95 percent of Japanese high school students graduate compared to 89 percent of American students. Some Japanese education specialists estimate that the average Japanese high school graduate has attained about the same level of education as the average American after two years of college. Comparable percentages of Japanese and American high school graduates now go on to some type of post-secondary institution.

Japanese K-12 Education.

Even though the Japanese adopted the American 6-3-3 models during the U.S. Occupation after World War II, elementary and secondary education is more centralized than in the United States. Control over curriculum rests largely with the national Ministry of Education,

²³ Japanese Education Lucien Ellington p.1

Culture, Sports, Science and Technology (Monbukagakusho) and education is compulsory through the ninth grade. Municipalities and private sources fund kindergartens, but national, prefectural, and local governments pay almost equal shares of kindergartens, but national, prefecture, and local governments pay almost equal shares of educational costs for students in grades one through nine. Almost 90 percent of students attend public schools through the ninth grade, but over 29 percent of students go to private high schools. The percentage of national funding for high schools is quite low, with prefectures and municipalities assuming most of the costs for public high schools. High salaries, relatively high prestige, and low birthrates make teaching jobs quite difficult to obtain in Japan while in the United States there are teacher shortages in certain fields. Although more Japanese schools are acquiring specialists such as special education teachers and counselors, American schools have many more special subjects and support personnel than is the case in Japan. Japanese schools have only two or three administrators, one of whom has some teaching responsibilities.²⁴ Japanese students spend at least six weeks longer in school each year than their American counterparts although Japan's school year was recently shortened when all required half-day Saturday public school attendance ended in 2002.

While the Japanese k-12 curriculum is actually quite similar in many respects to the curriculum of U.S. schools, three are important

²⁴ <http://www.gov/pubs/Research/Today>.

differences. Because Japanese teachers at all levels are better prepared in mathematics than their American counterparts, instruction in that subject is more sophisticated in Japan. Japanese language instruction receives more attention in Japanese school than English instruction in the United States because of the difficulty of learning written Japanese. Virtually every Japanese student takes English language courses from the seventh grade through the final year of high school.

Since many Japan Digest readers are social studies teachers, a few words about those subjects are included here. First-and second -grade students study social studies in an integrated science/social studies course. In grades 3-12, there are separate civics, geography, Japanese and world history, sociology, and politics-economics courses. University-bound students may elect to take more or less social studies electives depending upon their career interests.

All Japanese texts are written and produced in the private sector; however, the texts must be approved by the Ministry of Education. Textbook content, length, based upon the national curriculum, while most American texts tend to cover a wider array of topics. Japanese textbooks typically contain about half the pages of their American counterparts. Consequently, unlike many American teachers, almost all Japanese teachers finish their textbooks in an academic year.

The Japanese believe schools should teach not only academic skills but good character traits as well. While a small amount of hours every year is

devoted to moral education in the national curriculum, there is substantial anecdotal evidence that teachers do not take the instructional time too seriously and often use it for other purposes. Still, Japanese teachers endeavor to inculcate good character traits in students through the hidden curriculum.²⁵

12. For example, all Japanese students and teachers clean school building every week. Japanese students are constantly exhorted by teachers to practice widely admired societal traits such as putting forth intense effort on any task and responding to greetings from teachers in a lively manner. Many American public high schools are comprehensive. While there are a few comprehensive high schools in Japan, they are not popular. Between 75 and 80 percent of all Japanese students enroll in university preparation tracks. Most university-bound students attend separate academic high schools while students who definitely do not plan on higher education attend separate commercial or industrial high schools. In the United States, students enter secondary schools based on either schools district assignment or personal choice.

13. In Japan almost all students are admitted to high school based upon entrance examination performance. Since entering a high-ranked high school increase a student's chance of university admission or of obtaining a good job after high school graduation, over half of Japanese junior high students attend private cram schools, or *juku*, to supplement their examination preparations. Until recently examination performance was the major criterion for university entrance as well. However many

²⁵ Japan Digest. 2005

private colleges and universities have replaced entrance examinations scores, increasing numbers of college-bound students do not spend enormous amounts of hours studying for university examinations as was the case until just a few years ago.²⁶

Japanese Higher Education.

14. Japan, with almost three million men and women enrolled in over 700 universities and four-year colleges, has the second largest higher educational system in the developed world. In Japan, public universities usually enjoy more prestige than their private counterparts and only about 27 percent of all university-bound students manage to gain admission to public universities. Even so, Japanese universities are considered to be the weakest component in the nation's educational system. Many Japanese students have traditionally considered their university time to be more social than academic and, usually, professors demand relatively little of their charges. Until recently, graduate education in Japan was underdeveloped compared to Europe and the United States. However in response to increased demands for graduate education because of globalization, Japanese graduate enrollments have increased by approximately one third since the mid -1990s.²⁷

The Importance of Motivation

The Japan Study indicates one possible explanation for Japan's success in TIMSS: the Japanese education system actively builds students'

²⁶ Wray, Harry, Japanese and American Education: Attitude and practice.

²⁷ Luciant Ellington, Japan Education updated September 2005.

motivation to learn. Each section of the Japan Study offers vivid examples of how the system works to motivate Japanese students. The Japan Study's four sections concern (1) academic, (2) individual student differences, (3) adolescent life, and (4) teacher life.

National Standards Define a Well-Rounded Education

Many educators are focusing on the role of curriculum standards in education systems, and some observers believe that Japan's challenging national math and science standards explain students' success in TIMSS. The standards set by the Japanese Educational Ministry for all students do indeed provide the framework for offering students challenging and interesting curricula in mathematics and science. Interesting material certainly makes a difference for attracting students' attention to learning. There is more, however, to the story of Japanese students' success.²⁸

15. The Japanese Education Ministry highlights creating well-rounded students at the elementary and junior high school level through the various subject areas in the national curriculum. They set standard hours per subject in the national elementary school curriculum, emphasizing subjects such as music, arts and handicrafts, and homemaking, physical education, and moral education, as well as math and science. The standards also devote a large amount of time Japanese language and life activities, a subject that gives younger students personal life experiences ill preparation for classroom-oriented science. In life activities class,

²⁸ The Japanese Education System: A case study Summary and Analysis.

students participate in activities such as picking flowers, catching frogs and insects, raising rabbits, and watching falling stars.

16. The Japan Study suggests that Japanese schools' focusing on all of the subjects in a well-rounded education serves several purposes:

Student Engagement: The elementary school curriculum recognizes the importance of activities, because young children cannot sit still for such long days. The junior high school curriculum recognizes the value of fun and interaction by allowing time for socialization and special nonacademic activities, such as camping trips.

Strong Classroom

Relationship: The well-rounded curriculum allows students frequent and varied opportunities to interact, creating a welcome classroom community.

Student Motivation: When students find subjects they enjoy and feel welcome at school, they identify positively with school and feel motivated to learn.

Whole-Class Instruction Attends to Individual Differences

17. In Japanese whole-class instruction, students of all ability levels cover one subject at the same pace interactively in one classroom. For

example, instead of strictly lecturing, math teachers ask individual students to stand up to present their solutions to the class, and then ask members of the class to evaluate each solution. Whole-class instruction is used in the majority of Japanese elementary school and junior high school classrooms.²⁹

Whole-class instruction seems to play a large role in the Japanese students' academic success. This is contrary to a popular belief that Japanese schools cram their top students with intensive math and science drills from an early age to produce high achievement. Only later in junior high do tracking and drilling for high school entrance examinations begin. Japanese whole-class instruction seems to offer greater motivational support than tracking and drilling by:

- Emphasizing Effort Over Ability
- Engaging Students
- Building Strong Classroom Relationships
- Unifying the Classroom

known I Relationships- instruction While students unifies

Emphasizing Effort Over Ability-A Japanese teacher explains, "As fares inborn ability goes, I can't say that it	Engaging Students- It has long been known that presenting math in terms of concepts rather than calculations	Building Strong Classroom Relationships- While students look to teachers for comprehension and evaluation in American classrooms, students look to each	Unifying the Classroom- Whole class instruction unifies classrooms because students
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²⁹ w.w.w. ed. gov. Research Today.

<p>isn't there, but I say that it doesn't matter. Regardless of whether you have ability, if you persevere you can get a good outcome. To prevent the slower students from being discouraged, Japanese classrooms work on the same problem together, making sure everyone catches up to the class, pace. Teachers let Students choose their own partners when completing seatwork to avoid labeling students as fast or slow learners.</p>	<p>engages students. In whole class instruction, Japanese teachers go beyond simple conceptual learning by purposely withholding the correct answer to a problem, asking the class to think of as many ways to solve the problem as possible. Presenting material as a sort of puzzle sparks their curiosity in the subject matter and encourages them to participate.</p>	<p>other in Japanese whole-class instruction classrooms. The teacher asks the class to evaluate individual students, solutions to math problems. When given seatwork, those who understand usually offer to help those who do not. While some may complain that whole-class instruction brings advanced students down to the below-average level, it allows these students to learn how to cooperate with people of diverse abilities and backgrounds. Learning how to interact with others is so important to the Japanese that they consider it a form of studying. The Japanese classroom's competitive but cooperative atmosphere serves to motivate all students to learn from their classmates.</p>	<p>work on the same material together at the same pace. This common sense of purpose is reinforced by classroom mottos such as if there is a good thing to do, all of us will do it together. Individual students feel motivated to learn when they identify with class goals.</p>
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Motivating Students-When students feel that they are given a chance to achieve as long as they work hard, the subject matter is interesting, the classroom environment is encouraging, and the class is working together toward the same goal, they identify positively with school values and are motivated to learn.

Adolescents' After-school Activities Support Educational Goals

Do Japanese students do better because they spend more time on homework? According to TIMSS study findings, Japanese and U.S. eighth-grade students on average spend the same amount of time-between 30 minutes to an hour-studying math and science homework each day. Japanese adolescents do not spend more time than U.S. adolescents on homework, but the structure of their daily routines provides more consistent support for educational experiences. Japanese students' participation in other after-school activities may encourage their in-school striving and high academic performance:

School Clubs

18. The Japan study authors report that at both junior high and high school, teachers believe that there is a strong link between participation in clubs and success in academics. Over half of all Japanese junior high students spent 2 to 3 hours per day after school and on weekends in student-organized school clubs, such as broadcasting, Japanese fencing, or brass band. Teachers and parents see club participation as academically motivational because it makes for a more well rounded

school experience. They emphasize the clubs' role of providing opportunities for physical activity and socialization within a school setting.³⁰

Juku: Supplementary Classes

Some adolescents choose to spend after-school time at juku, privately owned academies that provide supplementary classes for students who pay a fee. Juku offers challenging and remedial courses for students who feel that the public schools do not offer enough. Both those who are bored with the slow pace of regular whole class instruction is too fast can pay for juku classes targeted at improving individual academic ability. Many adolescents spend after-school time in juku to prepare for entrance exams. Students enrolled in juku may also choose to take enrichment courses, such as piano lessons that will round out their individual abilities in nonacademic areas.³¹

Friendships Formed in School Clubs

While parents send their children to juku to develop individual ability in various areas, many junior high students claim that they attend juku primarily to socialize. Clubs also provide ample opportunity for social interaction. Clubs and juku channel the social experiences of Japanese adolescents toward educational goals. By contrast, in America, friendships form through commonalities unrelated to school. The goals of peer interaction in America are often so polarized from the school's goal of learning that, according to one teacher, some kids don't want to

³⁰ Research to day. U.S. Department of Education office of Educational Research and improvement. January 1999

³¹ *ibid*

show that they're bright because their peers will look down on them. Japanese adolescent friendships made in clubs or juku are most often based on school values. For example, many Japanese adolescents see academic competition as contributing toward friendships because it reflects a shared value in achievement: Rather than trying to do better by undermining others, the students... participate in a culture of mutual striving, or a mutual spirit of competition and cooperation. Students preparing for entrance exams do not see themselves competing directly with their friends, but rather competing indirectly with a large pool of applicants. When Japanese students play down potential antagonisms with friends by shring school values, they maintain the internal harmony of the school and motivate each other to learn.

Teachers Support of Collegial Interactions Cultivates a positive Learning Environment.

The Japanese school system does not use an authoritarian, top-down system of school management that emphasizes obedience of students to teachers and of teachers to administrators. Japanese schools actually employ a much more collegial system than most American schools, a system that cultivates an atmosphere of high -quality instruction and learning.

Collegial Student Interaction

19. Japanese teachers do not exercise stem authoritative control over their classrooms. As mentioned earlier, Japanese elementary school whole-class instruction encourages students to respond to each other's learning, emphasizing that the teacher's way is not the only way to solve a problem. In addition, instead of placing blame on a particular student for discipline problems, teachers let students discuss and resolve classroom conflicts on their own. At the high school level, teachers encourage collegial management by having students run their own clubs.

Collegial Teacher Interaction

Japanese teachers collaborate in a school management system as collegial as the students' classroom interaction. Teachers display a strong desire to improve themselves by learning from each other through frequent interaction. They chat about how to align their curriculum and how to improve their teaching techniques. Sometimes teachers sit in on other teachers' classes to learn from observation. This interaction is especially helpful for first-time teachers, who learn from the expertise of their colleagues.

Formal decision-making takes place in a wide variety of committees of teachers, administrators, and students. According to the Japan Study, this complex organizational structure forces participation of all teachers in school management that provides for the distribution of power and shared decision making.

Collegial Interactions Among Students and Teachers Motivate Student Learning:

1. When students are expected to cooperate with each other to learn, they are less likely to become discouraged because their peers are not viewed as competing adversaries, but as encouraging friends.
 2. When students are given some measure of autonomy, they feel that their ideas are respected, and they become more confident about their ability to learn.
 3. When students are given the chance to make school policies and to teach their peers, they are more likely to want to participate in school and classroom affairs.
 4. When higher authority refrains from forcing policies and lessons on students, the students are more receptive to these policies and lessons.
 5. Collegial relations among teachers motivate them to teach well, much in the same way students are motivated to learn. Motivated teachers not only provide better quality lessons, but also are more willing to encourage their students.
 6. When teachers coordinate their lesson plans and techniques with other teachers, they become more effective in reaching out especially to problem students.
 7. Motivated teachers who cooperate collegially are role models who inspire their students.
20. The Japan Study suggests that part of the explanation for Japanese students' success in TIMSS is that the Japanese education structure

helps build student motivation. Japanese national standards motivate students to learn through a wellrounded curriculum that engages students and builds strong classroom relationships. Whole-class instruction helps Japanese schools motivate their students by emphasizing effort over ability, engaging students, building strong classroom relationships, and unifying students effort over ability, engaging students, building strong classroom relationships, and unifying students under a common goal. Because Japanese adolescents participate in school-related activities such as school clubs or supplementary juku classes after school, they develop an attachment to school values, especially through the school-based friendships strengthened through these activities. Collegial management of student and teacher interactions in Japanese schools creates a positive environment that builds student motivation. While some Japanese students still have motivation problems, the Japanese recognize that the remedy to these problems lies in expanding upon motivation-building principles.

CHAPTER- FOUR

The Japanese Economic Development

1. The Japanese economy entered the 1990s in excellent shape. Japan had the world's second largest gross national product throughout the 1970s and ranked first among major industrial nations in 1989 in per capita GNP, at US \$ 23, 616, up sharply from US\$ 8, 900 in 1980. After a mild economic slump in the mid-1980s, Japan's economy began a period of expansion in 1986 that was continuing in 1990. Economic growth averaging 5 percent between 1987 and 1989 revived industries, such as steel and construction, which had been relatively dormant in the mid-1980s and brought record salaries and employment. Unlike the economic booms of the 1960s and 1970s, however, when increasing exports played the key role in economic expansion, domestic demand propelled the Japanese economy in the late 1980s. This development involved fundamental economic restructuring, from export dependence to reliance on domestic demand. The boom that started in 1986 was generated by the decisions of companies to increase private plant and equipment spending and of consumers to go on a buying spree. Japan's imports grew at a faster rate than exports.³²
2. During the 1980s, the Japanese economy shifted its emphasis away from primary and secondary activities to processing, with telecommunications and computers becoming increasingly vital. Information became an important resource and product, central to wealth and power. The rise of an information-based economy was

led by major research in highly sophisticated technology, such as advanced computers. The selling and use of information became very beneficial to the economy. Tokyo became a major financial center, home of some of the world's major banks, financial firms, insurance companies, and the world's largest stock exchange.

3. A national effort in the 1980s involved both government and business in increasing Japan's influence in the area of high technology. One important development area was industrial automation. Automotive producers, such as Toyota and Nissan, relied increasingly on robotics in their factories. Japan planned a much-touted Fifth Generation artificial intelligence computer project, boasted a new but active space program, and designated new towns as research centers and production hubs for new technologies. In the area of semiconductors, by 1989 Japan was out producing the United States, which had enjoyed a nearly two-to-one lead in world market share in the mid-1980s. Japan became a world leader in technological research and production.³³

4. Japanese postwar technological research was carried out for the sake of economic growth rather than military development. The growth in high-technology industries in the 1980s resulted from heightened domestic demand for high technology products and for higher living, housing, and environmental standards, better health, medical, and welfare opportunities, better leisure-time facilities, and improved ways to accommodate a rapidly aging society.

³² Japan : A country study: p-197.

³³ Japan : A country study: p-198.

5. The development of a postindustrial economy did not mean the end of Japan's importance as a major manufacturing center. Traditional industries, such as iron and steel, automobiles, and construction, experienced strong growth in the late 1980s, and there was every indication that these industries would continue to grow in the 1990s. Only the primary sector (agriculture, forestry, and fishing) and mining showed signs of decline in the 1990s.

Patterns of Development : Revolutionary Change

6. Since the mid-nineteenth century, when the Tokugawa government first opened the country to Western commerce and influence, Japan has gone through two periods of economic development.³⁴ The first began in 1854 and extended through World War II; the second began in 1945 and continued into the early 1990s. In both periods, the Japanese opened themselves to Western ideas and influence; experienced revolutionary social, political, and economic changes; and became a world power with carefully developed spheres of influence. During both periods, the Japanese government encouraged economic change by fostering a national revolution from above, planning and advising in every aspect of society. The national goal each time was to make Japan so powerful and wealthy that its independence would never again be threatened.

7. In the Meiji period (1868-1912), leaders inaugurated a new Western-based education system for all young people, sent thousands of students to the United States and Europe, and hired more than 3,000 Westerners to teach modern science, mathematics, technology, and

³⁴ The emergence of Modern Japan, 1868-1919 and world War II and the Occupation, 1941-52, Ch. 1

foreign languages in Japan. The government also built railroads, improved roads, and inaugurated a land reform program to prepare the country for further development.³⁵

8. To promote industrialization, government decided that, while it should help private business to allocate resources and to plan, the private sector was best equipped to stimulate economic growth. The greatest role of government was to help provide the economic conditions in which business could flourish. In short, government was to be the guide, and business the producer. In the early Meiji period, the government built factories and shipyards that were sold to entrepreneurs at a fraction of their value. Many of these businesses grew rapidly into the larger conglomerates that still dominated much of the business world in the early 1990s. Government emerged as chief promoter of private enterprise, enacting a series of profuseness policies, including low corporate taxes.

9. Before World War II, Japan built an extensive empire that included Taiwan, Korea, Manchuria, and parts of northern China. The Japanese regarded this sphere of influence as a political and economic necessity, preventing foreign states from strangling Japan by blocking its access to raw materials and crucial sea-lanes. Japan's large military force was regarded as essential to the empire's defense. The colonies were lost as a result of World War II, but since then the Japanese have extended their economic influence throughout Asia and beyond. Japan's Constitution, promulgated in 1947, forbids an offensive military force, but Japan still maintained

³⁵ Historical background Ch. 3

its formidable Self-Defense Force (SDF) and ranked third in the world in military spending behind the United States and the Soviet Union in the late 1980s.³⁶

10. Rapid growth and structural change have characterized Japan's two periods of economic development since 1886. In the first period, the economy grew only moderately at first and relied heavily on traditional agriculture to finance modern industrial infrastructure. By the time the Russo- Japanese War (1904-5) began, 65 percent of employment and 38 percent of gross domestic product was still based on agriculture, but modern industry had begun to expand substantially. By the late 1920s, manufacturing and mining contributed 23 percent of GDP, compared to 21 percent for all of agriculture. Transportation and communications developed to sustain heavy industrial development.
11. In the 1930s, the Japanese economy suffered less from the Great Depression than other industrialized nations, expanding at the rapid rate of 5 percent GDP of per year, while manufacturing and mining came to account more than 30 percent of GDP, more than twice the value for the agriculture sector. Most industrial growth, however, was geared toward expanding the nation's military power.
12. World War II wiped out many of Japan's gains since 1868. About 40 percent of the nation's industrial plants and infrastructure was destroyed, and production reverted to levels of about fifteen years earlier. The people were shocked by the devastation and swung into

³⁶ The post war constitution Ch. 6

action. New factories were equipped with the best modern machines, giving Japan an initial competitive advantage over the victor states, who now had older factories. As Japan's second period of economic development began, millions of former soldiers joined a well disciplined and highly educated work force to rebuild Japan.

13. Japan's highly acclaimed postwar education system contributed strongly to the modernizing process. The world's highest literacy rate and high education standards were major reasons for Japan's success in achieving a technologically advanced economy. Japanese schools also encouraged discipline, another benefit in forming an effective work force.³⁷
14. The early postwar years were devoted to rebuilding lost industrial capacity: major investments were made in electric power, coal, iron and steel, and chemical fertilizers. By the mid-1950s, production matched prewar levels. Released from the demands of military dominated government, the economy not only recovered its lost momentum, but also surpassed the growth rates of earlier periods. Between 1953 and 1965, GDP expanded by over 9 percent per year, manufacturing and mining by 13 percent, construction by 11 percent, and infrastructure by 12 percent. In 1965 these sectors employed over 41 percent of the labor force while only 26 percent remained in agriculture.

³⁷ Japan : A country study; p-200.

15. The mid -1960s ushered in a new type of industrial development as the economy opened itself to international competition in some industries and developed heavy and chemical manufactures. Whereas textiles and light manufactures maintained their profitability internationally, other products, such as automobiles, ships, and machine tools, assumed new importance. Manufacturing and mining value-added grew at the rate of 17 percent per year between 1965 and 1970. Growth rates moderated to about 8 percent and evened out between the industrial and service sectors between 1970 and 1973, as retail trade, finance, real estate, information, and other service industries streamlined their operations.³⁸
16. Japan faced severe economic challenge in the mid 1970s. The world oil crisis in 1973 shocked an economy that had become virtually dependent on foreign petroleum. Japan experienced its first postwar decline in industrial production together with severe price inflation. The recovery that production together with severe price inflation. The recovery that followed the first oil crisis revived the optimism of most business leaders, but the maintenance of industrial growth in the face of high energy cost required shifts in the industrial structure.
17. Changing price conditions favored conservation and alternative sources of industrial energy. Although the investment cost were high, many energy-intensive industries successfully reduced their dependence on oil during the late 1970s and 1980s and enhanced their productivity. Advances in micro circuitry and semiconductors in the late 1970s and 1980s also led to new growth industries in

³⁸ The value of the yen Ch. 5.

consumer electronics and computers and to higher productivity in already established industries. The net result of these adjustments was to increase the energy efficiency of manufacturing and to expand so-called knowledge-intensive industry. The service industries expanded in an increasingly postindustrial economy.

18. Structural economic changes, however, were unable to check the slowing of economic growth, as the economy matured in the late 1970s and 1980s, attaining annual growth rates no better than 4 to 6 percent. But, these rates were remarkable in a world of expensive petroleum and in a nation of few domestic resources. Japan's average growth rate of 5 percent in the late 1980s, for example, was far higher than the 3.8 percent growth rate of the United States.
19. Despite more petroleum price increases in 1979, the strength of the Japanese economy was apparent. It expanded without the double-digit inflation that affected other industrial nations and that had bothered Japan itself after the first oil crisis in 1973. Japan experienced slower growth in the mid-1980s, but its demand sustained economic boom of the late 1980s revived many troubled industries.
20. Complex economic and industrial factors affected Japan's postwar growth. First, the nation's prewar experience provided several important legacies. The Tokugawa period (1600-1867) bequeathed a vital commercial sector in burgeoning urban centers, a relatively well-educated elite (although one with limited knowledge of European science), a sophisticated government bureaucracy, productive agriculture, a closely unified nation with highly

developed financial and marketing systems, and a national infrastructure of roads. The build up of industry during the Meiji period to the point where Japan could vie for world power was an important prelude to postwar growth and provided a pool of experienced labor following World War II.³⁹

21. Second, and more important, was the level and quality of investment that persisted through the 1980s. Investment in capital equipment, which averaged more than 11 percent of GNP during the prewar period, rose to some 20 percent of GNP during 1950s and to more than 30 percent in the late 1960s and 1970s. During the economic boom of the late 1980s, the rate still kept to around 20 percent. Japanese businesses imported the latest technologies to develop the industrial base. As a latecomer to modernization, Japan was able to avoid some of the trial and error earlier needed by other nations to develop industrial processes. In the 1970s and 1980s, Japan improved its industrial base through technology licensing, patent purchases, and the imitation and improvement of foreign inventions. In the 1980s, industry stepped up its research and development, and many firms became famous for their innovations and creativity.
22. Japan's labor force contributed importantly to economic growth, not only because of its availability and literacy, but also because of its reasonable wage demands. Before and immediately after World War II, the transfer of numerous agricultural workers to modern industry resulted in rising productivity and only moderate wage increases. As population growth slowed and the nation became increasingly industrialized in the mid-1960s, wages rose significantly. But labor

³⁹ Japan : A country study: p-201

union cooperation generally kept salary increases within the range of productivity gains.

23. High productivity growth played a key role in postwar economic growth. The highly skilled and educated labor force, extraordinary savings rates and accompanying levels of investment, and the low growth of Japan's labor force were major factors in the high rate of productivity growth.
24. The nation has also benefited from economies of scale. Although medium-sized and small enterprises generated much of the nation's employment, large facilities were most productive. Many industrial enterprises consolidated to form larger and more efficient units. Before World War II, large holding companies formed wealth groups, or zaibatsu, which dominated most industry. The zaibatsu were dissolved after the war, but keiretsu-large and modern industrial enterprise groupings-emerged. The coordination of activities within these groupings and the integration of smaller subcontractors into the groups enhanced industrial efficiency.
25. Japanese corporations developed strategies that contributed to their immense growth. Growth-oriented corporations that took chances competed successfully. Product diversification became an essential ingredient of the growth patterns of many keiretsu. Japanese companies added plant and human capacity ahead of demand. Seeking market share rather than quick profit was another powerful strategy.
26. Finally, circumstances beyond Japan's direct control contributed to its success. International conflicts tended to stimulate the Japanese economy until the devastation at the end of World War II. The

Russo-Japanese War (1904-5), World War (1914-18), the Korean War (1950-53), and the second Indochina War (1954-75) brought economic booms to Japan. In addition, benign treatment from the United States after World War II facilitated the nation's reconstruction and growth. The United States occupation of Japan (1945-52) resulted in the rebuilding of the nation and the creation of a democratic state. United States assistance totaled about US \$ 1.9 billion during the occupation, or about 15 percent of the nation's imports and 4 percent of GNP in that period. About 59 percent of this aid was in the form of food; 15 percent in industrial materials, and 12 percent in transportation equipment. United States grant assistance, however, tapered off quickly in the mid-1950s. United States military procurement from Japan peaked at level equivalent to 7 percent of Japan's GNP in 1953 and fell below 1 percent after 1960. A variety of United States-sponsored measures during the occupation, such as land reform, contributed to the economy's later performance by increasing competition. In particular, the postwar purge of industrial leaders allowed new talent to rise in the management of the nation's rebuilt industries. Finally, the economy benefited from foreign trade, as it was able to expand exports rapidly enough to pay for imports of equipment and technology without falling into debt as have a number of developing nations in the 1980s.

27. The consequences of Japan's economic growth were not always positive. Large advanced corporations existed side by-side with the smaller and technologically less-developed firms, creating a kind of economic dualism in the late twentieth century. Often the smaller firms, which employed more than two-thirds of Japan's workers, worked as subcontractors directly for larger firms, supplying a

narrow range of parts and temporary workers. Excellent working conditions, salaries, and benefits, such as permanent employment, were provided by most large firms, but not by the smaller firms. Temporary workers, mostly women, received much smaller salaries and had less job security than permanent workers. Thus, despite the high living standards of many workers in larger firms, Japan in 1990 remained in general a low-wage country whose economic growth was fueled by highly skilled and educated workers who accepted poor salaries, often-unsafe working conditions, and poor living standards.

28. Additionally, Japan's preoccupation with boosting the rate of industrial growth during the 1950s and 1960s led to the relative neglect of consumer services and also to the worsening of industrial pollution. Housing and urban services, such as water and sewage systems, and social security benefits, lagged behind the development of industry, and despite considerable improvement in the 1970s and 1980s, still lagged well behind other industrialized nations at the end of the 1980s. Agricultural subsidies and a complex and outmoded distribution system also kept the prices of some essential consumer goods very high by world standards. Industrial growth came at the expense of the environment. Foul air, heavily polluted water, and waste disposal became critical political issues in the 1970s and again in the late 1980s.

The Evolving Occupational Structure

29. As late as 1955, some 40 percent of the labor force still worked in agriculture, but this figure had declined to 17 percent by 1970 and to 8.3 percent by 1988. The government estimated in the late 1980s that

this figure would decline to 4.9 percent by 2000, as Japan imported more and more of its food and small family farms disappeared.⁴⁰

30. Japan's economic growth in the 1960s and 1970s was based on the rapid expansion of heavy manufacturing in such areas as automobiles, steel, ship building, chemicals, and electronics. The secondary sector (manufacturing, construction, and mining) expanded to 35.6 percent of the work force by 1970s. By the late 1970s, however, the Japanese economy began to move away from heavy manufacturing toward a more service-oriented (tertiary sector) base. During the 1980s, jobs in wholesaling, retailing, finance and insurance, real estate, transportation, communications, and government grew rapidly, while secondary sector employment remained stable. The tertiary sector grew from 47 percent of the work force in 1970s to 58 percent in 1987 and was expected to grow to 62 percent by 2000, when the secondary sector will probably employ 33 percent of Japan's workers.

Industrial policy

31. *After World War II and especially in the 1950s*

and 1960s, the Japanese government devised a complicated system of policies to promote industrial development and cooperated closely for this purpose with private firms. The objective of industrial policy was to shift resources to specific industries, to gain international competitive advantage for Japan. These policies and methods were

⁴⁰ Japan : A country study: p-204.

used primarily to increase the productivity of inputs and to influence, directly or indirectly, industrial investment.⁴¹

32. Administrative guidance was a principal instrument of enforcement used extensively throughout the Japanese government to support a heavy electrical equipment, and chemicals. Later they added the automobile industry, petrochemicals, and nuclear power, and in the 1980s, such industry, as computers and semiconductors. Since the late 1970s, the government strongly encouraged the development of knowledge-intensive industries. Government support for research and development grew rapidly in the 1980s, and large joint government industry development projects in computers and robotics were started. At the same time, government promoted the managed decline of competitively troubled industries, including textiles, shipbuilding, and chemical fertilizers, through such measures as tax breaks for corporations that retrained workers to work at other tasks.
33. Mechanisms used by the Japanese government to affect the economy typically related to trade, labor markets, competition, and tax incentives. They included a broad range of trade protection measures, subsidies, de jure and de facto exemptions from antitrust statutes, labor market adjustments, and industry specific assistance to enhance the use of new technology. Rather than producing a broad range of goods, the Japanese selected a few areas in which they could develop high quality goods that they could produce in

⁴¹ Foreign Trade Policies Ch.5.

vast quantities at competitive prices. A good example is the camera industry, which since the 1980s has been dominated by Japan.

34. Historically, there have been three main elements in Japanese industrial development. The first was the development of a highly competitive manufacturing sector. The second was the deliberate restructuring of industry toward higher value-added, high-productivity industries. In the late 1980s, these were mainly knowledge domestic and International business-strategies.⁴²
35. Japan has few natural resources and depends on massive imports of raw materials. It must export to pay for its imports, and manufacturing and the sales of its services, such as banking and finance, were its principal means of doing so. For these reasons, the careful development of the producing sector was a key concern of both government and industry throughout most of the twentieth century. 'Government and business leaders generally agreed that the composition of Japan's output must continually shift if living standards were to rise. Government played an active role in making these shifts, often anticipating economic developments rather than reacting to them.
36. After World War II, the initial industries that policy makers and the general public felt Japan should have were iron and steel, shipbuilding, the merchant marine, machine industries in general heavy electrical equipment, and chemicals. Later they added the automobile industry, petrochemicals, and nuclear-power, and in the

⁴² Japan : A country study: p-207.

1980s, such industry, as computers and semiconductors. Since the late 1970s, the government has strongly encouraged the development of knowledge-intensive industries. Government support for research and development grew rapidly in the 1980s, and large joint government industry development projects in computers and robotics were started. At the same time, government promoted the managed decline of competitively troubled industries, including textiles, shipbuilding, and chemical fertilizers, through such measures as tax breaks for corporations that retrained workers to work at other tasks.

37. Although industrial policy remained important in Japan in the 1970s and 1980s, thinking began to change. Government seemed to intervene less and become more respectful of price mechanisms in guiding future development. During this period, trade and direct foreign investment were liberalized; tariff and non-tariff trade barriers were lowered, and the economies of the advanced nations became more integrated, with the growth of international trade and international corporations. In the late 1980s, knowledge-intensive and high technology industries became prominent. The government showed little inclination to promote such booming parts of the economy as fashion design, advertising, and management consulting. The question at the end of the 1980s was whether the government would become involved in such new developments or whether it would let them progress on their own.

Monetary and Fiscal Policy

38. Monetary policy pertained to the regulation, availability, and cost of credit, -while fiscal policy dealt with government expenditures, taxes, and debt. Through management of these areas, the Ministry of Finance regulated the allocation of resources in the economy, affected the distribution of income and wealth among the citizenry, stabilized the level of economic activities, and promoted economic growth and welfare.⁴³
39. The Ministry of Finance played an important role in Japan's postwar economic growth. It advocated a "growth first" approach, with a high proportion of government spending going to capital accumulation, and minimum government spending overall, which kept both taxes and deficit spending down, making more money available for private investment. Most Japanese put money into savings accounts.
40. In the postwar period, the government's fiscal policy centered on the formulation of the national budget, which was the responsibility of the Ministry of Finance. The Ministry's Budget Bureau prepared expenditure budgets for each fiscal year based on the requests from government ministries and affiliated agencies. The ministry's Tax Bureau was responsible for adjusting the tax schedules and estimating revenues. The ministry also issued government bonds, controlled government borrowing, and administered the Fiscal Investment and Loan Program, which is sometimes referred to as the "second budget."

⁴³ Japan : A country study: p-209.

41. Three types of budgets were prepared for review of the national Diet each year.⁴⁴ The general account meant operations. Special account budgets, of which there were about forty, were designed for special programs or institutions where close accounting of revenues and expenditures was essential: for public enterprises, state pension funds, and public works projects financed from special taxes. Finally, there were the budgets for the major public enterprises, including public service corporations, loan and finance institutions, and the special public banks. Although these budgets were usually approved before the start of each fiscal year, they were usually revised with supplemental budgets in the fall. Local jurisdiction budgets depended heavily on transfers from the central government.

42 Government fixed investments in infrastructure and loans to public and private enterprises were about percent of GNP. Loans from the Fiscal Investment and Loan Program, which were outside the general budget and funded primarily from postal savings, represented more than 20 percent of the general account budget, but their total effect on economic investment was not completely accounted for in the national income statistics. Taxes, representing 14 percent of GNP in 1987, were low compared to those in other developed economies. Taxes provided 87.8 percent of revenues in 1990. Income taxes were graduated and progressive. The principal structural feature of the tax system was the tremendous elasticity of the individual income tax. Because inheritance and property taxes were low, there was a slowly increasing concentration of wealth in the upper tax brackets. In 1989, the government introduced a major tax reform, including a 3 percent

⁴⁴ The legislature. Ch. 6

consumption tax.

The Financial System

43. In the mid-1980s, while the United States was becoming a debtor nation, Japan became the world's largest creditor and Tokyo a major international financial center. Four of the biggest banks in the world were Japanese at that time and Japan had the world's largest insurance company, advertising firm, and stock market. In the remainder of the 1980s, Japan's financial and banking industries grew at unprecedented rates.

The main elements of Japan's financial system were much the same as those of other major industrialized nations: a commercial banking system, which accepted deposits, extended loans to businesses, and dealt in foreign exchange; -specialized government owned financial Institutions, which funded various sectors of the domestic economy; securities companies, which provided brokerage services, underwrote corporate and government securities, and dealt in securities markets; capital markets, which offered the means to financial public and private debt and to sell residual corporate ownership; and money markets, which offered banks a source of liquidity and provided the Bank of Japan with a tool to implement monetary policy.⁴⁵

Japan's traditional banking system was segmented into clearly defined components in the late 1980s: commercial banks (thirteen major and sixty-four smaller regional banks), long-term credit banks

⁴⁵ Japan : A country study: p-209.

(seven), trust banks (seven), mutual loan and savings banks (sixty nine), and various specialized financial institutions. During the 1980s, a rapidly growing group of non bank operations, such as consumer loan, credit card, leasing, and real estate organizations began performing some of the traditional functions of banks, such as the issuing of loans.

44. In the early postwar financial system, city banks provided short-term loans to major domestic corporations while regional banks took deposits and extended loans to medium-sized and small businesses. Neither engaged much in international business. In the 1950s and 1960s, a specialized bank, the Bank of Tokyo, took care of most of the government's foreign exchange needs and functioned as the nation's foreign banking representative. Long-term credit banks were intended to complement rather than to compete with the commercial banks. Authorized to issue debentures rather than take ordinary deposits, they specialized in long-term lending to major *kaisha*, or corporations. Trust banks were authorized to conduct retail and trust banking and often combined the work of commercial and long-term credit banks. Trust banks not only managed portfolios but also raised funds through the sale of negotiable loan trust certificates. Mutual loan and savings banks, credit associations, credit cooperatives, and labor credit associations collected individual deposits from general depositors. These deposits were then loaned to cooperative members and to the liquidity-starved city banks via the inter-bank money markets or were sent to central cooperative banks, which in turn loaned the funds to small businesses and corporations. More than 8,000 agricultural, forestry, and fishery

cooperatives performed many of the same functions for the cooperatives. Many of their funds were transmitted to their central bank, the Norinchukin Bank, which was the world's largest bank in terms of domestic deposits.

45. A group of government financial institutions paralleled the private banking sector. The Japan Export Import Bank, the Japan Development Bank, and a number of finance corporations, such as the Housing Loan Corporation, promoted the growth of specialized sectors of the domestic economy. These institutions derived their funding from deposits collected by the postal savings system and deposited with the Trust Fund Bureau. The postal savings system, through the 24,000 post offices, accepted funds in various forms, including savings, until 1988, thereby collecting more deposits and accounts than any other institution in the world.

46. Japan's securities markets increased their volume of dealings rapidly during the late 1980s, led by Japan's rapidly expanding securities firms. There were three categories of securities companies in Japan, the first consisting of the "Big Four" securities houses (among the six largest such firm in the world): Nomura, Daiwa, Nikko, and Yamaichi. The Big Four played a key role in international financial transactions and were members of the New York Stock Exchange. Nomura was the world's largest single securities firm. its net capital, in excess of US\$10 billion in 1986, exceeded that of Merrill Lynch, Salomon Brothers, and Shear son Lehman combined. In 1986 Nomura became the first Japanese member of the London Stock Exchange. Nomura and Daiwa were primary Dealers in the United States

Treasury bond market. The second tier of securities firms contained ten medium-sized firms and the third all the smaller securities firms registered in Japan. Many of these smaller firms were affiliates of the Big Four, while some were affiliated with banks. In 1986 eighty-three of the smaller firms were members of the Tokyo Securities and Stock Exchange. Japan's securities firms derived most of their incomes from brokerage fees, equity and bond trading, underwriting, and dealing. Other services included the administration of trusts. In the late 1980s, a number of foreign securities firms, including Salomon Brothers and Merrill Lynch, became players in Japan's financial world.

47. Japanese insurance companies became important leaders in international finance in the late 1980s. More than 90 percent of the population owned life insurance, and the amount held per person was at least 50 percent greater than in the United States. Many Japanese used insurance companies as savings vehicles. Insurance companies' assets grew at a rate of over 20 percent per year in the late 1980s, reaching nearly US \$694 billion in 1988. These assets permitted the companies to become major players in international money markets. Nippon Life Insurance Company, the world's largest insurance firm, was reportedly the biggest single holder of United States Treasury securities in 1989. The Tokyo Securities and Stock Exchange became the largest in the world in 1988, in terms of the combined market value of outstanding shares and capitalization, while the Osaka Stock Exchange ranked third after those of Tokyo and New York. Although there are eight stock exchanges in Japan, the Tokyo stock exchange represented 83 percent of the nation's total equity in 1988. Of the 1,848 publicly traded domestic companies in

Japan at the end of 1986, about 80 percent were listed on the Tokyo stock exchange. Two developments in the late 1980s helped in the rapid expansion of the Tokyo Securities and Stock Exchange. The first was a change in the financing of company operations. Traditionally, large firms obtained funding through bank loans rather than capital markets, but in the late 1980s they began to rely more on direct financing. The second development came 1986 when the Tokyo exchange permitted non Japanese brokerage firms to become members for the first time. By 1988 the exchange had sixteen foreign members. The Tokyo Securities and Stock Exchange had 124 member companies all told in mid-1990.

48. Japan's stock market dealings exploded in the 1980s, with increased trading volume and rapidly rising stock prices. The Nikkei Stock Average grew from 6,850 in October 1982 to nearly 39,000 in early 1990. During one six-month period in 1986, total trade volume on the Tokyo exchange increased by 250 percent with wild swings in the Nikkei average. After the plunge of the New York Stock Exchange in October 1987, the Tokyo average dropped by 15 percent, but there was a sharp recovery by early 1988. In 1990 five types of securities were traded on the Tokyo exchange: stocks, bonds, investment trusts, rights, and warrants alone.

Economic Development Trends of Japan

49. The economic and social environment of postwar Japan have characteristics not seen in any other country, it was generally believed that Japan was ruined at the World War II and this her chance of recovery, not to mention further development, had

disappeared with her defeat in 1945. Most people felt this way until 1960s, and the Western countries showed a ready willingness to accept Japan's exports. The remarkable achievement of Japan by the early 1960's caught most observers by surprise. There were few detailed studies into the causes of or factors behind Japan's success, all is easy to understand why many observers could not describe. Hiram's postwar development in any term other than miracle.¹ Japan has now established itself as the second biggest economy in the fetch world. By any standard her achievements were phenomenal, although these cannot be described as a miracle.⁴⁶

50. That Japan's GNP grew from US\$14.2 billion in 1951 to US\$22.7 billion in 1955, US\$88.8 billion in 1965, US\$203.1 billion in 1970, US\$44.6 billion in US\$1,039.6 billion in 1980 and to US\$2,940.4 billion in 1990. In other words, Japan's GNP in 1965 was 6.25 times its GNP in first and the GNP. in 1973 was 29.19 times that in 1951. This growth rate was un-precedent. For example, the GNP of the USA was US\$ 328.4 billion in 1951 and US\$1,326.4 billion in 1973 resulting, . in an increase by 4.03 times, which is no match for Japan's GNP growth during the Corresponding period. Despite the oil crises resulting from repeated price increases of crude oil by OPEC countries since 1973, and despite Japans huge oil bill, she managed to increase her 1973 GNP 250 % by 1980. This growth under severe worldwide recession is also much larger than the US achievement of a 198% increase during the same period.

51. Japan overtook both France and the UK in GNP by 1967 to become

⁴⁶ Rahman Mostafisur. The Japanese Strategy. P.-13

the third largest economy in the free world after the USA and West Germany. Japan did not remain in the third place for long. She managed to surpass West Germany's GNP in 1968. It is around this period when a number of scholarly studies on various aspects of Japan's economy were undertaken. Many researchers visited Japan and predicted an even brighter future for Japan. Paul A. Samuelson remarked:

Japan undoubtedly will pass the Soviet Union by (the year) 2000 is gone -less than 30 *years* away - her per capita GNP may outstrip ours just as we outstripped Britain, the 1800 champ.⁴⁷

This remark confirms a similar earlier comments by Herman Kahn of Hudson Institute: "It's possible for Japan to pass the US in per capita income around 1990 and (with a much smaller population) to equal our total GNP by 2000".

The oil crisis that began in 1973 had an unforeseen impact on the economy of the world and the forecast on the Japanese economy had to be modified slightly, but the fact of Japan's extraordinary performance cannot be denied. Herman Kahn, assessing the postwar economic performance by Japan, said:

52. Japan is among the most successful examples of modern economic growth. Between 1948 and 1973 its gross national product (GNP) grew by a factor of about ten in real terms, a figure 2.5 times as high as the world average. Since 1973 the Japanese economy has grown

⁴⁷ Rahman Mostafisur, Approach to National Economic and Industrial Planning for the development country with special reference to the development process of Japan P-15.

more slowly, but at rates that remain as high as or higher than those of any other affluent country.⁴⁸

It has been proved beyond doubt that Japan has outperformed all the developed and developing countries since the end of World War II. This performance is not limited to its GNP alone. The Japanese people now enjoy a qualitatively better life than those who live in the developed countries of the West. The initial goal of catching up with the West has already materialized. Their second dream of superseding them could also have been achieved by now had it not been for her vast differences with the USA natural resources.

The following section will examine how Japan achieved so much in such a short time. As the GNP ratings alone do not tell the complete story of the quality of development or the development process itself, inquiry shall hereafter be made into the growth pattern in some typical sectors having greater weight in her economy.

DEVELOPMENT IN MAJOR SECTORS.

Japan's postwar development was not only fast but also structurally dynamic. As late as 1955, textiles constituted about 17.5% of her total industrial products, but by 1979 its share was lowered to 4.5%. Chemicals made up 19.1% of the total industrial products in 1955, and it maintained its growth since then to cope with the overall growth. Its share was as high as 14.5% in 1978. Metal had a share of 17.0% in industrial products, and it grew steadily to stabilize at a level as high as 15.4% as of 1978. The extraordinary growth in the industrial sector was

⁴⁸ Herman Khan and Thomas Pepper. *The Japanese Challenge: The success and failure of economic success* p-1

brought about mainly by the machinery' and equipment sector. Machinery and equipment constituted 14.6 % of the manufactured production in 1955, but its share went up to 33.40/0 in 1978.

Japan's export grew at a rate faster than its rate ⁴⁹of growth in GNP. The surging export was the result of the contribution from these four broad categories of industries, but their individual weight changed between 1955 and 1978. Textiles were the major export in the earlier years. For example, textiles made up for 37.30% of exports in 1955. Us exports continued to rise in value but its share in total exports came down to 4.90/0 in 1980. Metal was another major export sector. Its share in total exports was 19.20/0 in 1955. However, it continued to keep pace with the fast growth of exports. Its share was as high as 16.40/0 in 1980, while it maintained an even higher share in some years in between. The export share of chemicals grew from 4.7% in 1955 to 5.20/0 in 1980. The most spectacular growth in exports, however, took place in the machinery and equipment sector. While its share in total exports was 12.3% in 1955, the share jumped to 43.6 % in 1968; 64.1% in 1978; and to 75.20/0 in 1991. The export shares of all Industrial manufactures and chemical products have been conspicuously high in Japan's export pattern. This share was 86.2 % in 1953 and 95.7% in 1973.

Japan exported 30.20/0 of its total domestic manufactures in 1953, and despite a sharp rise in volume of exports and higher capital formation, she managed to export 41.9% of her industrial products in 1971.5 industrial production constituted 30.8 % in 1968.6 It can be concluded that it is mainly the development in the manufacturing field they

⁴⁹ Douglas wilder Morill, Economic Effects of Japan's Barrier to International Trade and Investment 1951-1973 p.

brought about the economic development of Japan. The manufacturing sector of Japan is again quite broad-based and its individual sub sectors are interrelated and complementary to each other. The growth in any sub sectors had been dependent on the growth of other sub sectors or even other sectors of industries. A peculiarity of the industrial growth pattern in Japan was that the growth in one subsection had a dynamic effect on technological development in other sectors or sub sectors, and the technological development in one sector brought about structural changes in other related sectors.

In the early postwar period Japanese industries were in dislocation, and in the period leading up to early 1950's they were in a period of rehabilitation. Though many important changes in the social and industrial environment occurred during the first few postwar years, many industries did not have normal production for reasons like change in policies and marketing, technological efficiency, or competitiveness in international market. Some industries did not return to their prewar levels until the mid-or late 1950. The reasons for dislocation in production were Jot, however, the direct effects of war in all cases.

Economic Development Structure

Sustained by the improved international climate and other factors after World War II, Japan pooled the wisdom and industriousness of its people to rebuild its battered economy and move into a new era of rapid growth. In the process, it effectively weathered the impact of two oil shocks and an increasingly overvalued yen to assume an instrumental role in global economic affairs as the world's second-largest economic'

power.⁵⁰

Several actions proved crucial in helping Japan shape the structural base and policy framework for its economy in the postwar era. They included an array of reforms (e.g., revisions to the civil code, efforts in agrarian reform, labor reform, the breakup of the zaibatsu cartels, the rejection of economic centralization, and adoption of the antitrust laws) together with the Dodge-line stabilization policies of 1949. The former had the effect of laying the basic framework for a competitive market economy powered by a robust entrepreneurial spirit. The Dodge-line policies additionally accomplished three things. First, they summarily removed the command-and-control economic system that had been in force until that point, and replaced it with a more-decentralized, market-oriented model. Second, they imposed extremely restrictive financial policies in a bid to bring then-hyperinflationary price trends under control. And third, they sought to unify the exchange rate and accordingly lay the groundwork for future economic policy. Japan's economic revival was sustained in the process, allowing per-capita national income to recover to prewar levels by 1950.

The period from 1955 through the early 1970s has been described as the era of rapid economic growth. Although Japan experienced several slowdowns along with way, average economic growth during this period exceeded 10 percent. Enacted in 1960, a program to double national income helped the nation maintain its rapid growth track through accelerated levels of capital spending in the private sector. It was also around this time that Japan began actively pursuing free trade policies

⁵⁰ Statistical Handbook of Japan 2001

and other initiatives that were aimed at building an open-market economy. Japan became an IMF Article 8 nation in 1964, and from the late 1960s onward began to register a consistent surplus in its international balance of payments.

In the 1970s and later on, the Japanese economy was hit by an assortment of external shocks, including disarray in the international currency system (attributable to the so-called Nixon shock of 1971 and the transition to a floating exchange-rate system in 1973) and two successive oil crises. It was also around this time that Japan began registering an economic boom powered by a government plan to "remodel the Japanese archipelago. As a consequence, the nation found itself confronted by strains including rampant inflation followed by stagflation, structurally depressed industrial sectors, and a gaping fiscal deficit. The shift to a floating exchange-rate system proved beneficial to a certain degree in terms of providing more leeway in the arena of monetary policy and allowing the country to buffer itself somewhat from the impact of the two oil shocks. The oil shocks, moreover, taught Japan that its economy could no longer survive with the heavily energy-intensive industrial structure on which it had been based to date.

When the second oil crisis hit, Japan adapted its macroeconomic policies and sought to cultivate a new industrial structure that encouraged energy conservation while allowing labor and management to work out independent wage agreements reflective of macroeconomic trends. These actions enabled the nation to tame inflationary forces and sustain relatively favorable economic performance compared to other industrialized counterparts. In addition, it was able to enhance its

international competitiveness and reinforce its foundations for sustainable growth.

The period from the late 1960s to the early 1970s witnessed the appearance of various distortions attributable to rapid economic growth. That is, the task of addressing problems with a bearing on pollution, urban ills, the distribution of wealth, social security, and emerging disparities between growth and welfare developed into a pivotal policy issue.

The 1980s saw a new wave of economic conservatism sweep through many countries of the industrialized world. In Japan, for example, initiatives in administrative reform and privatization had the effect of revitalizing the private corporate sector. In the meantime, though, the trade surplus with other industrial countries continued to expand.

The first in a series of internationally coordinated currency adjustments took place in 1985. To surmount the ensuing recession caused by an increasingly overvalued yen, Japan instituted stimulus-oriented macroeconomic policies and succeeded in harnessing domestic demand to power its ongoing economic growth. However, at this point in time, the economy faced yet another challenge in the form of a speculative bubble, inflated by soaring capital asset values.

Recent Economic Trends

The speculative bubble burst in the early 1990s, occasioned by changes in the financial climate and steps on the regulatory front. As such, the decade of the 1990s marked the arrival of a new era that would force stem undertakings in economic adjustments and demand a fundamental

reassessment of the nation's economic structure and system combined. Stock prices peaked on the final day of stock trading in 1989 (December 29) and fell into a steep downtrend in the beginning of 1990s. This was followed by a collapse in property prices that until then had been soaring far above the range supported by the element of business profitability.⁵¹

By the end of July 1998, Japan faced with a "three-layered recession. The first layer was worsening business conditions, which had begun to decline from a peak reached around March 1997. Hit by a combination of factors, including a hike in the consumption tax (designed to promote fiscal restructuring), a reduction in public-sector demand, the Asian monetary crisis, and the collapse of Japanese major financial institutions, the Japanese economy began to decline rapidly from the end of 1997.

The second layer was widespread stagnation in business activity resulting from excessive plant and over-employment remaining from the bubble period, as well as the huge accumulation of non-performing loans. Faced with declining levels of self-owned capital, financial institutions quickly tightened the money supply. Since companies found it difficult to procure financing and suffered from a general lack of demand, they began trimming their facilities and labor forces. On the other hand, consumers felt anxious about future prospects and put greater emphasis on savings. All of the long-delayed negative effects of the inflationary bubble came to the surface at once, resulting in a very sick economy.

⁵¹ Statistical Handbook of Japan 2001

The third layer reflected an even more basic and structural problem: Japan's industrial society had been built up on the model of standardized mass production over the course of more than a hundred years, but now it no longer matched the current trend of human civilization.

It became evident that world civilization had taken a new course away from standardization, mass production, and ever-larger projects to a new emphasis on diversity, "softening" of the economy (the emergence of a more high-technology and service oriented economy), and information. This trend became particularly conspicuous in the U.S .A. from the mid 1990s. Then, it also became clear that the make-up of the Japanese economy was no longer keeping pace.

In response to this "three-layered recession," the Japanese government formulated a three-stage reconstruction plan.

In the second half of fiscal 1998, a series of emergency measures were adopted in an attempt to avert a deflationary spiral, which was considered the most urgent problem at the time.

First, a change was made in fiscal policy. The existing policy, which was designed to protect and stabilize Japan's financial institutions, was abandoned in favor of a policy that' introduced market principles. To ensure the stability of the financial system, the government separated fiscal and monetary administrative functions and strengthened its monetary investigation and oversight functions. Creating a huge monetary regeneration framework worth ¥60 trillion (¥70 trillion, if

funds added by the fiscal 2000 budget are included), the government began processing bankrupt financial institutions and increasing the amount of public capital. provided to other institutions whose financial condition seemed precarious in an effort to stabilize Japan's financial system.

Second, a special security framework worth ¥20 trillion (¥30 trillion if funds added by "the Economy Regeneration Measures" in November 1999 are included) was established to make loans available to small and medium-sized businesses to prevent them from going bankrupt. This helped to ensure that small businesses had access to adequate financing despite the tight credit situation in the private sector.

Third, the government took additional emergency economic measures designed to be immediately effective in expanding demand. These included over ¥17 trillion earmarked for public works projects and a permanent tax cut worth an average of ¥9 trillion per year.

Thanks to the government's bold and rapid stimulus measures, the number of small and medium-sized businesses filing for bankruptcy began to fall after October 1998 and the economy, buttressed by effective support bottomed out in April 1999 and began to show signs of a slow recovery.

In response to economic trends, the government continued its supportive measures in fiscal 1999, while adding detailed refinements aimed at spurring new business start-ups and development among small and medium-sized companies. These policies were accompanied by

efforts to strengthen the labor market and other measures intended to structurally reform Japanese society as a whole.

The private sector responded with great sensitivity to these initiatives. Large financial institutions continued their trend toward mergers and integration, and the financial cartels that had characterized Japanese industry in the past began to loosen. Also, many established, traditional companies have undertaken restructuring in an effort to streamline operations and reorganize their businesses. Similarly, new technologies, especially IT, are being widely introduced. This process continues to have a tremendous impact in all industrial sectors. These developments have inspired a feeling that a great change is taking place in the nation's entire socioeconomic structure.

It is valid to say that, by fiscal 1999, Japan had made it through the worst of the recession and begun a slow recovery, thanks to a continuing policy of support from the government and to the recovery of demand in Asia and other foreign markets. However, personal consumption, which constitutes approximately 60 percent of total domestic demand, continues to fluctuate. In 2000, there has been no substantial change in the economic picture, with the business sector doing rather well while the household sector continues to struggle under harsh conditions.

The current situation displays the following three characteristics.

First, the recovery process is becoming polarized between the business and household sectors. As noted above, production is growing at a healthy rate and corporate profits have improved substantially. On the other hand, companies are continuing to restructure, and this has put a

damper on the growth of full-time employment positions, increased the unemployment rate, and retarded the recovery of wage levels.

Second, polarization is occurring between IT-related fields and all other fields. In exports, the growing global demand for IT-related materials sparked by manufacturing centers in Asia played a major role in Japan's initial economic recovery. In production and plant investment, too, electrical machinery and other IT-related sectors have provided a large part of the driving force for growth. During the current recovery process, IT has accounted for approximately 30 percent of exports, 50 percent of production, and 80 percent of plant investment. Similarly, IT-related fields (including information services) have shown great growth in the number of job openings available. Although growth in overall consumption remains sluggish, expenditures on IT-related goods and services such as telephone telecommunications charges and personal computers have increased dramatically. In production and plant investment, however, there has been little spillover from the IT sector into other sectors, and many household consumption sectors other than those related to IT continue to struggle.

Third, in a development that is closely related to points one and two above the pace of economic recovery has been slack.

Even in 2001, Japan's economy is still rather fragile. Production has declined in response to a reduction in exports stemming from an economic slowdown in the U.S.A. As of June 2001, the decline of the Japanese economy is continuing. Although the corporate sector is still working toward autonomous recovery, the impetus has weakened in recent months. Plant investment is on the rise, but growth in corporate profits has slackened and business prospects, especially in the

manufacturing sector have been rapidly deteriorating. Unemployment levels are high, personal consumption remains basically flat, and prospects for the future are uncertain at best, 'With further economic slowdown, increased inventories and reduced plant investment predicted in the U.S.A.

In response, the Japanese government has set up the Council on Economic and Fiscal Policy (CEFP), which will draw up Basic Policies for Macroeconomic Management and Structural Reform of the Japanese Economy by the end of June. Based on these policies, it will implement economic and fiscal structural reform measures including the definite and final disposal of non-performing loans, the creation of a competitive economic system appropriate for the 21st century.

Industrial Structure

Japan's industrial structure underwent dramatic changes in the half-century since the end of World War II.

In 1950, about half of all Japanese workers were employed in the primary industries of agriculture, forestry, and fisheries; in 2000, only 5.1 percent were. Conversely, there has been a dramatic rise in the number of workers employed in secondary and tertiary industries. This increase has been especially evident in tertiary industries since the oil crises of the 1970s. In 2000, 63.7 percent of the entire labor force was engaged in tertiary trades.

An examination of the make-up of the nation's gross domestic product by type of economic activity reveals that in 1990 agriculture, forestry and

fisheries accounted for 2.7 percent of the total. This compared with 26.0 percent from the manufacturing sector, 13.3 percent from the wholesaling and retail trades, 5.8 percent from the financial and insurance sectors, and 18.2 percent from the service sector. In 1999, the corresponding contributions to GDP were 1.7 percent, 23.9 percent, 15.5 percent, 6.7 percent, and 20.4 percent, respectively.

Compared to figures by general industrial sector for 1996, The secondary industrial sector and 118 thousand fewer business establishments (8.3 percent). The tertiary sector, moreover, reversed its growth trended registered its first decline on record, by a margin of 200 thousand establishments (down 3.9 percent). Both represented sizable setbacks.

Business establishments represent the foundation for corporate activity in Japan. According to the findings of the Establishment and Enterprise Census taken in 1999, there were 6,203 thousand business establishments (excluding public entities). This figure was 319 thousand less than the number recorded by the preceding census in 1996, for a decline of 4.9 percent.

Public Finance

In the early 1990s, after the collapse of the bubble economy, the government repeatedly deployed large-scale fiscal measures to stimulate the economy, thus putting heavy pressure on the fiscal situation. Because of the subsequent severe economic situation, tax revenue significantly declined. The government was forced, however, to continually issue deficit-financing bonds.

At the end of FY1997, with outstanding government bonds amounting to ¥ 254 trillion and a total long-term public debt of ¥476 trillion, Japan's public finance sank to the worst level among the major industrialized countries. In November 1997, the government enacted [he Fiscal Structural Reform Law aimed at lowering the national and local budget deficits to within 3% of GDP and eliminating the issuance of special deficit-covering bonds by FY2003. Against the background of the worsened recession, however, the government decided on temporarily freezing the law in November 1998 and replaced its belt-tightening policy with expansionary fiscal measures to shore up the ailing economy. It compiled a budget for FY1999 amounting to ¥81.86 trillion, up 5.4% over the initial FY 1998 level, and for FY2000, it drafted the second consecutive expansionary budget totaling ¥84.99 trillion, the largest ever, up 3.8% from the initial FY 1999 budget. To cover revenue shortfalls, the government proposed the issuance of new national bonds amounting to ¥32.61 trillion. The ratio of government bonds to general account was estimated to be 38.4%. In December 2000, the government compiled a draft budget for FY2001 totaling ¥82.65 trillion, 2.7% down from the initial FY2000 figure, and also approved the issuance of ¥28.32 trillion in new government bonds. The dependency rate on government bonds will be 34.3% of total revenues, falling from the initial budget of the previous fiscal year. Still, outstanding long-term government debts, combining those of central and local governments, are expected to reach a record-high of ¥666 trillion at the end of FY200 1.

Tax System

Japan's postwar tax system has been characterized by heavy dependence

on direct taxes and a steeply progressive income tax system. In 1987 and 1988, the government carried out a radical revision of the tax system with the goal of striking a better balance between the income, consumption, and property taxes, taking into account the aging of the Japanese population. The tax rate structure of the personal income tax was revised, with the former 15 stages from 10.5% to 70% being changed to five stages from 10% to 50%. The corporate tax rate, which used to be 42%, was lowered in stages to 37.5% in 1990, and the maximum inheritance tax rate was lowered from 75% to 70%. In April 1989, a 3% consumption tax, a form of value-added tax, was implemented, and in April 1997, it was raised to 5%.

In the tax reform plan for FY1999, the government implemented a permanent tax cut exceeding ¥6 trillion (personal and corporate income tax combined) in order to stimulate the economy. The maximum personal income tax rate was lowered from 50% to 37%, and the maximum personal residence tax rate from 15% to 13%. Corporate taxes (corporate tax plus business tax plus corporate residence tax) were lowered to an effective rate of 40.87%.

In the tax reform plan for FY2000 that was approved by the Diet in early 2000, the government proposed tax cuts amounting to ¥215 billion. The tax reform featured, among other things, (1) measures to promote private-sector investment, such as an extension of income tax deductions for home buyers and a one-year extension of tax deductions for personal computer purchases for business use, (2) measures to support small- and medium-sized enterprises and venture businesses, and (3) measures to

promote the introduction of new pension plans similar to the U.S. 401(k) pension fund system.

In December 2000, the government proposed tax reforms for FY2001 that affirmed the continuation of the permanent tax reductions (national and local) for individuals and corporations. Which substantially exceeded-¥6 trillion, and that included such measures as creation of a new taxation system relating to the restructuring of corporations, measures to encourage investment in housing and investment in plant and equipment by SMEs, as well as measures that are necessary for coping with socioeconomic changes. In compiling the draft budget for FY2001 totaling ¥82.65 trillion, the government predicted that tax revenues would surpass ¥50 trillion for the first time in three years.

CHAPTER- FIVE

MAIN CAUSES OF JAPAN'S DEVELOPMENT

Japan's development process and the driving forces behind economy may be explained in terms of a few factors collectively responsible for Japan's development.

Japan's development has been more systematic and massive than simple words like miracle, copying, free ride, or life-long employment alone can explain. From the study and analysis made so far, the whole Japanese economic development process may well be considered to be the outcome of the interaction of the following factors working as a system:

1. Pre-Meiji isolation of Japan and situational motivation in the Meiji era and afterwards;
2. Ceaseless efforts by Meiji leaders to evolve a strategy to achieve development with their own resources;
3. Priority to education and its continuous improvement;
4. Farmer-oriented agricultural policies;
5. Creation of a dedicated and educated bureaucracy and conversion of government-business rivalry into active cooperation.
6. Timely realization of the importance of long-term industrial policies and import of technology;
7. Occasional military intervention in prewar economic and industrial policies;
8. Formulation of growth-oriented fiscal and monetary policies;
9. Introduction of a rational taxation system and effective deferment of domestic consumption in favor of savings for productive

investment

10. Expansion and protection of domestic market while export drive;
11. Evolution of legal systems and institutions capable of monitoring and solving crises with keeping an eye on tradition;
12. Macarthur's rationalization plan and American imposed constitution and security treaty; 13. Identification of national interest and attachment of top priority to it continuously in all changed circumstances;
14. Effective methods of handling labor resources;
15. Effective control of foreign capital investment in Japan and import of technology; and 16. Prevalence of rationality and prewar-postwar continuity in national development system and leadership.⁵²

Ceaseless efforts by Meiji leaders

When the conditions of Skokie were relaxed gradually to widen external trade again, the early Meiji leaders found a gap between the material development in the outside world and that in Japan, which they thought to have developed a lot during the period of isolation based on whatever knowledge and techniques they could get from the European civilization before and to some extent during the period of isolation. This was a period when international loans were unheard of in this part of the world. The only way of development was the rational allocation of scarce resources to the priority

investment areas, suppression of potential domestic demands to the level of production and enhancement of productivity. The methods were not, however, understood as easily as today. They wisely took the policy

⁵² Rahman Mustafisue, *The Japanese Strategy*

of "learning from the world" instead of considering their own knowledge to be the best. In course of the search for a strategy, the requirement for education, the necessity of streamlining the Samurai-dominated administration, the importance of better financial management, the importance of agriculture, industries, and foreign technology, and the importance of various other reforms were clearly realized. They made all possible efforts to implement whatever they believed in. The introduction of compulsory education in 1872, introduction of the Meiji constitution in 1889, introduction of a non-Samurai Public Service System, adoption of industrial policies and so forth were but some of the outcomes of the ceaseless efforts by Meiji leaders to find a self-reliant development strategy. The major strategies of their influence on present Japan are . dealt with briefly in the subsequent sections.

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Priority to education

Although the rate of literacy was about 50 % for males and about 15% for women towards the end of Tokugawa period and despite the establishment of training schools like the Naval Training School in Nagasaki in 1855 with foreign instructors, the necessary reforms and modernization envisaged by the Meiji leaders demanded larger and highly educated personnel for their materialization. The establishment of the Ministry of Education in 1871, introduction of compulsory 4-year primary education in 1872, establishment of Tokyo University in 1877 (incorporating many special institutions started still earlier), and the reorganization of Tokyo University into Tokyo Imperial University in 1886 were some of the important events, especially when it is considered

that many Asian countries had not introduced compulsory primary education more than one hundred years after the Japanese.

There are, of course, very many general and highly specialized universities now, but the highly placed bureaucrats, technocrats, scholars, politicians, and the business leaders in that period were mainly the products of the prestigious Tokyo University, or *Todai* as it is called in short. The quality of education has continuously improved. Post-graduate students are required to study at least two European languages to harness the knowledge and technology available in those countries. German systems had a lot of influence on the Meiji leaders. Japan invited a large number of foreign teachers, and also had their own people trained in Europe and in the United States. Most important, textbooks were written in Japanese or translated therein. A tradition of research was built up through the establishment of research institutes and national laboratories under the university or directly under the control of the government ministries. Science education was rightly given priority. The result is the present state of development in Japan which the associate editor of the weekly *Education USA* referred to in his article, "Science Education = Economic Might:

Over the past 20 years, the governments of Japan, West Germany and the Soviet Union have dramatically upgraded their education programs in mathematics and science. All three did so because they realized that economic success-and in the case of the Soviets, military success-demanded a work force that was knowledgeable and skilled in science

and technology. Japanese leaders often point to the rigor of their education system as a key to their economic success.⁵³

Clearly, modern Japan would have been quite different economically and otherwise if education had not been given priority in the development process of Japan. The attachment of the right priority to education from the beginning of the Meiji era as the tool for westernization and economic development was one of the wisest steps the Meiji leaders took when they took into stock the difficulties in the modernization process without western education in the early Meiji period. Today's high percentage of higher education in Japan, next only to the US, is the result of what was done since the Meiji period and earlier.⁵⁴ It is this higher education that has allowed Japan to maintain a remarkable international position in high technology, considered important for her economic health in the past as well as in coming years.

Farmer-oriented agricultural policies.

During the Tokugawa period Japan was basically an agricultural country. The land taxes were collected in rice, and stipends to the Samurai were paid in rice. There were great and small *daimyos* in accordance with the rice revenue they could pay. During the Tokugawa period, the total yearly rice revenue was about 26,433,097 koku.¹⁴ Silk was one of the major export items towards the last part of the Tokugawa period and through the Meiji era. During 1868-82, the export of raw silk, silk products and tea made up for 71,10/0 of Japan's total exports of ¥302 million. Tokugawa leaders made some investments in the agricultural infrastructure to increase production, but farmers were not free to

⁵³ Mustafizur Rahman Approaches to National Economic and Industrial planning for the Development Countries, P.27

⁵⁴ The Japan's Time June 24, 1981 reproduced from the Washington Post.

change professions. About four-fifths of the employed people of about 19.5 million population were still engaged in agriculture, forestry, and fishing. The Meiji government changed the land tax system, giving peasants freedom to change their cropping pattern.⁵⁵

The Meiji government took up an elaborate agricultural policy of introducing advanced agricultural equipment, improved techniques, and new crops. Citing Okazaki, Takahashi Masao says:

In April 1870, American cottonseeds were imported and distributed to various provinces for experimental cultivation. Seeds of pasturage grass, sugar beet, turnip, etc., were imported by the Tokyo Land Development Office. From that year until 1890, the seeds or seedlings of the new varieties of the following crops were imported and distributed to various prefectures: vegetables, rice, wheat, barley, corn millet, fruit trees, tobacco, cotton, hemp tea, peanuts, olive, cinchona, hop, indigo plants, grass bulbs of flower plants, tropical plants, etc.

Educated bureaucracy.

"Japan, Incorporated-a Conglomerate" is a common term used recent years to criticize or describe Japan's phenomenal postwar economic growth. The term implies a government-business cooperative relation in powering and steering the wheels of high-speed growth economy of Japan. This may be further clear from an analogy drawn by Abegglen between "how Japanese economy works" and a giant multi-division company on the order of General Electric or General Motors:

In this analogy, the Japanese government corresponds to corporate headquarters, responsible for planning and coordination, formation of

⁵⁵ Kkahashi Masao. Op. cit P. 75

long-term policies and major investment decisions. The large corporations of Japan are akin to corporate divisions, with a good deal of operating autonomy within the overall policy framework laid down by corporate headquarters, free to compete with each other within broad limits, and charged with direct operating responsibility.⁵⁶

This analogy has its limitations and there may not be anything to criticize in Japan for way of doing things and maintaining such close government-business relations. This relationship was not created just by an imperial order or by accident. It was developed through a process of social need and situational imperatives. As Chalmers Johnson says: Looked at historically, modern Japan began in 1868 to be plan rational and development. Mer about a decade and a half of experimentation with direct state operation of economic enterprises, it discovered the most obvious pitfalls of plan rationality: Corruption, bureaucratism, and ineffective monopolies-- Thus, Meiji Japan began to shift away from state entrepreneurship to collaboration with privately owned enterprises, favoring those enterprises that were capable of rapidly adopting new technologies and that were committed to the national goals of economic development and military strength. From this shift developed the collaborative relationship between the government and big business in Japan.⁵⁷

The change from the old constitution to the new, did little to change administrative guidance which left the western governments in confusion for years together in understanding working of the Japanese government is said to rest in the [mal analysis on this Samurai sword.

⁵⁶ Abegglen. op., cit p-71.

⁵⁷ Johnson op. cit. p-23

A key factor in Japan's economic success has been the ability to select, absorb, and improve foreign technology.-The methods for selection of technology from abroad, and the determination of a suitable price for it, are another example of the interaction in Japan between the government apparatus and the business community, with the bureaucracy in the role of a judge of overall national interest and arbitrator between conflicting business interests. The specific mechanism for government involvement in the process has been the regulations governing foreign exchange, applying not only to trade and investment but also to the importation of technology in whatever form and course the flow of funds in payment--- Purchase of technology has been integrated withy plans and expenditures for domestic development, notably in such sensitive fields as electronics, computers and nuclear energy, through joint government-business committees on research planning for key product areas.⁵⁸

Formulation of growth -oriented flsca1 and monetary policies

As Japan did not have control over its tariff Until 1911 the Meiji leaders had no other choice but to devise innovative- fiscal and monetary policies to boost its economy, check inflation, keep irate deficit under control, and increase exports and desired production. Masticator's successful deflationary policy of 1880, which is comparable to that carried out 70 years later by Joseph Dodge and Iced Heaton under postwar occupation rule, was innovative in its lime. This led to the conception and adoption of a separate foreign currency and local

⁵⁸ Abegglen op cit ppp 117, 121-22.

currency budgets, which continued although until Japan's current account surplus started to grow over the last few years.⁵⁹

The policy of liberal financing of selected industries since 1881 has given birth to planned industrialization policies. Aggressive investment in the prewar and postwar Japan would not be feasible in the absence of government policy of keeping the interest rate on investment funds low. The development of government-bank-business ties, where the government guarantees loans by city banks to growing industries, was a rare device to nurture selective economic growth. The bold economic decision by Prime Minister Hamaguchi Osachi in 1929 to order a 10 % pay cut for all civil and military officials was a reflection of the serious handling of fiscal policies even against underlying protests and risks. The deficit budget financing for development introduced by Takahashi in 1932 is still an accepted method of budget planning in Japan and by now in the USA, and many other countries. Japan overtook other industrialized nations because it could adopt the deficit financing wisely enough to pull its economy out of depressions and recessions before other nations actually did so. The postwar economic policies are the direct extension of the prewar policies except for their complexities, scale, refinements, and establishment of new financial institutions like the Japan Development Bank, Export-Import Bank, long-term credit Bank, and so on and reduced defense expenditure.⁶⁰

⁵⁹ Rahman Mustafizur. *The Japanese Strategy*. P.122

⁶⁰ Rahman Mustafizur. *The Japanese Strategy*. P.122

Introduction of a rational taxation system

The tradition of living frugal lives for hundreds of years created a strong basic sense for the effective use of money in the Japanese people, both in the government as well as in private management. The tax system developed according to the needs no the changed circumstances over the years could never undermine that basic sense. The tax burden in Japan is the lowest among the developed countries of the free world. Heavy taxes have always been abandoned in favor of cuts in the government expenses. This is reflected in the famous deflationary reform of Masticate in 1880 when government expenses were brought under control by cutting government jobs, pay, and imports. Governments did not hesitate to pay respect to tax payers by allowing landlords with large holdings, seats in the upper house and House of Peers, simply because of the high taxes they paid. Takahashi came out with his famous deficit financing programmed for development because a high tax was not considered for extra funding. Earnings from export were allowed a special tax exemption before the War, as well as after the War, although the occupation authority wanted to remove such preferential incentives. While industries grew substantially, expansion of domestic demand was found advisable by the finance minister, Ikeda Heaton, in 1956, who launched the policy of positive financing under the slogan of "*a hundred billion yen tax cut is a hundred billion yen of aid.*"⁶¹

Immediately after the War, General Macarthur, with the help of his economic adviser Dodge, introduced the rationalization plan which called for a severe cut in the government jobs (about 10,000 officials were removed between 1949 and 1951 from MIT1 alone), a balanced

budget, improved controls over foreign trade, strengthening tax collection, and so on. The Japanese bureaucrats implemented them apparently as per the orders but safeguarding the interest of Japan to the maximum wherever possible. Some commentators termed it as "seven years of bureaucratic *menu fibulae*, following orders to a superior's face, reversing them in the belly."⁶² In this rationalization process, the taxation system was greatly simplified, but the basic principles remained the same. During the high speed growth they included, on the protective side, discriminatory tariffs, preferential commodity taxes on national products, import restrictions based on foreign currency controls, and on the developmental side, and exemption of import duties of designed critical equipment.

Japan still maintains one of the lowest tax rates among the industrialized countries even though its budget deficit has swollen to a high level. However, the government is now taking measures to reduce the deficit without increasing taxes, but through administrative reforms in the form of cutting 82,000 government jobs and converting the major government enterprises into private ones in five years. Prime Minister Suzuki and the then state minister for Administrative Management Agency, Yasuhiro Nakasone, declared in 1982 that, if necessary, they would risk their political career to bring about these reforms as recommended by the *ad hoc* commission headed by Toshio Dodo (b. 1896), honorary chairman of the *Powerful Keldaren*, the quasi-official organ of the business world in Japan. Dodo himself was a symbol of Meiji-era frugality living with his wife within a monthly budget of

⁶¹ Rahman Mustafizur, *The Japanese Strategy*, P.123

⁶² Johnson *op.cit.* 16, 43

¥100,000 while earning well above 100 million a year, donating most of it to a private senior high school founded by his mother.⁶³ Making a man like him head of the commission, the government showed its concern for reforms.

The Japanese tax system is very responsible and rational to serve its purpose best. The lower tax combined with deferment of domestic consumption by other measures generated private savings available through banks or the postal savings system to respond to government deficit financing of development programmers and investment in growing industrial sectors all the way from (he Meiji restoration to the present day. Efforts to correct its course to respond to the need of time were not absent. Yasuhiro Nakasone, who was then the Director General of Administrative Management Agency and later became the Prime Minister of Japan, spoke of the coming reform in his TV interview on 1 August 1982 as one comparable to that of the Meiji period and Macarthur's reforms.

The fact that Japan's administrative system is one of the most effective in the world is probably due to its rational (tax system and responsible allocation of resources which compelled them to have the lowest ratio of administrative staff per thousand people employed among the developed countries. There are enough forces in-built into the social and political system of Japan for self-correction and improvement.

Mac Arthur's rationalization plan

Japan's industries geared to War production and the foreign trade capturing world market prior to War suddenly dwindled when the

⁶³ The Japanese times, August 12, 1982

Emperor broadcast his announcement of surrender on 15 August 1945. The ministries hastily started reorganizing themselves to remove possible evidences of their connection with War crimes before the first allied troops arrived. The Ministry of Munitions was reconverted to the Ministry of Commerce and Industry by Shine overnight. Allied investigators discovered the end-of-the-war juggling of ministries but they did not find it out of step with their direction of thinking. It soon became clear to the Japanese that the SCAP had decided on mi indeed occupation, Uniting lulu.' Japanese government intact except lord some changes here anal Hire to be. implemented through the Japanese government itself. The bureaucrats thought out probable changes and started protecting their interest before SCAP could realize its implications. The SCAP wanted to break up the Zaibatsu but they were reborn under the shelter of their banks, which the Americans, as per their own conception, considered to be free from industries and commerce. As early as 15 February 1946 the cabinet had called for an emergency economic policy headquarters, which the SCAP also liked in some form. This led to the formation of the economic stabilization board. Before SCAP stopped payments of war claims, the government flooded the business with money. Even after the stop on 25 June 1946, they revived such payment through. a new institution, the Reconstruction Finance Bank created on 24 January 1947. It is said to be one of a set of institutions that the Japanese created after the War to restore their economy to the prewar level. The priority production scheme for coal and steel production was taken up, which served its purpose though some inflation was created as a side effect. A series of

measures were taken for economic recovery and control of inflation while foreign trade was still under SCAP control.⁶⁴

In 1949, General Mac Arthur presented a 9-point rationalization program to be implemented by the Japanese government and deputed Joseph Dodge (hence also called the Dodge plan) to advise them in their efforts and to monitor progress. He compelled (or otherwise made) the government to write an overbalanced budget, to fix exchange rate at US \$ 1= ¥360, and to create the export-import bank, Japan development bank, and many other institutions which affected the Japanese economy for years to come. The sudden drastic curtailment of inflation, through a draconian reduction of demand and cutting thousands of government jobs created a deflation which was a prerequisite to Japan's economic recovery and growth. To control foreign investment by giant multi-nationals, Japan enacted a very important law, the Foreign Exchange and Foreign Trade Control Law. This law along with *Gaicho* (foreign investment law) gave Japan the necessary legal weapons to protect the local market. However, the SCAP approved these laws probably with the understanding that Japan was going to allow import of technology and foreign investment. The SCAP gradually handed over power of control of foreign trade and foreign exchange to the Japanese authorities. As Leon Holloman puts it:

In Liquidating the occupation by "handing back" operational control to the Japanese, SCAP naively presided not only over the transfer of its own authority but also over the institutionalization of the most restrictive foreign trade and foreign exchange control system ever devised by a major free nation.

⁶⁴ Rahman Mustafizur. The Japanese Strategy. P.129

CHAPTER SIX

MODELING OF JAPAN'S DEVELOPMENT PROCESS

From the study and analysis of Japan's development process made so far, the driving forces behind Japan's economic development could be ascertained as given in the preceding sections. To study whether the Japanese development process is adaptable to any other developing countries in a different time- frame and under enormously changed international and national environments, it may be necessary to first generalize the factors or the driving forces behind Japan's economic development in terms of the present-day techno economic and economic political practice and behavior of the nations under influences of the external and internal forces different from those prevalent during the early stages of Japan's development. This generalization shall be termed as the modeling of Japan's development process and will be used later to compare with the similar factors in some other developing countries. For ease in study, the factors are grouped into the following broad areas:

- Situational motivation and historical background affecting economic development through fixation of objectives;
- Consensus in pursuing the objectives of development;
- Natural advantage and disadvantage;
- Policies and strategies for development;
- Stability, continuity and leadership; and
- International environment.

1) If the starting point of Japan's development process is fixed in the early Tokugawa era, it may be safely said that Japan was a determined by the circumstances. Despite some minor power struggles in the early years of the Meiji regime, the nation had a consensus behind the Meiji objectives. The situational motivation like poverty, late starting of development, visible difference with the foreign power and availability of a backlog of technology in the West helped Japan find her strategies to achieve her objectives. Japan did not have any foreign debts at that time. She learned how to live within her own means during the 215 years of Sakoku. Her wants were limited.

2) The motivation to build a "rich country and strong army" was so strong and the changes were so sweeping that the new institutions introduced by the Meiji government did not inherit the dangerous vicious circles that are standing in the way of development among the developing countries of today. The police force, known for their corruption in the developing countries, proved to be so dutiful in Japan that they enjoy public confidence till now. The legal system has been perfected to a degree that the crime rate is even today low and the whole legal profession is not economically alluring in Japan.

3) Japan's labour force was loyal, and despite rapid industrialization and importation of many institutions from the West from the beginning of the Meiji period, Japan delayed importing foreign labour. So far Japan's labour force has never showed any instance of disruptive behavior that have put Western industries in economic and social problems, time and again. In short, a serene labour situation has helped Japan's industrial growth from the beginning of its industrialization. Even though there have occurred global recessions, now and then, Japan has maintained a

full employment policy and a policy of employing highly efficient robots. Japan's unemployment rate of 2-3 % for many years, compared to 5.3-15% in the West, has not only been low, the labour unions are not seeking higher wage increases as before, to give a competitive edge to their Industry in the international market.

4) Japan enjoyed some privileges of colonies after winning wars against her neighbors before World War II. World War I also allowed her an war export boom to strengthen her economy. World War II inflicted damages to her, industrial facilities and economy. The Allied Powers, however, changed their attitude towards Japan soon, and it was given a free hand to manage its affairs in 1952. Even before 1952, the SCAP policy was rather helpful to Japan. The postwar development was the outcome of her efforts with precise strategies in a favorable international environment with peace for herself.

The Tokugawa regime continued for about 250 years after 1603, followed by the Meiji Taisho, and Showa eras. Most of postwar period has been the ruled by the Liberal Democratic Party. Japan's Meiji constitution of 1889 end continued until World War II when the USA imposed the present constitution. Thus Japan enjoyed political stability and continuity of policies which gave cumulative benefits of all development efforts made so far.

5) Japan's development strategy was precise, effective and comprehensive. The development policy of Japan was based on industrialization. Its agriculture could support her industrialization in

the early stages. The high rate of savings and an extremely high rate of capital formation that boosted industrial production could be possible because of the successful deferment consumption. The industrialization was broad-based but selective and was nurtured by the government under necessary protection.

6) The government-business cooperative relation has allowed the government to have access to a wide spectrum of wisdom in different sections of the people outside the government. To maintain a viable and competitive position for Japan in the high technology field, government has been carefully guiding and supporting its prospective industries despite foreign criticism. It has been giving utmost priority to education as a tool for national development. Japan never liked to rely on foreign capital for her economic development, and reliance on her own resources made her development broad-based and well-adjusted to tradition.

7) Japan was also lucky in the sense that she did not have to bear the burden of her postwar defense expense which had mounted to about 50.9 % of her GNP in 1944. Japan's defense expenditure is below 1% of her GNP now. The defense expenditure of Japan was US\$11.50 billion in 1981 compared to 185 billion for the USSR; 171 billion for the USA; 26 billion for France; and 25 billion for West Germany. The defense expenditure however rose to US\$28.73 billion in 1990, but still remained at 1.0% of her GNP. The USA, which has been protecting Japan since World War II, has realized recently that Japan was taking advantage of the US-Japan security treaty. But it is already too late. Japan can now bargain strongly in the face of any US pressure, although it sometimes

shows modesty to avert US pressure on Japan's huge trade surplus. But it may now rely on its own arms industry for a defense build-up which the USA is encouraging.

8) Japan, which has protected its investment market so far, has been welcomed by the USA, the EC and other countries to invest there. This was a new opportunity for Japan which she has exploited in the most favorable terms. Japan is taking over existing companies, investing in new plants, and mining in all prospective parts of the world. Fuji Bank's takeover of two commercial lending subsidiaries of the Walter E. Heller Corporation for US\$425 million is one of the biggest single takeovers in the USA by a Japanese bank. Most of the Japanese banks, security companies, manufacturing, and trading companies are well entrenched in the USA, the EC, and in many other countries of the world. Her total foreign investment as of 1991 is US\$352,392 million. This is probably not the end, but only the beginning of Japan's strategy. One cannot, however, imagine a similar takeover in Japan by any foreign interest whatsoever.

9) Japan's efforts to be technologically independent have paid off. Her technology is being sought even by the USA and the EC. Japan's history as a developed country is too short and as such she still has full vigour to take pains of structurally changing her industries and working out long-term strategies while deferring social development as far as possible. Even after achieving economic power, Japan has maintained her policies and spirit as a developing country to take economic advantage wherever available. As the developed countries of the west attained a high standard of living long ago, which Japan could hardly think of due to her various limitations, they relaxed their efforts. Japan

silently made its way to oust them from the international market gradually. Japan is now enjoying a healthy and enviable trade surplus with almost all non-OPEC member countries.

10) Japan population growth rate in the postwar period was maintained at about 1 % or less on an average. A large number of Japanese have settled in Brazil, the USA, and in many other countries while she maintained a virtually closed door policy to foreign immigration for jobs in Japan. The number Nikkeijin (persons of Japanese parentage) in North America grew to 4,530 as of 1 October 1981. The number of such Nikkeijins was 763,693 in the South America. In addition, a large number of Japanese are staying permanently in different parts of the world. Their number was 246,142 in 1981. About 204,731 Japanese were taking prolonged residence abroad as of 1981. The number was 66,100 as of 1 October 1991. The total number of Japanese Emigrants as of 1 October 1981 was as high as 4,006,388 compared to the total number of immigrants (mostly for a short time) 1,552,296. The number of registered aliens in Japan as of 1981 was just 70,005 excluding the Chinese and the Koreans. As Japan brought a many Chinese and Koreans to work in Japan, while those places are under Japanese control, their number was comparatively large before the war over three million Japanese were living in Japan colonies. .

Japan's policy, strategy, and efforts to achieve her objectives have been highly rational with an in-built capacity to monitor and direct its course to serve its purposes best. The strong nationalism of the Japanese played an economic role that can probably be best performed by active nationalism alone in the right environment.

HAPTER-SEVEN

Conclusion:

Japan is one the most developed country and Bangladesh is one of the least developed countries in the world. But the populations are same and area is one third. Japan's philosophy, norms and system, accountability, political stability, governing system, local government structure is the best. The Japanese practice of using education as a tool for national development and population control may be universally adaptable. The industrial and trade polices of Japan, now being criticized by the developed countries, and may be adopted by Bangladesh. The banking system, fiscal and monitory system, legal system and taxation system of Japan may be valuable model for Bangladesh. It is doubtful whether any other system can pull our country out of poverty. Bangladesh needs 64 public University in 64 districts. Besides this Union Bank, citizen tax or born tax is important, power decentralization Union council and district council should be upgrade. A profile for a family is essential.

Economic development makes democracy possible, political leadership make it real, Bangladesh needs new roles and new behavior from its political leaders who should be more tolerant and performing for the people.

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