### STATISTICAL HANDBOOK OF

# JAPAN

# 2010

#### **Statistics Bureau**

**Ministry of Internal Affairs and Communications** 

JAPAN

© 2010 by Statistics Bureau Ministry of Internal Affairs and Communications Japan All rights reserved.

Edited by Statistical Research and Training Institute Ministry of Internal Affairs and Communications Japan

Published by Statistics Bureau Ministry of Internal Affairs and Communications 19-1 Wakamatsu-cho, Shinjuku-ku Tokyo 162-8668 Japan

> Printed in Japan ISSN 0081-4792

#### **On the Internet**

Statistical Handbook of Japan 2010 is also available at the following address: http://www.stat.go.jp/english/data/handbook/index.htm

#### Preface

This handbook is designed to provide a clear and coherent overview of present-day Japan through statistics.

It provides statistical tables, figures, maps and photographs to portray conditions in modern-day Japan from a variety of perspectives, including demographics, economic and social trends, and culture. Most of the comments and statistical data for this purpose have been drawn from principal statistical publications available from government and other leading sources.

For more in-depth statistical information on Japan, readers are invited to peruse the Japan Statistical Yearbook and the Japan Monthly Statistics.

We hope that this booklet will serve as a guide in your search for knowledge about Japan. We are always happy to receive opinions or requests from readers.

You can also view the contents of this booklet on the website of the Statistics Bureau.

August 2010

Shigeru KAWASAKI Director-General Statistics Bureau Ministry of Internal Affairs and Communications Japan

#### **Notes for Users**

- 1. The present issue contains statistics that became available by June 30, 2010.
- 2. Unless otherwise indicated, "year" refers to the calendar year and "fiscal year" refers to the 12 months beginning April 1 of the year stated.
- 3. Metric units are used in all tables and figures in which the data are measured in weight, volume, length or area.
- 4. Statistical figures may not add up to the totals due to rounding.
- 5. "Billion" means a thousand million; "trillion" means a thousand billion.
- 6. The following symbols are used in the tables:
  - ••• Data not available
  - Magnitude zero or figures not applicable
    - Less than half of unit employed
  - 0.0

0

- # Marked break in series
- \* Provisional or estimate
- 7. Data relating to "China" generally exclude those for Hong Kong SAR, Macao SAR and Taiwan.
- 8. All contents of the present issue, including tables, figures, and maps, are also available on the website of the Statistics Bureau, Ministry of Internal Affairs and Communications, Japan.

(http://www.stat.go.jp/english/data/handbook/index.htm)

9. When any contents of the present issue are to be quoted or copied in other media (print or electronic), the title is to be referred to as follows:

Source: Statistical Handbook of Japan 2010, published by the Statistics Bureau, Ministry of Internal Affairs and Communications, Japan.

### Contents

	Page
Chapter 1. Land and Climate	
1. Land	2
2. Climate	4
Chapter 2. Population	
1. Total Population	
2. Declining Birth Rate and Aging Population	
3. Births and Deaths	
4. Marriages and Divorces	
5. Households	
(1) Household Size and Household Composition	
(2) Elderly Households	
6. Population Density and Regional Distribution	
(1) Population Density	
(2) Population Distribution	
Chapter 3. Economy	
1. Economic Development	
2. Recent Economic Trends	
3. Industrial Structure	
Chapter 4 Finance	
Chapter 4.       Finance         1. National and Local Government Finance	
(1) National Government Finance	
(1) Ivational Government Finance	
(3) National and Local Government Finance	
(4) Tax	
2. Bank of Japan and Money Stock	
3. Financial Institutions	
4. Financial Assets	
5. Stock Market	

	Page
Chapter 5. Agriculture, Forestry and Fisheries	
1. Overview of Agriculture, Forestry and Fisheries	
2. Agriculture	55
(1) Agricultural Production	
(2) Farmers and Farmland	
3. Forestry	
4. Fisheries	
(1) Fishery Production	
(2) Fishery Workers	
5. Self-Sufficiency in Food	
Chapter 6. Manufacturing and Construction	65
1. Overview of the Manufacturing Sector	
2. Principal Industries in the Manufacturing Sector	71
(1) Machinery Industry	
(2) Chemical Industry	
(3) Iron and Steel Industry	
(4) Fabricated Metal Products Industry	
3. Construction	
Chapter 7. Energy	77
1. Supply and Demand	
2. Electric Power	
3. Gas	
Chapter 8. Science and Technology/Information and	
Communication	
1. Science and Technology	
(1) Researchers and R&D Expenditures	
(2) Technology Trade	
2. Patents	
3. Information and Communication	
(1) Diffusion of the Internet	
(2) Progress of Communication Technologies	
(3) Telephone	
(4) Postal Service	
	_

Page	
Chapter 9. Transport	
1. Domestic Transport	
(1) Domestic Passenger Transport	
(2) Domestic Freight Transport	
2. International Transport	
(1) International Passenger Transport	
(2) International Freight Transport	
Chapter 10. Commerce	
1. Wholesale and Retail	
(1) Wholesale Trade	
(2) Retail Trade	
2. Food Service Establishments	
Chapter 11. Trade, International Balance of Payments, and	
International Cooperation	
1. Trade	
(1) Overview of Trade	
(2) Trade by Commodity	
(3) Trade by Country/Region	
2. International Balance of Payments	
3. International Cooperation	
Chapter 12. Labor	
1. Labor Force	
2. Employment	
(1) Employment by Industry	
(2) Employment by Occupation	
(3) Employment by Employment Pattern	
3. Unemployment	
4. Hours of Work and Wages	
Chapter 13. Family Budgets and Prices144	
1. Family Budgets	
(1) Income and Expenditure	
(2) Savings and Debts	

	Page
2. Prices	
(1) Consumer Price Index (CPI)	
(2) Corporate Goods and Services Price Indices	
Chapter 14. Environment and Life	
1. Environmental Issues	
2. Housing	
3. Traffic Accidents	
4. Crime	
Chapter 15. Social Security, Health Care, and Public	Hygiene 166
1. Social Security	
2. Health Care and Public Hygiene	
Chapter 16. Education and Culture	
Chapter 16. Education and Culture 1. School-Based Education	
-	
1. School-Based Education	
1. School-Based Education         2. Lifelong Learning	
<ol> <li>School-Based Education</li> <li>Lifelong Learning</li> <li>Leisure Activities</li> </ol>	
<ol> <li>School-Based Education</li> <li>Lifelong Learning</li> <li>Leisure Activities</li> <li>Publishing and Mass Media</li> <li>Cultural Assets</li> </ol>	
<ol> <li>School-Based Education</li> <li>Lifelong Learning</li> <li>Leisure Activities</li> <li>Publishing and Mass Media</li> <li>Cultural Assets</li> <li>Chapter 17. Government System</li> </ol>	
<ol> <li>School-Based Education</li> <li>Lifelong Learning</li> <li>Leisure Activities</li> <li>Publishing and Mass Media</li> <li>Cultural Assets</li> <li>Cultural Assets</li> <li>Division of Powers</li> </ol>	
<ol> <li>School-Based Education</li> <li>Lifelong Learning</li> <li>Leisure Activities</li> <li>Publishing and Mass Media</li> <li>Cultural Assets</li> <li>Cultural Assets</li> <li>Division of Powers</li> <li>The Legislative Branch</li> </ol>	
<ol> <li>School-Based Education</li> <li>Lifelong Learning</li> <li>Leisure Activities</li> <li>Publishing and Mass Media</li> <li>Cultural Assets</li> <li>Cultural Assets</li> <li>Division of Powers</li> <li>The Legislative Branch</li> <li>The Executive Branch</li> </ol>	176 180 181 183 183 187 <b>190</b> 191 193 194
<ol> <li>School-Based Education</li> <li>Lifelong Learning</li> <li>Leisure Activities</li> <li>Publishing and Mass Media</li> <li>Cultural Assets</li> <li>Cultural Assets</li> <li>Division of Powers</li> <li>The Legislative Branch</li> <li>The Executive Branch</li> <li>The Judicial Branch</li> </ol>	176 180 181 183 183 187 <b>190</b> 191 193 194 195
<ol> <li>School-Based Education</li> <li>Lifelong Learning</li> <li>Leisure Activities</li> <li>Publishing and Mass Media</li> <li>Cultural Assets</li> <li>Cultural Assets</li> <li>Division of Powers</li> <li>The Legislative Branch</li> <li>The Executive Branch</li> </ol>	176 180 181 183 183 187 <b>190</b> 191 193 194 195

# Appendices

1. Population, Surface Area and Population Density by Prefecture	
2. Main Economic Indicators of Selected Countries	
3. Foreign Exchange Rates	
4. Conversion Factors	

### **List of Tables**

	F	Page
1.1	Surface Area of Japan	2
1.2	Top 10 Countries According to Surface Area	2
1.3	Mountains	3
1.4	Rivers	3
1.5	Lakes	3
1.6	Surface Area by Use	4
1.7	Temperature and Precipitation	
2.1	Countries with a Large Population	8
2.2	Trends in Population	10
2.3	Age Structure of Population by Country	12
2.4	Vital Statistics	13
2.5	Changes of Mothers' Age at Childbirth	15
2.6	Mean Age of First Marriage	16
2.7	Households and Household Members	17
2.8	Trends in Elderly Households	19
2.9	Population of Major Cities	21
2.10	Population of Three Major Metropolitan Areas	21
3.1	Gross Domestic Product (Expenditure approach)	28
3.2	Changes in Industrial Structure	
3.3	Number of Establishments and Persons Engaged	32
4.1	Revenue and Expenditure of National Government Finance	37
4.2	Expenditure of General Account	38
4.3	Local Government Finance	41
4.4	Expenditures of National and Local Governments	42
4.5	Currency in Circulation	47
4.6	Money Stock	47
4.7	Financial Markets	48
4.8	Number of Financial Institutions	49
4.9	Financial Assets and Liabilities of Japan	51
4.10	Stock Prices	53
5.1	Agricultural, Forestry and Fishery Output	
5.2	Agricultural Production	56

		Page
5.3	Production Volumes of Meat, Milk and Eggs	Ũ
5.4	Commercial Farm Households and Commercial Farmers	
5.5	Forest Land Area and Forest Resources	
5.6	Production by Fishery Type and Species	61
5.7	Number of Enterprises and Workers Engaged	
	in the Marine Fishery Industry	
5.8	Supply of Cereal Grains	
6.1	Number of Establishments, Persons Engaged and Value of	
	Manufactured Goods Shipments of the Manufacturing Ind	ustry.67
6.2	Indices of Industrial Production	
6.3	Indices on Mining and Manufacturing	
6.4	Steel Production	74
6.5	Construction Investment	75
7.1	Trends in Total Primary Energy Supply and Percentage	
	by Energy Source	
7.2	Trends in Electricity Output and Power Consumption	
7.3	Trends in Production and Purchases, and Sales of Gas	
8.1	Trends in Research and Development	
8.2	Technology Trade by Business Enterprise	
8.3	Patents	
8.4	PCT International Applications by Country of Origin	
8.5	Telecommunications Services	
8.6	Postal Services	
9.1	Domestic Passenger Transport	
9.2	Number of Motor Vehicles Owned	100
9.3	Domestic Freight Transport	101
9.4	Japanese Travelers	103
9.5	Foreign Visitors	103
9.6	Seaborne Foreign Transport	104
10.1	Trends in the Commercial Sector	106
10.2	Stores, Persons Engaged and Annual Sales	
	in the Commercial Sector	107

	Page
10.3	Retail Establishments by Sales Form Classification
10.4	Food Service Establishments
11.1	Trends in Foreign Trade and Indices of Trade
11.2	Value of Exports and Imports, by Principal Commodity
11.3	Trends in Exports and Imports by Country/Region
11.4	International Balance of Payments
11.5	Trends in Japan's Foreign Assets and Liabilities
11.6	Reserve Assets
11.7	Net Flow of Development Cooperation
11.8	Regional Distribution of Bilateral ODA
11.9	Number of Persons Involved in Technical Cooperation
	by Type and Program
12.1	Population by Labor Force Status
12.2	Employment by Industry
12.3	Employment by Occupation
12.4	Employment by Employment Pattern
12.5	Hours of Work and Wages
13.1	Average Monthly Income and Expenditure
13.2	Average Monthly Consumption Expenditure of One-Person
	Households by Age Group151
13.3	Average Amount of Savings and Debts
13.4	Amount of Savings and Debts by Age Group
	of Household Head152
13.5	CPI for Major Categories of Goods and Services
13.6	Corporate Goods and Services Price Indices
14.1	Breakdown of Carbon Dioxide Emissions in Japan
14.2	Waste Generation and Disposal
14.3	Housing Conditions
14.4	Occupied Dwellings by Type of Building
14.5	Traffic Accidents and Casualties
14.6	Trends in Crime
15.1	Trends in Social Security Benefit Expenditures
	by Institutional Scheme167

		Page
15.2	Social Welfare Institutions	170
15.3	Number of Medical Personnel at Work	172
15.4	Number of Medical Care Institutions and Beds	173
16.1	Educational Institutions in Japan	176
16.2	Number of University Students	178
16.3	Social Education Facilities	180
16.4	Sports Facilities	180
16.5	Major Leisure Activities by Gender	181
16.6	New Publications	184
16.7	Advertising Expenditures by Medium	186
16.8	Cultural Properties Designated by the National Government	187
16.9	Heritage Sites Inscribed on the World Heritage List	189
17.1	Members of the Diet by Political Group	194
17.2	Successive Prime Ministers	195
17.3	Judicial Cases Newly Accepted, Settled and Pending	196
17.4	Local Government Employees by Type of	
	Administrative Services	197

# List of Figures

	Page	;
1.1	Famous Mountains of the World	;
1.2	Temperature and Precipitation5	
2.1	Population Pyramid8	3
2.2	Population Density by Country9	)
2.3	Changes in the Population Pyramid11	_
2.4	Proportion of Elderly Population by Country12	)
2.5	Natural Population Change14	┝
2.6	Life Expectancy at Birth by Country	;
2.7	Changes in Marriage Rate and Divorce Rate	)
2.8	Changes in Household Composition	>
2.9	Population Density by Prefecture	)
3.1	Economic Growth Rates	3
3.2	Gross Domestic Product	
3.3	National Wealth	j
3.4	Economic Growth Rates (Quarterly changes)	1
3.5	Gross Domestic Product by Type of Economic Activity	)
3.6	Shares of Establishments and Persons Engaged	
	by Scale of Operation	L
3.7	Ratio of Overseas Production in the Manufacturing Sector 34	ŀ
4.1	Composition of Revenue and Expenditure of	
	General Account Budget	)
4.2	Trends in Ratio of Net Total National and Local Expenditures by Function	\$
4.3	Trends in National Government Bond Issue	Ĺ
4.4	Ratio of General Government Gross Debt to GDP	
4.5	Ratio of Taxation Burden to National Income by Country 46	
4.6	Trends in Stock Price Index and Total Market Value	
5.1	Industrial Wood Supply and Self-Sufficiency Rate	)
5.2	Production by Type of Fishery	
5.3	Self-Sufficiency Rates for Selected Categories	
	of Agricultural Produce	3
5.4	Trends in Food Self-Sufficiency Rates of Major Countries 64	

### Page

6.1	Number of Establishments, Persons Engaged and Value of	
	Manufactured Goods Shipments by Sector	66
6.2	Trends in Indices on Mining and Manufacturing	
6.3	Crude Steel Production in Selected Countries	73
6.4	Building Construction Started by Use Objective	76
7.1	Total Primary Energy Supply	79
7.2	Trends in Final Energy Consumption by Sector	80
7.3	Consumption of Commercial Energy by Country	81
7.4	International Comparison of Energy/GDP Ratio	81
8.1	R&D Expenditures by Discipline	86
8.2	Researchers and Expenditures by Industry	87
8.3	Trends in Technology Trade by Business Enterprise	88
8.4	Composition of Technology Trade by Major Country/Region	89
8.5	Number of Patent Applications Filed	
	in Major Countries/Organizations by Japanese	91
8.6	Internet Users	92
8.7	Telephone Service Subscribers	94
9.1	Composition of Domestic Transport	97
9.2	Rail Transport by Country	
9.3	Breakdown of Freight Transport	101
9.4	Japanese Overseas Travelers and Foreign Visitor Arrivals	102
10.1	Trends in Wholesale and Retail Trade	
10.2	Non-Storefront Sales	109
11.1	Foreign Trade	
11.2	Component Ratios of Foreign Trade by Commodity	
11.3	Japan's Major Export and Import Commodities	116
11.4	Japan's Foreign Trade by Country/Region	118
11.5	Trends in Japan's Trade by Country/Region	119
11.6	Yen Exchange Rate against the U.S. Dollar	
11.7	Trends in ODA by Country	
11.8	Distribution of Bilateral ODA by Purpose	126

		Page
12.1	Labor Force Participation Rate by Sex	129
12.2	Structure of Employment by Country	130
12.3	Distribution of Employment by Industry	
12.4	Percentage of Female Workers by Occupation	135
12.5	Percentage of Non-Regular Staff by Age Group	
12.6	Employment Pattern by Sex and Age	
12.7	Unemployment Rate and Ratio of Job Offers to Job Seekers	
12.8	Unemployment Rates by Sex and Age	
12.9	Unemployment Rates by Country	
12.10	Monthly Contractual Cash Earnings by Size of Enterprise	
13.1	Average Monthly Consumption Expenditure	145
13.2	Balance of Income and Expenditure	147
13.3	Annual Change in Household Income and Expenditure	148
13.4	Average Monthly Family Income and Expenditure	
	by Age Group of Household Head	149
13.5	Average Monthly Income and Expenditure	
	(Non-working elderly households)	150
13.6	Price Trends	154
13.7	CPI by Country	154
13.8	Regional Difference Index of Prices by Selected Prefecture .	155
14.1	Sources of Carbon Dioxide Emissions in Japan	159
14.2	Recycling of Nonindustrial Waste	161
14.3	Ratio of Housing with Barrier-Free Features	163
15.1	Trends in Social Security Benefit Expenditures by Sector	168
15.2	National Contribution Ratio by Country	169
15.3	Death Rates by Major Cause	171
15.4	Trends in Medical Care Expenditures	174
16.1	Japanese School System	
16.2	University Students by Major Subject	178
16.3	Public Expenditures on Education	179
16.4	Participation Rates for Major Leisure Activities	
	by Age Group	182
16.5	Trends in Number of Publications	183
16.6	Newspaper Circulation by Country	184

16.7	Subscribers of Cable TV Service	Page . 185
17.1	Separation of the Three Branches of Government under the Japanese Constitution	. 191
	Government Organization of Japan	. 192
	5 5	

### Chapter 1

## Land and Climate

### 1. Land

Table 1.1

Japan is an island nation situated off the eastern seaboard of the Eurasian continent in the northern hemisphere. The islands form a crescent-shaped archipelago stretching from northeast to southwest parallel to the continental coastline with the Sea of Japan in between. The country is located between approximately 20 degrees to 45 degrees north latitude and stretches over 3,200 kilometers. It consists of the main islands of Hokkaido, Honshu, Shikoku, Kyushu and Okinawa, and more than 6,800 smaller islands of varying sizes. Its surface area totals approximately 380,000 square kilometers, a figure equivalent to 0.3 percent of the global land mass.

Since the Japanese archipelago is located in a zone of relatively young tectonic plate movement, it is particularly prone to various physiographical phenomena. The land is full of undulations, with mountainous regions including hilly terrain accounting for about three-quarters of its total area. The mountains are generally steep and are intricately carved out by ravines. Hilly terrain extends between the mountainous regions and the plains.

Surface Area of Japan (2009) (Square kilometers)						
District	Area					
Japan	377,947					
Honshu	a) 231,113					
Hokkaido	83,457					
Kyushu	42,191					
Shikoku	a) 18,792					
Okinawa	2,276					

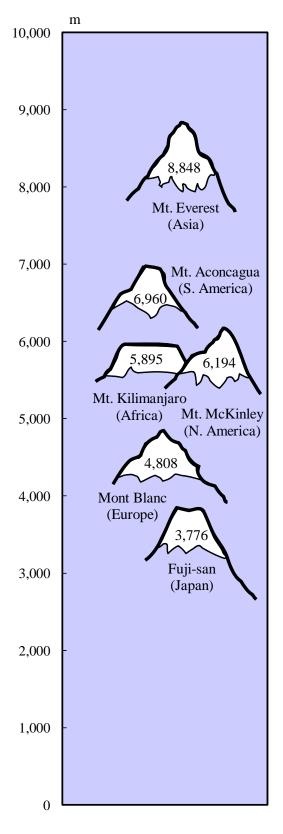
a) Excluding some areas of which boundaries are not yet fixed.Source: Ministry of Land, Infrastructure, Transport and Tourism.

Table 1.2
<b>Top 10 Countries According</b>
to Surface Area (2007) <sup>1)</sup>

(1,000 square kilometers				
Country	Area			
World	136,127			
Russia	17,098			
Canada	9,985			
U.S.A	9,629			
China	9,597			
Brazil	8,515			
Australia	7,692			
India	3,287			
Argentina	2,780			
Kazakhstan	2,725			
Sudan	2,506			

1) Comprising land area and inland waters. Excluding polar regions and uninhabited islands. Source: United Nations.

#### Figure 1.1 Famous Mountains of the World



Source: National Astronomical Observatory of Japan.

# Table 1.3Mountains (2008)

	(Meters)
Name	Height
Fuji-san	3,776
Kita-dake	3,193
Okuhotaka-dake	3,190
Aino-dake	3,189
Yari-ga-take	3,180
Higashi-dake	3,141
Akaishi-dake	3,120
Karasawa-dake	3,110
Kitahotaka-dake	3,106
Obami-dake	3,101
Source: Ministry of Land	Infra

~ •

Source: Ministry of Land, Infrastructure, Transport and Tourism.

#### **Table 1.4 Rivers** (2009)

	(Kilometers)
Name	Length
Shinano-gawa	367
Tone-gawa	322
Ishikari-gawa	268
Teshio-gawa	256
Kitakami-gawa	249
Abukuma-gawa	239
Mogami-gawa	229
Kiso-gawa	229
Tenryu-gawa	213
Agano-gawa	210

Source: Ministry of Land, Infrastructure, Transport and Tourism.

#### Table 1.5

Lakes (2009)

(Square	e kilometers)
Name	Area
Biwa-ko	670.3
Kasumi-ga-ura	167.6
Saroma-ko	151.8
Inawashiro-ko	103.3
Naka-umi	86.2
Kussharo-ko	79.6
Shinji-ko	79.1
Shikotsu-ko	78.4
Toya-ko	70.7
Hamana-ko	65.0

Source: Ministry of Land, Infrastructure, Transport and Tourism. Forests account for the largest portion of the nation's surface area. There are approximately 250,000 square kilometers (which equates to 66 percent of the nation's surface area) of forests, followed by approximately 50,000 square kilometers of farmland (13 percent). Together, forests and farmland thus cover approximately 80 percent of the nation. There are approximately 20,000 square kilometers of building land (5 percent).

Table 1.6	
Surface Area by	Use

					(1,	000 square k	cilometers)
Year	Total	Forests	Farmland	Inland water	Roads <sup>1)</sup>	Building land <sup>2)</sup>	Others
1975	377.5	252.9	57.6	12.8	8.9	12.4	32.9
1985	377.8	253.0	54.8	13.0	10.7	15.0	31.3
1995	377.8	251.4	51.3	13.2	12.1	17.0	32.8
2005	377.9	251.0	47.8	13.4	13.2	18.5	34.0
(%)	(100.0)	(66.4)	(12.6)	(3.5)	(3.5)	(4.9)	(9.0)

1) Including farm roads and forest roads, etc. 2) Including industrial land and other land for buildings.

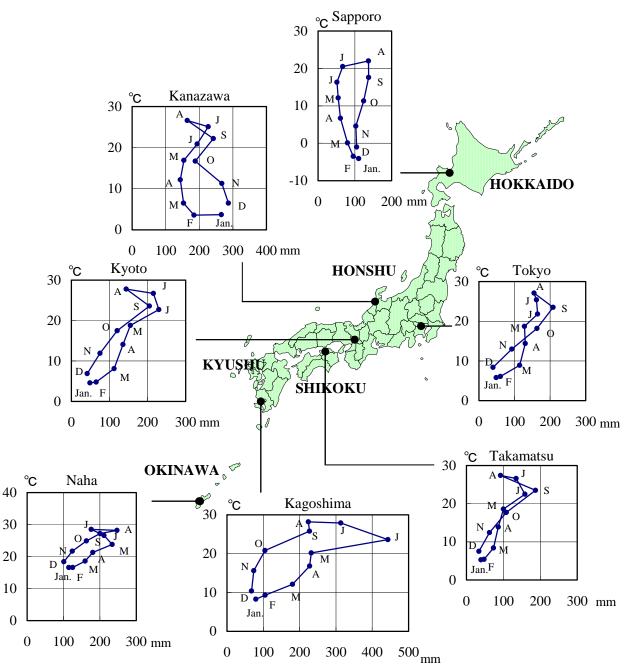
Source: Ministry of Land, Infrastructure, Transport and Tourism.

#### 2. Climate

The Japanese archipelago has a temperate marine climate, with four distinct seasons, an annual average temperature of between 10 to 20 degrees centigrade, and annual precipitation of 1,000 to 2,500 millimeters. Japan typically experiences hot, humid summers and cold, dry winters. The topography of Honshu, however, features a series of major mountain ranges running from north to south. Because of this feature, the northwest monsoon in the winter brings humid conditions with heavy precipitation (snow) to Honshu's Japan Sea side but comparatively dry weather with low precipitation to the Pacific Ocean side. In summer, the winds blow mainly from the southeast, giving rise to hot and humid weather. Another unique characteristic of Japan's climate is that it has two long spells of rainy seasons, one in early summer when southeast monsoon begins to blow, and the other in autumn when the winds cease. From summer to autumn, tropical cyclones generated in the tropical seas develop into typhoons and hit Japan, sometimes causing storm and flood damage.

#### Figure 1.2 Temperature and Precipitation (Normal value)

(1971-2000 average)



Source: Japan Meteorological Agency.

								]	ſemp	eratur	e (°C	) Prec	cipitat	tion (mm)
Observing station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Annual <sup>1)</sup>
	Temp. High	-0.9	-0.3		11.1		21.1		26.1	22.0	15.8	8.1	2.1	12.5
Sapporo	Low	-7.7	-7.2	-3.5	2.7	7.8	12.4	17.1	18.5	13.6	6.9	0.9	-4.4	4.8
	Prec.	111	96	80	61	55	51	67	137	138	124	103	105	1,128
	Temp High	9.8	10.0	12.9	18.4	22.7	25.2	29.0	30.8	26.8	21.6	16.7	12.3	19.7
Tokyo	Temp. $\frac{\text{Hign}}{\text{Low}}$	2.1	2.4	5.1	10.5	15.1	18.9	22.5	24.2	20.7	15.0	9.5	4.6	12.5
	Prec.	49	60	115	130	128	165	162	155	209	163	93	40	1,467
	Tomm High	6.8	6.7	10.5	16.6	21.4	24.5	28.7	30.4	26.0	21.0	15.3	10.0	18.2
Kanazawa	Temp. High Low	0.8	0.6	2.7	7.9	12.6	17.7	22.2	23.1	19.0	13.0	7.4	3.2	10.8
	Prec.	266	184	153	144	154	194	227	164	242	188	267	287	2,470
	Tomm High	8.9	9.3	13.1	19.7	24.4	27.4	31.4	32.9	28.3	22.6	16.9	11.5	20.5
Kyoto	Temp. High Low	1.1	1.1	3.7	8.9	13.7	18.6	22.9	23.9	19.8	13.2	7.6	2.9	11.5
	Prec.	49	65	112	135	155	230	215	144	205	121	75	42	1,545
	Tomm High	9.3	9.6	12.9	19.0	23.6	26.7	30.7	31.7	27.6	22.2	16.8	11.9	20.2
Takamatsu	Temp. High Low	1.2	1.2	3.7	8.9	13.7	18.8	23.1	23.6	19.8	13.2	7.8	3.0	11.5
	Prec.	39	48	73	86	100	159	135	92	187	108	62	34	1,124
	Tomm High	12.6	13.5	16.5	21.3	24.5	27.2	31.5	32.0	29.7	25.1	19.9	15.0	22.4
Kagoshima	Temp. High	4.1	5.4	8.0	12.6	16.7	20.6	24.9	25.1	22.4	16.9	11.5	6.1	14.5
	Prec.	79	105	181	228	232	443	314	224	227	105	74	68	2,279
	Tomm High	19.1	19.2	21.3	24.0	26.4	29.2	31.3	30.9	29.9	27.5	24.2	20.9	25.3
Naha	Temp. High Low	14.3	14.3	16.2	18.9	21.5	24.6	26.4	26.1	25.1	22.7	19.5	16.1	20.5
	Prec.	115	125	160	181	234	212	176	247	200	163	124	101	2,037

Table 1.7Temperature and Precipitation (Normal value) (1971-2000 average)

/	< compared with the second sec		0 /	
	Tomporatura	$\binom{\circ}{C}$ Dro	ainitation	(mm)

1) Annual average for temperature and annual total for precipitation. Source: Japan Meteorological Agency.

### Chapter 2

### **Population**

#### **1. Total Population**

Japan's 2009 total population was 127.51 million. This ranked tenth in the world and made up 1.9 percent of the world's total. Japan's population density measured 343 persons per square kilometer in 2005, ranking fifth among countries with a population of 10 million or more.

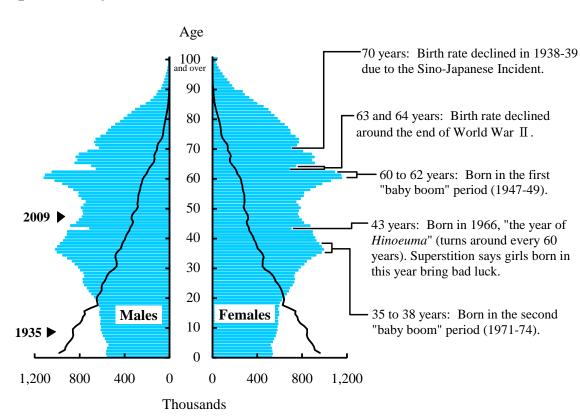


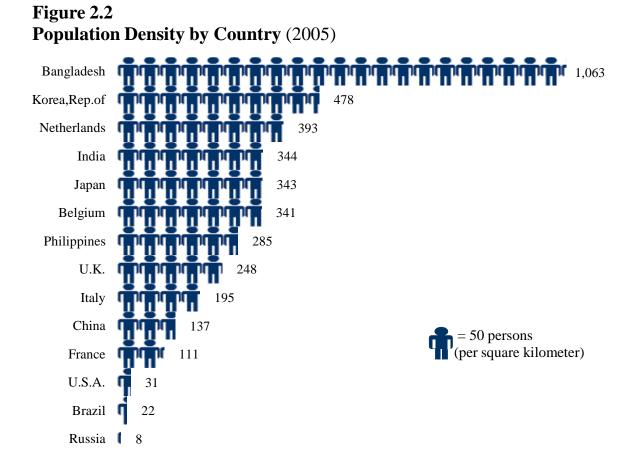
Figure 2.1 Population Pyramid

Source: Statistics Bureau, MIC.

# Table 2.1Countries with a Large Population (2009)

			(Millions)
Country	Population	Country	Population
World	6,829		
China	1,346	Pakistan	181
India	1,198	Bangladesh	162
U.S.A	315	Nigeria	155
Indonesia	230	Russia	141
Brazil	194	Japan	128

Source: Statistics Bureau, MIC; United Nations.



Source: Statistics Bureau, MIC; United Nations.

From the eighteenth century through the first half of the nineteenth century, Japan's population remained steady at about 30 million. However, following the Meiji Restoration in 1868, it began expanding in tandem with the drive to build a modern nation-state. In 1926, it reached 60 million, and in 1967, it surpassed the 100 million mark. However, Japan's population growth has slowed in more recent years, with the annual pace of population growth averaging about one percent from the 1960s through the 1970s. Since the 1980s, it has declined sharply. Japan's total population peaked at 127.84 million in December 2004. The 2005 Population Census showed the figure to be 127.77 million, declining from the previous year for the first time after World War II. The 2009 population estimate was 127.51 million, down by 183,000 from the year before.

	Population	(1,000)	Age of	composition	ı (%)	Average	Population
Year		Males	0 - 14 years	15 - 64	65 and over	annual rate of increase (%)	density (per km <sup>2</sup> )
As of Oc	t. 1 of each y	ear <sup>1)</sup>					
1872	34,806	17,666					91
1900	43,847	22,051	33.9	60.7	5.4	0.83	115
1910	49,184	24,650	36.0	58.8	5.2	1.16	129
1920	55,963	28,044	36.5	58.3	5.3	1.30	147
1930	64,450	32,390	36.6	58.7	4.8	1.42	169
1940	71,933	35,387	36.7	58.5	4.8	1.10	188
1950	84,115	41,241	35.4	59.6	4.9	1.58	226
1955	90,077	44,243	33.4	61.2	5.3	1.38	242
1960	94,302	46,300	30.2	64.1	5.7	0.92	253
1965	99,209	48,692	25.7	68.0	6.3	1.02	267
1970	104,665	51,369	24.0	68.9	7.1	1.08	281
1975	111,940	55,091	24.3	67.7	7.9	1.35	300
1980	117,060	57,594	23.5	67.3	9.1	0.90	314
1985	121,049	59,497	21.5	68.2	10.3	0.67	325
1990	123,611	60,697	18.2	69.5	12.0	0.42	332
1995	125,570	61,574	15.9	69.4	14.5	0.31	337
2000	126,926	62,111	14.6	67.9	17.3	0.21	340
2004	127,787	62,380	13.9	66.6	19.5	0.17	343
2005	127,768	62,349	13.7	65.8	20.1	-0.01	343
2006	127,770	62,330	13.6	65.5	20.8	0.00	343
2007	127,771	62,310	13.5	65.0	21.5	0.00	343
2008	127,692	62,251	13.5	64.5	22.1	-0.06	342
2009	127,510	62,130	13.3	63.9	22.7	-0.14	342
•	on as of Dec.						
2010	127,176	61,868	13.0	63.9	23.1	-0.26	341
2020	122,735	59,284	10.8	60.0	29.2	-0.35	329
2030	115,224	55,279	9.7	58.5	31.8	-0.63	309
2040	105,695	50,467	9.3	54.2	36.5	-0.86	283
2050	95,152	45,320	8.6	51.8	39.6	-1.05	255

# Table 2.2Trends in Population

1) Figures for and before 1910 were as of January 1 of the respective years.

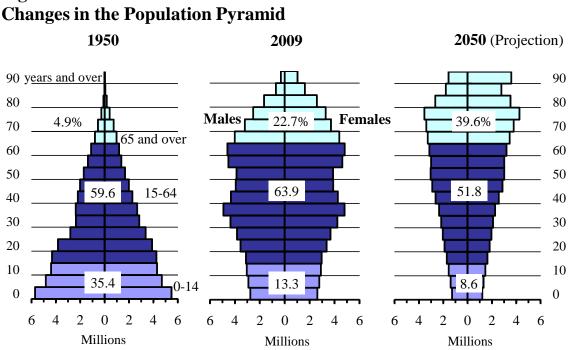
Source: Statistics Bureau, MIC; Ministry of Health, Labour and Welfare; Ministry of Land, Infrastructure, Transport and Tourism.

#### 2. Declining Birth Rate and Aging Population

The population pyramid of 1950 shows that Japan had a standard-shaped pyramid marked by a broad base. The shape of the pyramid, however, has changed dramatically as both the birth rate and death rate have declined. In

#### POPULATION

2009, the population of elderly citizens (65 years and over) was 29.01 million, constituting 22.7 percent of the total population and marking record highs both in terms of number and percentage. This percentage of elderly in the population is the highest in the world. The speed of aging of Japan's population is much faster than in advanced Western European countries or the U.S.A. Although the population of the elderly in Japan accounted for only 7.1 percent of the total population in 1970, 24 years later in 1994, it had almost doubled in scale to 14.1 percent. In other countries with an aged population, it took 61 years in Italy, 85 years in Sweden, and 115 years in France for the percentage of the elderly to increase from 7 percent to 14 percent of the population. These comparisons clearly highlight the rapid progress of demographic aging in Japan.



Source: Statistics Bureau, MIC; Ministry of Health, Labour and Welfare.

Figure 2.3

On the other hand, the percentage of the younger age population in Japan (0-14 years) has been shrinking since 1982. In 2009, the younger age population amounted to 17.01 million, accounting for 13.3 percent of the total population, the lowest level on record since the Population Estimates began. The working-age population (15-64 years) totaled 81.49 million, continuing its decline since 1996. In share terms, it accounted for 63.9 percent of the entire population. As a result, the ratio of the dependent population (the sum of the elderly and younger age population divided by

#### POPULATION

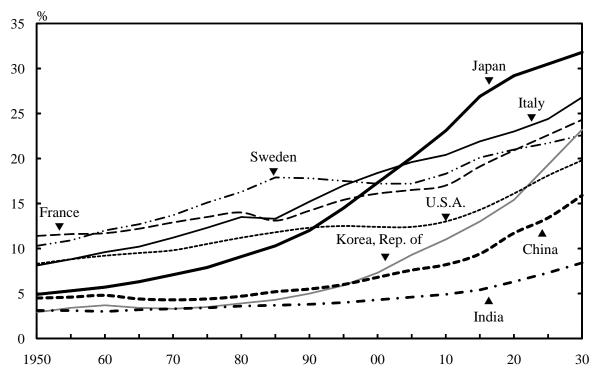
the working-age population) was 56.5 percent. In terms of their proportion of the total population, the elderly have surpassed the younger age group since 1997.

	-	·	•			(%)		
		2005		2030 (projection)				
Country	0-14 years	15-64	65 and	0-14 years	15-64	65 and		
	0 14 years	15 04	over	0 14 years	15 04	over		
Japan	13.7	65.8	20.1	9.7	58.5	31.8		
Germany	14.3	66.8	18.9	12.5	59.3	28.2		
Italy	14.2	66.2	19.6	12.3	60.9	26.8		
France	18.4	65.1	16.5	16.4	59.3	24.3		
Korea, Rep. of	19.1	71.6	9.3	12.6	64.2	23.2		
Canada	17.6	69.3	13.1	16.1	61.2	22.7		
Sweden	17.4	65.4	17.2	17.0	60.3	22.6		
U.K	18.0	65.9	16.1	17.2	62.0	20.9		
U.S.A	20.8	66.8	12.4	18.0	62.3	19.8		
Russia	15.1	71.1	13.8	15.2	65.4	19.4		
China	22.0	70.4	7.6	16.9	67.2	15.9		
Brazil	27.5	66.3	6.2	17.0	69.3	13.7		
India	33.1	62.3	4.6	22.8	68.8	8.4		

# Table 2.3Age Structure of Population by Country

Source: Statistics Bureau, MIC; Ministry of Health, Labour and Welfare; United Nations.

#### Figure 2.4 Proportion of Elderly Population by Country (Aged 65 years and over)



Source: Statistics Bureau, MIC; Ministry of Health, Labour and Welfare; United Nations.

#### **3.** Births and Deaths

Population growth in Japan had primarily been driven by natural increase, while social increase played only a minor part. In 2005, however, the natural change rate (per 1,000 population) turned negative for the first time since 1899; the figure was -0.6 in 2009.

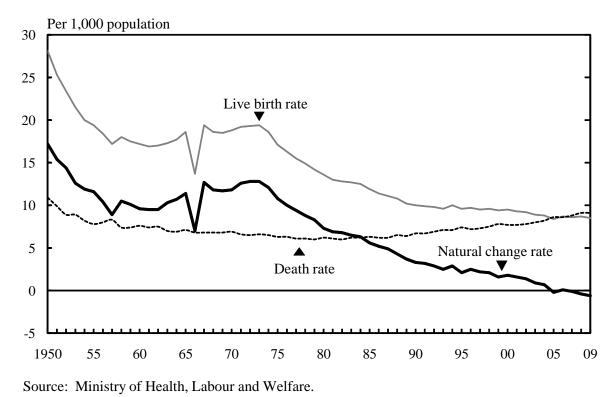
During the second baby boom, the birth rate was at a level of 19 (per 1,000 population) between 1971 and 1973. Since the late 1970s, however, it continued to drop and eventually hit a record low of 8.4 in 2005. Having subsequently repeated an up-and-down pattern, the rate marked 8.5 in 2009, a decrease from 8.7 marked in the previous year.

Table 2.4
Vital Statistics

	Rat	es per 1,00	0 population	Total	Life expectancy at birth			
Year	Live births	Deaths	Infant	Natural	fertility	(years)		
	Live bittils	Deatils	mortality	change	rate <sup>2)</sup>	Males	Females	
1950	28.1	10.9	60.1	17.2	3.65	a) 59.57	a) 62.97	
1955	19.4	7.8	39.8	11.6	2.37	63.60	67.75	
1960	17.2	7.6	30.7	9.6	2.00	65.32	70.19	
1965	18.6	7.1	18.5	11.4	2.14	67.74	72.92	
1970	18.8	6.9	13.1	11.8	2.13	69.31	74.66	
1975	17.1	6.3	10.0	10.8	1.91	71.73	76.89	
1980	13.6	6.2	7.5	7.3	1.75	73.35	78.76	
1985	11.9	6.3	5.5	5.6	1.76	74.78	80.48	
1990	10.0	6.7	4.6	3.3	1.54	75.92	81.90	
1995	9.6	7.4	4.3	2.1	1.42	76.38	82.85	
2000	9.5	7.7	3.2	1.8	1.36	77.72	84.60	
2005	8.4	8.6	2.8	-0.2	1.26	78.56	85.52	
2007	8.6	8.8	2.6	-0.1	1.34	79.19	85.99	
2008	8.7	9.1	2.6	-0.4	1.37	79.29	86.05	
2009	* 8.5	* 9.1	* 2.4	* -0.6	* 1.37	79.59	86.44	

1) The infant mortality rate is per 1,000 live births. 2) The average number of children that would be born alive to a hypothetical cohort of women if, throughout their reproductive years, the age-specific fertility rates for the specified year remained unchanged. a) 1950-52 period.

Source: Ministry of Health, Labour and Welfare.



#### Figure 2.5 Natural Population Change

The general decline in birth rate may partly be attributable to the rising maternal age at childbirth. The average mothers' age at first childbirth rose from 25.6 in 1970 to 29.7 in 2009. The total fertility rate was on a downward trend after dipping below 2.00 in 1975. However, it rose in 2006 for the first time in six years and continued to rise for three consecutive years until 2009, at which point the rate turned out to be unchanged from the previous year: 1.37.

The death rate (per 1,000 population) was steady at 6.0 - 6.3 between 1975 and 1987. Since 1988, however, it has shown uptrend, reflecting the increased percentage of the elderly in the overall population. The death rate was 9.1 in 2009.

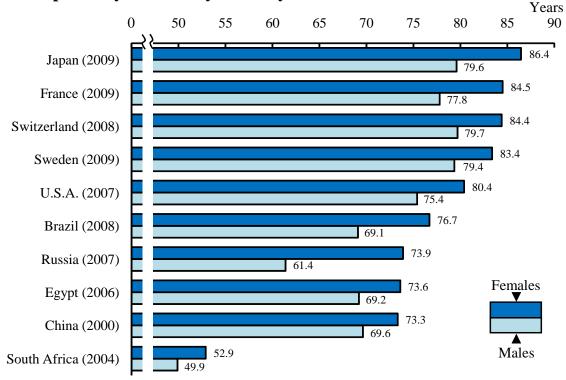
Average life expectancy in Japan climbed sharply after World War II, and is today at the highest level in the world. In 2009, life expectancy at birth was 86.4 years for women and 79.6 years for men.

	Number	ImberDistribution of mothers' age (%)							
Year	of babies	-19	20-24	25-29	30-34	35-39	40 and	bearing first	
	(1,000)	17	20 2 .	20 2)	50 51	00 07	over	child	
1970	1,934	1.0	26.5	49.2	18.5	4.2	0.5	25.6	
1975	1,901	0.8	25.2	53.4	16.8	3.3	0.5	25.7	
1980	1,577	0.9	18.8	51.4	24.7	3.7	0.5	26.4	
1985	1,432	1.2	17.3	47.7	26.6	6.5	0.6	26.7	
1990	1,222	1.4	15.7	45.1	29.1	7.6	1.0	27.0	
1995	1,187	1.4	16.3	41.5	31.3	8.4	1.1	27.5	
2000	1,191	1.7	13.6	39.5	33.3	10.6	1.3	28.0	
2005	1,063	1.6	12.1	31.9	38.1	14.4	1.9	29.1	
2007	1,090	1.4	11.6	29.7	37.9	17.1	2.3	29.4	
2008	1,091	1.4	11.4	29.1	37.1	18.4	2.6	29.5	
2009 *	1,070	1.4	10.9	28.8	36.4	19.6	2.9	29.7	

# Table 2.5Changes of Mothers' Age at Childbirth

Source: Ministry of Health, Labour and Welfare.

#### Figure 2.6 Life Expectancy at Birth by Country



Source: Ministry of Health, Labour and Welfare.

#### 4. Marriages and Divorces

The annual number of marriages in Japan exceeded one million in the early 1970s, which, coupled with the marriage rate (per 1,000 population) hovering over 10.0, showed an apparent marriage boom. However, both the number and rate started declining thereafter. They rose again in the late 1980s but have, though fluctuating repeatedly, essentially been unchanged in recent years. In 2009, 708,000 couples married and the marriage rate was 5.6.

The mean age of first marriage was 30.4 for men and 28.6 for women in 2009, a rise by 2.0 years and 2.7 years, respectively, over the past twenty years. The declining marriage rate and rising marrying age in recent years as described above is one explanation for the dropping birth rate.





Table 2.6Mean Age of First Marriage

Year	Groom	Bride
1950	25.9	23.0
1955	26.6	23.8
1960	27.2	24.4
1965	27.2	24.5
1970	26.9	24.2
1975	27.0	24.7
1980	27.8	25.2
1985	28.2	25.5
1990	28.4	25.9
1995	28.5	26.3
2000	28.8	27.0
2005	29.8	28.0
2006	30.0	28.2
2007	30.1	28.3
2008	30.2	28.5
2009 *	30.4	28.6

Source: Ministry of Health, Labour and Welfare.

In contrast, divorces have shown an upward trend since the 1960s, hitting a peak of 290,000 in 2002. Subsequently, both the number of divorces and the divorce rate have declined for six years straight. However, the trend once again turned upward in 2009, when the number of divorces totaled 253,000, and the divorce rate was 2.01 (per 1,000 population).

#### 5. Households

#### (1) Household Size and Household Composition

The Population Census shows that Japan had 49.06 million households in 2005. Of that total, 57.9 percent were nuclear-family households, and 29.5 percent were one-person households.

From the 1920s to the mid-1950s, the average number of household members remained at about five. However, due to the increase in one-person households and nuclear families since the late 1950s, the size of household was down significantly in 1970, to 3.41 members. The size of household members continued to decline to 2.55 in 2005. Although the Japanese population has shifted into decline, the number of households is expected to continue to increase for some years to come, as the size of the average household will shrink further. The number of households is projected to peak in 2015 and then decrease thereafter.

Year	House- holds (1,000)	Average annual rate of increase (%)	Household members (1,000)	Members per household	Population (1,000)	Average annual rate of increase (%)
1970	30,297	a) 3.00	103,351	3.41	104,665	1.08
1975	33,596	2.09	110,338	3.28	111,940	1.35
1980	35,824	1.29	115,451	3.22	117,060	0.90
1985	37,980	1.18	119,334	3.14	121,049	0.67
1990	40,670	1.38	121,545	2.99	123,611	0.42
1995	43,900	1.54	123,646	2.82	125,570	0.31
2000	46,782	1.28	124,725	2.67	126,926	0.21
2005	49,063	0.96	124,973	2.55	127,768	0.13

Table 2.7Households and Household Members

a) Annual rate of increase between 1960-1970.

Source: Statistics Bureau, MIC.

In terms of household composition, nuclear families accounted for the largest share of total households. One-person households have been on the rise since 1975.

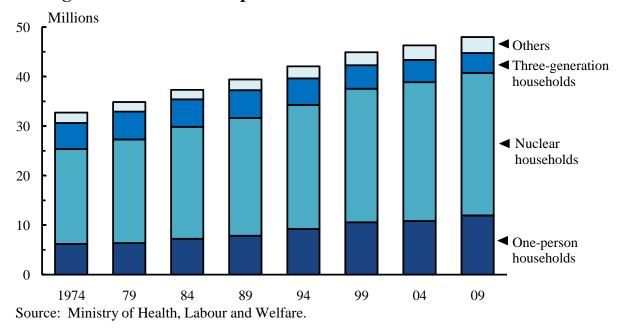


Figure 2.8 Changes in Household Composition

#### (2) Elderly Households

Elderly households (defined as households consisting of individuals aged 65 years or over, with or without unmarried dependents below the age of 18) numbered 1.09 million in 1975, representing 3.3 percent of the total households for that year. By comparison, there were 9.62 million elderly households in 2009, accounting for a sharply increased share of 20.0 percent. The number of one-person elderly households increased 7.6 times between 1975 and 2009: from 611,000 to 4.63 million. In 2009, three out of four one-person elderly households were women's. The number of households consisting only of wife and husband aged 65 years or over reached 4.68 million in 2009, a 10.6-fold increase over the figure in 1975.

								(Tho	usands)
Type of households	1975	1980	1985	1990	1995 <sup>1)</sup>	2000	2005	2008	2009
All households	32,877	35,338	37,226	40,273	40,770	45,545	47,043	47,957	48,013
Elderly households	1,089	1,684	2,192	3,113	4,390	6,261	8,349	9,252	9,623
(percentage)	3.3	4.8	5.9	7.7	10.8	13.7	17.7	19.3	20.0
One-person households	611	910	1,131	1,613	2,199	3,079	4,069	4,352	4,631
Males	138	192	218	295	449	682	1,010	1,157	1,285
Females	473	718	913	1,318	1,751	2,398	3,059	3,195	3,346
Elderly couples	443	722	996	1,400	2,050	2,982	4,071	4,582	4,678
Other elderly households	36	52	65	100	141	199	209	318	314

# Table 2.8Trends in Elderly Households

1) Excluding Hyogo Prefecture where the survey was canceled because of the Great Hanshin Earthquake.

Source: Ministry of Health, Labour and Welfare.

#### 6. Population Density and Regional Distribution

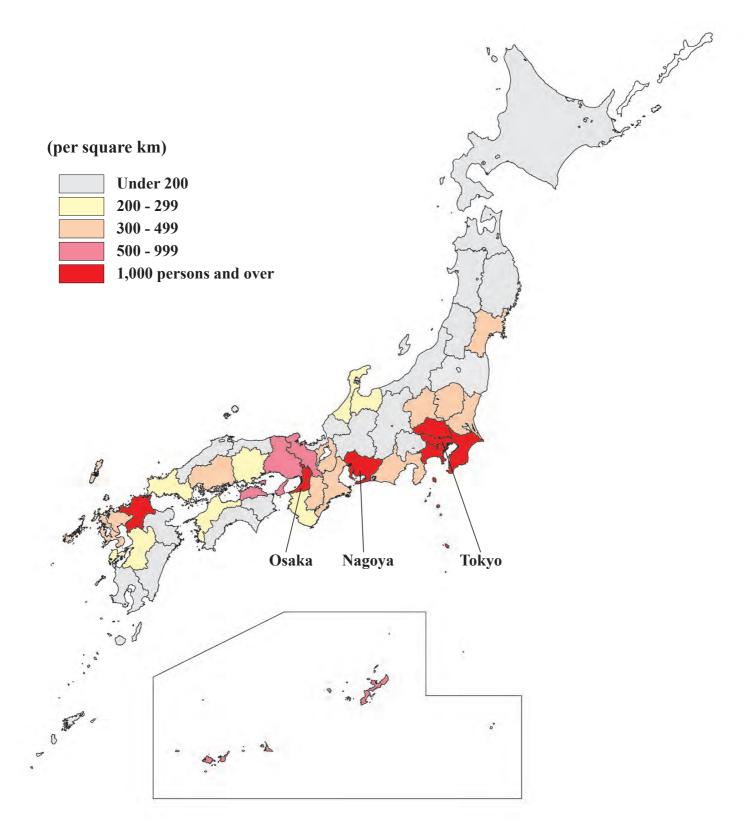
#### (1) **Population Density**

In 2005, Tokyo had the largest population of 12.58 million among Japan's 47 prefectures, followed in decreasing order by the prefectures of Osaka, Kanagawa, Aichi, and Saitama. These five prefectures each had a population of seven million or more, and together accounted for 34.8 percent of the total Japanese population. The order of the five largest prefectures has not changed since 1985.

The population density in Tokyo was the highest among Japan's prefectures, at 5,751 persons per square kilometer. This was almost 17 times the national average (343 per square kilometer).

In 2005, there were 12 cities in Japan with a population of one million or more. Their total population topped 27 million, a figure equivalent to 21.8 percent of the national total. The largest single city was the 23 wards (*ku*) of central Tokyo, with 8.49 million citizens. It was followed in decreasing order by Yokohama-*shi* (3.58 million), Osaka-*shi* (2.63 million), and Nagoya-*shi* (2.22 million).





Source: Statistics Bureau, MIC.

	-			(]	Thousands)
Cities —	Population		Cities —	Population	
Cities —	2000	2005	Cities —	2000	2005
Tokyo <sup>1)</sup>	8,135	8,490	Kyoto-shi	1,468	1,475
Yokohama- <i>shi</i>	3,427	3,580	Fukuoka-shi	1,341	1,401
Osaka- <i>shi</i>	2,599	2,629	Kawasaki-shi	1,250	1,327
Nagoya- <i>shi</i>	2,172	2,215	Saitama-shi	-	1,176
Sapporo-shi	1,822	1,881	Hiroshima-shi	1,126	1,154
Kobe-shi	1,493	1,525	Sendai-shi	1,008	1,025

## Table 2.9Population of Major Cities

1) 23 wards (ku) of Tokyo-to.

Source: Statistics Bureau, MIC.

### (2) Population Distribution

The percentage of the urban population grew since the late 1950s. In 2005, 44.9 percent of the entire national population was concentrated within a 50-kilometer radius from the centers of the three largest cities of Tokyo, Osaka and Nagoya, respectively (together comprising 6.1 percent of Japan's total land area). Population density measured 4,158 persons per square kilometer in the Tokyo area, 2,094 in the Osaka area, and 1,204 in the Nagoya area.

#### **Table 2.10**

### **Population of Three Major Metropolitan Areas**<sup>1)</sup>

				(Thousands)
Areas	1980	1990	2000	2005
Japan	117,060	123,611	126,926	127,768
Tokyo metropolitan area	26,343	29,200	30,724	31,714
Osaka metropolitan area	15,422	16,210	16,567	16,663
Nagoya metropolitan area	7,828	8,432	8,852	9,046
Total of three major metropolitan areas	49,593	53,842	56,143	57,424
Percentage to the total population (%)	42.4	43.6	44.2	44.9

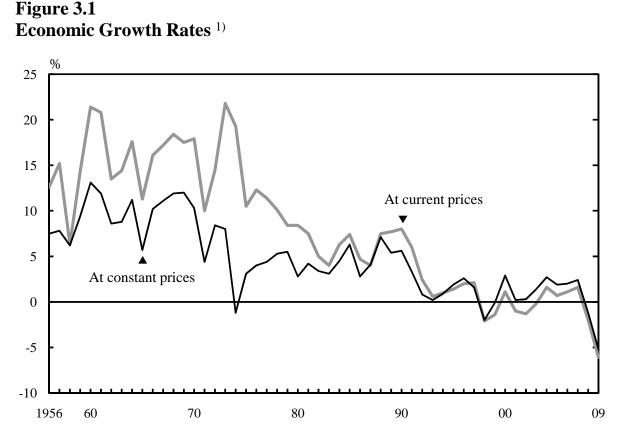
1) Areas within 50 kilometers radius from each municipal office.

## Chapter 3

## Economy

## **1. Economic Development**

After World War II, Japan underwent a period of restoration followed by high economic growth, eventually becoming the economy with the second largest GDP in the world in 1967. Through two oil crises and a prolonged recession that began in the 1990s, Japan has since retained this position as the world's second largest economy. The following is a brief history of Japan's economic development.



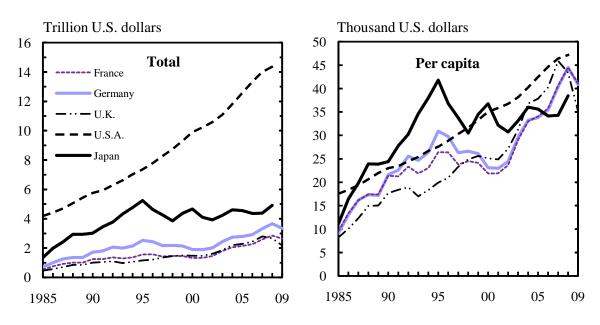
1) Data from 1955 to 1979 are based on the 1968 SNA. Data from 1980 onward are based on the 1993 SNA. Data was calculated using the fixed-based method from 1955 to 1979, and the chain-linked method from 1980 to the present date. Source: Cabinet Office.

During the 1960s, Japan's economy grew at a rapid pace of over 10 percent per annum. This rapid economic growth was supported by: (i) expansion of private investments in plant and equipment, backed by a high rate of personal savings; (ii) a large shift in the working population from primary to secondary industries, and abundant supply of high-quality labor; and (iii) an increase in productivity brought about by adopting and improving foreign technologies.

From the late 1960s until the first half of the 1970s, new social problems emerged that reflected warps left by high economic growth. As a result, steps to tackle environmental pollution, urban issues and social security problems became the central targets of administrators, and countermeasures were taken accordingly.

In the 1970s, the sharp increase of Japan's exports of industrial products to the U.S.A. and Europe began to cause international friction. In 1971, the U.S.A. announced it would end the convertibility of the dollar into gold. In December 1971, Japan revalued the yen from 360 yen against the U.S. dollar, which had been maintained for 22 years, to 308 yen. In February 1973, Japan adopted a floating exchange-rate system.

In October 1973, the fourth Middle East War led to the first oil crisis, triggering high inflation. Accordingly, Japan recorded negative economic growth in 1974 for the first time in the post-war period. Following the second oil crisis in 1978, efforts were made to change Japan's industrial structure from "energy-dependent" to "energy-saving," enabling Japan to successfully overcome inflation.

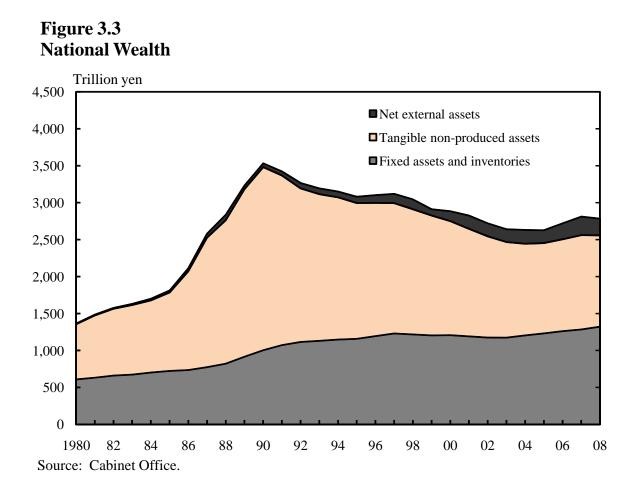


**Figure 3.2 Gross Domestic Product** (Current prices, converted into U.S. dollars)

Source: OECD.

In the 1980s, the trade imbalance with advanced industrial countries expanded because of the yen's appreciation. As part of administrative and financial reforms, Japan National Railways and Nippon Telegraph and Telephone Public Corporation were privatized. As a result, domestic demand-led economic growth was achieved.

At the end of the 1980s, Japan's economy enjoyed favorable conditions, with stable wholesale prices and a low unemployment rate. Corporate profits were at their highest level in history, and corporate failures were at their lowest level in several years, while investments in plant and equipment for manufacturing products, such as semiconductors, were very active. Stock and land prices continued to rise rapidly, and large-scale urban developments and resort facility developments in rural areas progressed at a very fast pace. However, excessive funds flowed into the stock and real estate markets, causing abnormal increases in capital asset values (forming an economic bubble).



The change of Japan's net worth (national wealth) has reflected the status of its economy well. At the end of 1980, Japan's national wealth stood at 1,363 trillion yen, 5.6 times GDP. It then increased, reaching 3,531 trillion yen, 8.0 times GDP, at the end of 1990, due to increasing land and stock prices. The subsequent collapse of the bubble economy resulted in Japan's national wealth dropping to 2,783 trillion yen by the end of 2008.

At the beginning of 1990, stock prices plummeted, followed by sharp declines in land prices. This marked the start of major economic recession (collapse of the bubble economy). Japan's financial and economic systems, which were excessively dependent on land, consequently approached collapse.

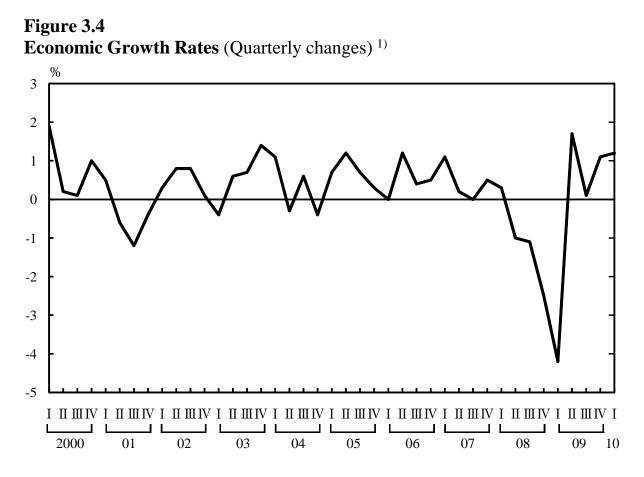
Massive bad debts were created in financial institutions' loan portfolios, as corporate borrowers suffered serious losses due to declining land prices. As a result, shareholders' equity in financial institutions shrank. In 1997, large banks began to fail. In 1998 and 1999, the government injected public money into the banking sector to stabilize the financial system.

The Japanese economy began to make a moderate recovery in April 1999. This, however, was only a temporary phenomenon, as investments in plant and equipment were weak and the economy was too dependent on foreign demand and information and communication technologies. With the global decline in IT demand from mid-2000, Japan's exports to Asia dropped, necessitating adjustments of excess inventory and production facilities. In line with this, the Japanese economy again entered into an economic downturn in 2001.

Following the simultaneous terrorist attacks in the U.S.A. in September 2001, further slowdown of the world economy became a matter of serious concern, resulting in greater uncertainty over the outlook for the Japanese economy. There were several reasons for the long-running stagnation of the Japanese economy. One major reason was that the huge bad debts of Japanese banks had yet to be cleaned up. Lengthy economic recessions aggravated bad debt conditions, which hindered Japan's economic growth. Another reason was that the economic structure of Japan made it impossible to deal flexibly with changes in the economic environment.

### 2. Recent Economic Trends

The Japanese economy maintained a long-lasting recovery since the beginning of 2002. However, the path has not been flat, given the two "soft patches (temporary softening in the market)" in the past and impairment in some parts of the economy.



1) Data based on the 1993 SNA, calculated using the chain-linked method. Growth rates calculated using seasonally adjusted figures, based on constant prices in 2000. Source: Cabinet Office.

The first soft patch was caused by slower export growth following economic slowdowns in the U.S.A. and the Asian region, both Japan's major export destinations, since late 2002. The second soft patch resulted from slower export growth owing to a surplus inventory of information-related producer goods in Japan as demand for IT-related goods declined worldwide since late 2004. During the phase of Japan's economic recovery from the beginning of 2002, there was a common trend where exports were showing signs of steady growth, reflecting a brisk

recovery of the world economy, but then a soft patch set in and pushed exports down, resulting in sluggish growth in both production and personal spending. As exports picked up, the economy broke away from this slower period.

#### Table 3.1

**Gross Domestic Product** (Expenditure approach)<sup>1)</sup>

			(E	Billion yen)
Item	2006	2007	2008	2009
Gross domestic product (GDP)	547,709.3	560,650.8	553,912.7	524,866.9
Domestic demand	527,314.3	533,984.0	526,819.6	505,840.2
Private demand	410,085.0	417,032.0	411,321.5	387,330.7
Private final consumption expenditure	304,965.6	309,857.0	307,754.3	304,722.7
Private Residential Investment	18,454.1	16,676.9	15,318.8	13,150.9
Private plant and equipment	85,013.3	87,258.4	87,376.4	70,502.0
Changes in inventories of private sector	2,091.5	3,818.5	1,701.7	-130.4
Public demand	117,337.3	117,089.9	115,631.5	118,407.4
Government final consumption expenditure	95,203.4	96,655.3	96,910.7	98,327.2
Gross capital formation by public sector	21,880.5	20,264.7	18,552.2	19,926.5
Changes in inventories of public sector	252.0	250.1	337.7	244.4
Net exports of goods and services	20,392.4	26,202.1	26,965.9	16,136.7
Exports of goods and services	80,699.5	87,495.5	88,878.2	67,680.3
(less) Imports of goods and services	60,307.1	61,293.4	61,912.3	51,543.6
(Reference)				
Trading gains/losses	-14,706.3	-18,774.5	-26,401.2	-14,710.3
Gross domestic income		541,876.3	527,511.5	510,156.6
Net income from the rest of the world		18,207.6	17,554.7	13,851.3
Incomes from the rest of the world	,	27,794.6	25,925.8	19,935.1
(less) Incomes to the rest of the world		9,587.0	8,371.1	6,083.8
Gross national income (GNI)	548,224.5	560,083.9	545,066.2	524,007.9

1) Constant prices in 2000; by chain-linked method.

Source: Cabinet Office.

However, with the start of 2008, private consumption and investments in plant and equipment fell flat and so did production, bringing the economic recovery to a standstill. This occurred against the backdrop of soaring crude oil and raw material prices and repercussions from the subprime mortgage loan problems that, since mid-2007, rapidly clouded future prospects for the world economy further. Moreover, after the failure of a major American investment bank in September 2008, the situation worsened and even developed into a global financial crisis. Stock prices plummeted in Japan as well, which, combined with the sharp appreciation of the yen, further undermined business and household confidence.

As signs of recovery began to appear in the economy in April 2009, the Cabinet Office decided to define, tentatively, March 2009 to be the trough of the economic cycle. In November 2009, the government also summed up price movements to conclude that they were "in a state of moderate deflation."

As of June 2010, the economy is picking up steadily, paving the way for a self-sufficient recovery. Since February 2009, the overall index of consumer prices (with 2005 as the base year = 100) has remained constantly below the previous year's levels. On the other hand, the unemployment rate (a seasonally adjusted figure) reached 5.6 percent, a record high, in July 2009 and the 2009 annual average rose 1.1 percentage points from the previous year to 5.1 percent, marking the highest increase ever. The fact that the unemployment rate persists at high levels, which hit 5.2 percent in May 2010, implies that employment conditions still remain bleak.

### **3. Industrial Structure**

Japan's industrial structure has undergone a major transformation in the half-century since the end of World War II. Looking at changes in the industrial structure in terms of industry share of employed persons and GDP over time, we see those in the primary industry in particular have fallen dramatically since 1970, when Japan experienced a long-standing rapid economic growth. During the 1980s, the secondary industry's share of employed persons and GDP also began to decline gradually. On the other hand, the tertiary industry's shares of both employed persons and GDP have risen consistently.

In 1970, the primary industry accounted for 19.3 percent of employed persons, the secondary industry for 34.0 percent, and the tertiary industry for 46.6 percent. In 2005, the corresponding shares of these three sectors were 4.8 percent, 26.1 percent and 67.2 percent, respectively.

As for GDP by type of economic activity, in 1970, the primary, secondary, and tertiary industries accounted for 5.9 percent, 43.1 percent and 50.9 percent, respectively. In 2005, these figures for the primary, secondary, and tertiary industries were 1.5 percent, 26.8 percent, and 71.7 percent, respectively.

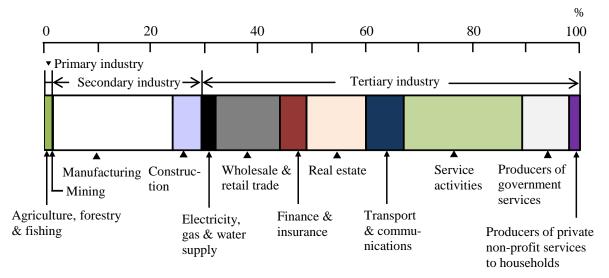
(%)

	Emj	ployed person	s <sup>1)</sup>	Gross don	nestic product	t (GDP) <sup>2)</sup>
Year	Primary	Secondary	Tertiary	Primary	Secondary	Tertiary
	industry	industry	industry	industry	industry	industry
1950	48.5	21.8	29.6	-	-	-
1955	41.1	23.4	35.5	19.2	33.7	47.0
1960	32.7	29.1	38.2	12.8	40.8	46.4
1965	24.7	31.5	43.7	9.5	40.1	50.3
1970	19.3	34.0	46.6	5.9	43.1	50.9
1975	13.8	34.1	51.8	5.3	38.8	55.9
1980	10.9	33.6	55.4	# 3.5	# 36.2	# 60.3
1985	9.3	33.1	57.3	3.0	34.9	62.0
1990	7.1	33.3	59.0	2.4	35.4	62.2
1995	6.0	31.6	61.8	1.8	30.4	67.8
2000	# 5.1	# 29.2	# 64.5	1.7	28.5	69.8
2005	4.8	26.1	67.2	1.5	26.8	71.7

# Table 3.2Changes in Industrial Structure

1) Due to the revision of the Japan Standard Industrial Classification, the figures from 2000 onward are not strictly consistent with those for 1995 or earlier. 2) Data from 1955 to 1979 are based on the 1968 SNA. Data from 1980 onward are based on the 1993 SNA. Source: Statistics Bureau, MIC; Cabinet Office.

#### **Figure 3.5 Gross Domestic Product by Type of Economic Activity** (2008) (Constant prices in 2000)

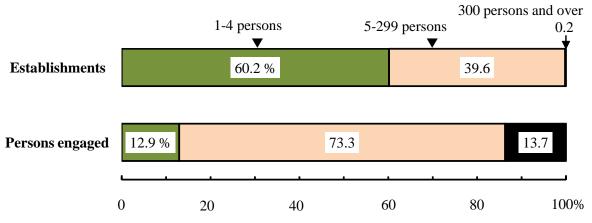


Source: Cabinet Office.

Next, let us examine changes in industrial structure using the "Establishment and Enterprise Census." This census covers every business establishment located in Japan, including those of the national and local governments (excluding unincorporated establishments in agriculture, forestry and fisheries). In 2006, there were 5.91 million establishments in Japan, at which a total of 58.63 million persons were employed. The average number of persons engaged per establishment was 9.9 persons. Large-scale establishments employing 300 or more persons accounted for 0.2 percent of the total.

A comparison of the numbers of establishments and persons engaged in the tertiary industry between 2001 and 2006 showed a great increase in "medical, health care and welfare," and a substantial decrease in "finance and insurance" and "wholesale and retail trade."

## **Figure 3.6 Shares of Establishments and Persons Engaged by Scale of Operation** (2006)



Source: Statistics Bureau, MIC.

	Numb		Persons e	
	establishmer	nts (1,000)	(1,000)	
	2001	2006	2001	2006
Total	. 6,350	5,911	60,158	58,634
By industry				
Primary industry				
Agriculture, forestry and fisheries	. 22	22	251	248
Secondary industry				
Mining	. 4	3	47	34
Construction	. 607	549	4,944	4,144
Manufacturing	. 643	548	10,956	9,922
Tertiary industry				
Electricity, gas, heat supply and water	. 10	9	324	283
Information and communications	. 60	59	1,466	1,593
Transport	. 139	131	2,975	2,914
Wholesale and retail trade	. 1,807	1,605	13,316	12,401
Finance and insurance	. 97	84	1,638	1,429
Real estate	329	320	1,003	1,015
Eating and drinking places, accommodations	. 870	788	5,117	4,875
Medical, health care and welfare	. 298	351	4,529	5,588
Education, learning support	232	232	2,813	2,940
Compound services	. 54	49	753	707
Services, n.e.c.	1,133	1,119	8,149	8,690
Government, n.e.c.	. 46	42	1,877	1,852
By type of legal organizations				
Privately owned	6,138	5,723	54,912	54,184
Sole proprietorships		2,735	9,006	7,559
Corporations		2,955	45,761	46,495
Companies	. 2,665	2,605	40,620	39,963
Unincorporated organizations		32	145	130
National and local governments		188	5,245	4,450
By number of persons engaged			,	ŗ
1 - 4 persons	. 3,867	3,538	8,422	7,588
5 - 9 persons	,	1,124	7,896	7,327
10 - 29 persons		883	14,642	14,256
30 - 99 persons		273	13,434	13,421
100 - 299 persons		50	7,974	7,994
300 and over		12	7,789	8,050
Dispatched or subcontracted employees only		30	.,	

# Table 3.3Number of Establishments and Persons Engaged

Source: Statistics Bureau, MIC.

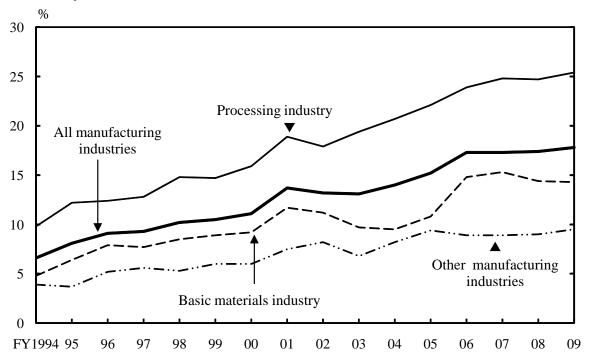
One of the main reasons for the accelerated shift to a service-oriented economy was the advancement of information technology, alongside which supporting industries that deliver software and information have grown. Another reason was changes in consumer demand. From the late 1970s in particular, incomes have risen, leisure time has increased, and more couples have double incomes. Affected by these changes, consumer lifestyles have largely changed, and demand for services has risen.

On the other hand, Japan's domestic manufacturing industry has continued to shrink amidst ongoing economic globalization. Imports of textiles and consumer durable goods have increased at a rapid pace in recent years, and the share of imports from China, among other sources, has risen. Furthermore, Japanese companies have begun manufacturing products in China and other Asian countries, and increased imports of these products into Japan have elicited the effect of pushing down the prices of finished products.

The percentage of companies in the manufacturing sector that have overseas production sites was 67.5 percent in fiscal 2009 and is expected to remain at the fiscal 2007 level. In terms of output, overseas production accounted for 17.8 percent in fiscal 2009 and is expected to rise in the future. A category-by-category comparison shows that the percentage of overseas production is likely to go up in all industry categories, with the exception of the medical and pharmaceutical industry. Of total overseas production output in the manufacturing sector, exports bound for Japan constituted 24.1 percent.

As a reason for setting up production bases overseas, many Japanese companies in the manufacturing sector cite their intention to cater to local demand for products. Other areas increasingly drawing the attention of Japanese manufacturing companies as potential operation locations are China, as well as India and Vietnam. In particular, increasing importance is attached to China as an export market, production base location and market competitor.





1) Figures for FY2009 are estimates. Source: Cabinet Office.

## Chapter 4

## Finance

## **1. National and Local Government Finance**

### (1) National Government Finance

Japan's fiscal year starts in April, and ends in March of the following year. In setting the national budget, the government submits a proposed budget for the upcoming fiscal year to the Ordinary Session of the Diet, which begins in January. The proposal is then discussed, and an initial budget is approved usually before the fiscal year begins in April. In the event that the Diet does not approve the budget by the end of March, an interim budget comes into effect. The interim budget is effective from the beginning of April until such time when the proposed budget is approved. If it becomes necessary to amend the budget in the course of a fiscal year, the government submits a supplementary budget for Diet approval.

Japan's national budget consists of the general account, special accounts, and the budget for government-affiliated agencies. Using revenues from general sources such as taxes, the general account covers core national expenditures such as social security, culture/education/science and national defense. Special accounts are accounts established for the national government to carry out projects with specific objectives, and are managed and administered independent of the general account. The number and particulars of special accounts change from year to year; for fiscal 2010, a total of 18 special accounts have been established, including the national debt consolidation fund and the grants of allocation tax and transferred tax. Following a review of the special accounts, they will be reduced to a total of 17 by the end of fiscal 2011. Government-affiliated agencies are entities established by special laws and are entirely funded by the government. Currently, the Japan Finance Corporation, the Okinawa Development Finance Corporation, and the Japan International Cooperation Agency (Loan Aid Section) are operated as government-affiliated agencies.

				(Billion yen)
Fiscal year	General account	Special accounts	Net total <sup>1)</sup>	Government- affiliated agencies
Revenue				
1995	80,557	267,814	193,858	7,657
2000	93,361	341,146	234,670	7,019
2005	89,000	452,141	283,202	4,710
2006	84,413	501,536	303,181	4,503
2007	84,553	395,920	247,230	2,604
2008 <sup>2)</sup>	91,081	409,854	258,307	a) 2,102
2009 <sup>3)</sup>	88,548	370,910	220,106	1,831
2010 <sup>3)</sup>	92,299	381,366		2,200
Expenditure				
1995	75,939	232,466	155,325	7,536
2000	89,321	305,776	199,466	6,988
2005	85,520	401,184	230,183	4,103
2006	81,445	450,580	250,923	3,793
2007	81,843	353,283	203,515	2,065
2008 <sup>2)</sup>	91,011	370,347	220,592	a) 1,955
2009 <sup>3)</sup>	88,548	354,915	206,516	2,126
2010 <sup>3)</sup>	92,299	367,074		3,135

## Table 4.1Revenue and Expenditure of National Government Finance

1) Net total deducting duplications of general account and special accounts.

2) Final estimates as of the end of December 2008. 3), a) Initial budget.

Source: Ministry of Finance.

The size of the general account budget expenditure expanded to 89.32 trillion yen in fiscal 2000. This expansion was caused by the increasing costs of social security, which have been triggered by the rapidly aging society, and a series of economic measures implemented after the collapse of the bubble economy. Since then, the national government finance has been facing severe difficulties.

The size of the general account budget for fiscal 2010 was 92.30 trillion yen, an increase of 3.75 trillion yen (4.2 percent) from the initial budget of fiscal 2009. This is equivalent to 19.4 percent of the fiscal 2010 GDP, forecasted by the government at 475.2 trillion yen.

(Billion yen)

Fiscal year	Total	General expendi- tures	Social security	Education and science	Pensions	National defense	Public works
	(A)+(B)+(C)	(A)					
1995	75,939	50,816	14,543	6,667	1,707	4,720	12,795
2000	89,321	52,046	17,636	6,872	1,418	4,907	11,910
2005	85,520	49,343	20,603	5,701	1,065	4,878	8,391
2006	81,445	46,708	20,555	5,331	992	4,817	7,709
2007	81,843	47,621	21,141	5,458	941	4,758	7,257
2008 1)	88,911	53,292	22,831	5,634	852	4,818	7,282
2009 <sup>2)</sup>	88,548	51,731	24,834	5,310	787	4,774	7,070
2010 <sup>2)</sup>	92,299	54,172	27,269	5,586	714	4,790	5,773
Fiscal year	Economic cooperation	Small- and medium-sized business promotion	Energy measures	Food stable supply	Others	National debt service	Local allocation tax grants, etc.
year	cooperation	medium-sized business promotion	measures	stable supply		debt service (B)	allocation tax grants, etc. (C)
year 	cooperation 1,034	medium-sized business promotion 623	measures 708	stable supply 269	7,751	debt service (B) 12,820	allocation tax grants, etc. (C) 12,302
year 1995 2000	cooperation 1,034 1,012	medium-sized business promotion 623 933	measures 708 677	stable supply 269 247	7,751 6,434	debt service (B) 12,820 21,446	allocation tax grants, etc. (C) 12,302 15,829
year 1995 2000 2005	cooperation 1,034 1,012 784	medium-sized business promotion 623 933 237	measures 708 677 493	stable supply 269 247 657	7,751 6,434 6,536	debt service (B) 12,820 21,446 18,736	allocation tax grants, etc. (C) 12,302 15,829 17,441
year 1995 2000 2005 2006	cooperation 1,034 1,012 784 784	medium-sized business promotion 623 933 237 240	measures 708 677 493 471	stable supply 269 247 657 610	7,751 6,434 6,536 5,200	debt service (B) 12,820 21,446 18,736 18,037	allocation tax grants, etc. (C) 12,302 15,829 17,441 16,701
year 1995 2000 2005 2006 2007	cooperation 1,034 1,012 784 784 784 787	medium-sized business promotion 623 933 237 240 418	measures 708 677 493 471 866	stable supply 269 247 657 610 674	7,751 6,434 6,536 5,200 5,321	debt service (B) 12,820 21,446 18,736 18,037 19,290	allocation tax grants, etc. (C) 12,302 15,829 17,441 16,701 14,932
year 1995 2000 2005 2006 2007 2008 <sup>1)</sup>	cooperation 1,034 1,012 784 784	medium-sized business promotion 623 933 237 240	measures 708 677 493 471	stable supply 269 247 657 610	7,751 6,434 6,536 5,200	debt service (B) 12,820 21,446 18,736 18,037	allocation tax grants, etc. (C) 12,302 15,829 17,441 16,701
year 1995 2000 2005 2006 2007	cooperation 1,034 1,012 784 784 784 787	medium-sized business promotion 623 933 237 240 418	measures 708 677 493 471 866	stable supply 269 247 657 610 674	7,751 6,434 6,536 5,200 5,321	debt service (B) 12,820 21,446 18,736 18,037 19,290	allocation tax grants, etc. (C) 12,302 15,829 17,441 16,701 14,932

# Table 4.2Expenditure of General Account

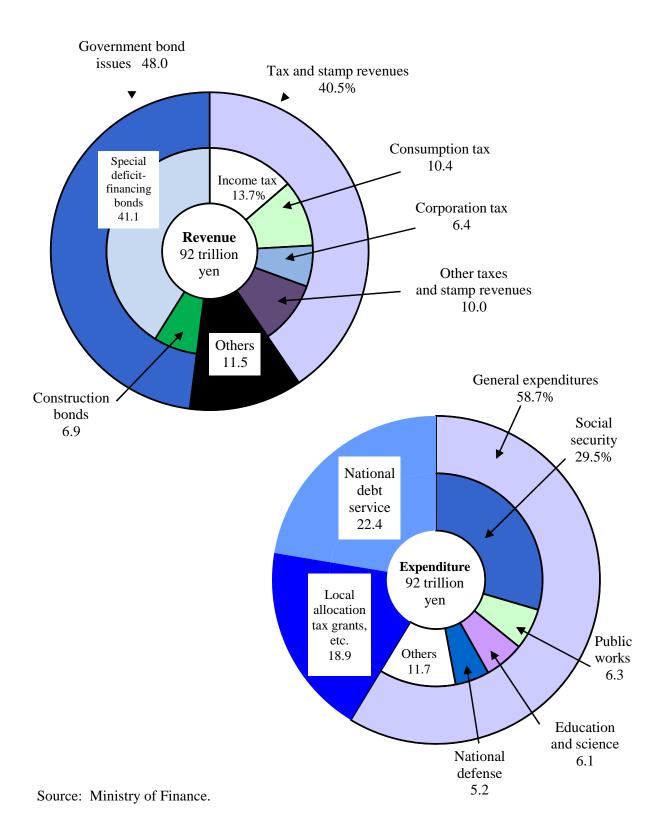
1) Revised budget. 2) Initial budget.

Source: Ministry of Finance.

In fiscal 2010, major expenditures from the initial general account budget include social security (29.5 percent), national debt service (22.4 percent), local allocation tax grants, etc. (18.9 percent), public works (6.3 percent), and education and science (6.1 percent).

With regard to revenue sources for the fiscal 2010 initial general account budget, income tax, consumption tax and corporation tax account for 30.5 percent. Even with the addition of other taxes and stamp revenues, these revenue sources only amount to 40.5 percent of the total revenue.





### (2) Local Government Finance

There are two budget categories in the local government finance: the ordinary account and the public business accounts. The former covers all kinds of expenses related to ordinary activities of the prefectural and municipal governments. The latter covers the budgets of independently accounted enterprises such as public enterprises (water supply and sewerage utilities, hospitals, etc.), the national health insurance account and the health care account for the elderly.

While expenditures such as national defense are administered solely by the national government, a large portion of expenditures that directly relate to the people's lives are disbursed chiefly through local governments. In particular, a high proportion of the following expenditures are disbursed through local governments: public hygiene and sanitation expenses, which include areas such as medical service and waste disposal; school education expenses; expenses covering judicial, police and fire services; and public welfare expenses, which cover the development and management of welfare facilities for children, the elderly and the mentally and physically challenged.

The revenue composition of local governments usually remains almost the same each fiscal year, while their budget scale and structure vary from year to year. The largest portion of fiscal 2007 (net) revenues came from local taxes, accounting for 44.2 percent of the total. The second-largest source, 16.7 percent, was local allocation tax grants, which are allocations from the national government to local governments from national tax revenues, in certain percentages of income tax, corporation tax, liquor tax, consumption tax and tobacco tax revenues, to secure financial resources for standard public services and basic social infrastructure so that they should be available to residents of all regions. Local governments with stable tax revenues do not receive local allocation tax grants, though such comprise a large proportion of revenues in financially-fragile local governments.

				(B	Sillion yen)
Item	FY2003	FY2004	FY2005	FY2006	FY2007
Revenue	94,887	93,442	92,936	91,528	91,181
Local taxes	32,666	33,539	34,804	36,506	40,267
Local allocation tax grants	18,069	17,020	16,959	15,995	15,203
Treasury disbursements	13,030	12,350	11,778	10,416	10,222
Local government bonds	13,789	12,375	10,376	9,622	9,584
Expenditure	92,582	91,248	90,697	89,211	89,148
General administration	9,039	8,941	8,737	8,618	8,906
Public welfare	14,540	15,132	15,693	16,259	16,976
Labor	374	359	317	296	276
Sanitation	5,896	5,785	5,707	5,510	5,436
Civil engineering work	16,439	15,235	14,417	13,853	13,391
Education	17,201	16,910	16,578	16,472	16,432

# Table 4.3Local Government Finance <sup>1)</sup> (Ordinary account)

1) Settled figures of the net total of prefectural and municipal government accounts after deducting duplications.

Source: Ministry of Internal Affairs and Communications.

### (3) National and Local Government Finance

The net total indicates the actual amount of governmental expenditures after eliminating duplications such as the transfer of funds between different accounts in the national budget, the local allocation tax grants and other subsidies from the national government to local governments. In the initial budget for fiscal 2009, the gross total of national government expenditure was 446 trillion yen. However, after eliminating duplications, the net total was 208 trillion yen. Furthermore, the local public finance program, which consists of the estimated sum of ordinary accounts for the following fiscal year for all local governments, amounted to 83 trillion yen. Therefore, after eliminating duplications between national and local accounts (29 trillion yen), the net total of both national and local government expenditures combined was 262 trillion yen.

#### FINANCE

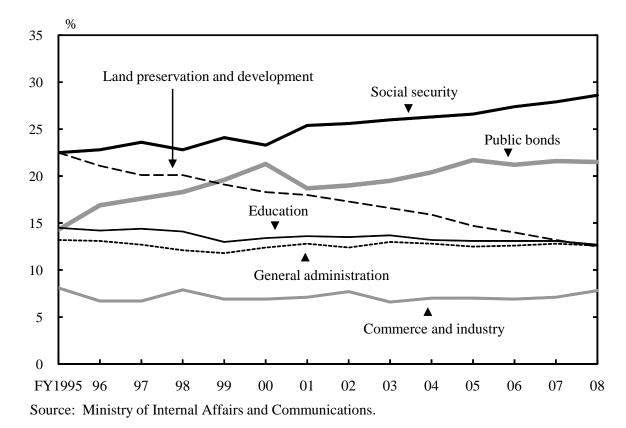
					(B	illion yen)	
Item –	Expenditures						
	FY1995	FY2000	FY2005	FY2007	FY2008	FY2009	
General account	70,987	84,987	82,183	82,909	83,061	88,548	
Special accounts	241,718	318,689	411,944	361,880	368,448	354,915	
Government-affiliated							
agencies	8,086	7,661	4,678	2,343	1,956	2,126	
Gross total (national)	320,792	411,337	498,805	447,132	453,465	445,589	
Duplications	160,054	200,435	257,490	236,386	239,366	237,338	
Net total (national)	160,738	210,902	241,316	210,746	214,099	208,251	
Local public							
finance program	82,509	88,930	83,769	83,126	83,401	82,556	
Gross total							
(national + local)	243,247	299,832	325,084	293,872	297,500	290,807	
Duplications	32,035	37,216	32,689	27,631	27,871	29,173	
Net total							
(national + local)	211,213	262,616	292,395	266,242	269,629	261,634	

# Table 4.4Expenditures of National and Local Governments (Initial budget)

Source: Ministry of Finance.

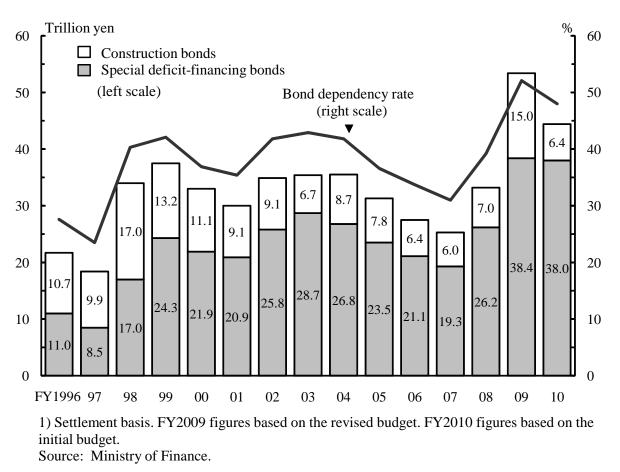
In fiscal 2008, the net total of national and local government expenditures was 270 trillion yen, approximately half of which, net of overlaps, were expenditures "directly related to people's lives." The national government disbursed 41 percent of this amount, while the local governments disbursed 59 percent.

#### FINANCE



#### **Figure 4.2 Trends in Ratio of Net Total National and Local Expenditures by Function**

A function-by-function breakdown of expenditures "directly related to people's lives" showed that social security expenditure accounted for the largest portion (28.6 percent), followed by public bonds (21.5 percent), education (12.7 percent), and then general administration (12.6 percent). Public bonds are issued to compensate for shortages of national and local revenues. Their issue volumes have increased mainly due to, for example, economic stimulus measures and decreasing tax revenues since 1992. A rising amount of public bond redemptions, among other factors, has resulted in public bonds making up a high percentage of government expenditures net of overlaps.



#### **Figure 4.3 Trends in National Government Bond Issue**<sup>1)</sup>

Japan's ratio of outstanding general government debt to GDP, a stock measure in a fiscal context, has been deteriorating rapidly due to its public bond issues over a series of years and is now the worst among major industrial countries.

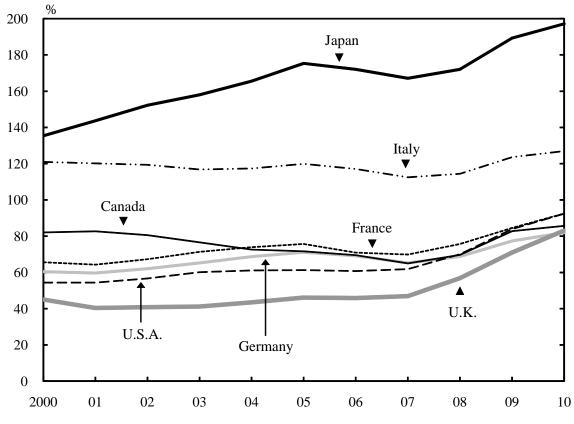


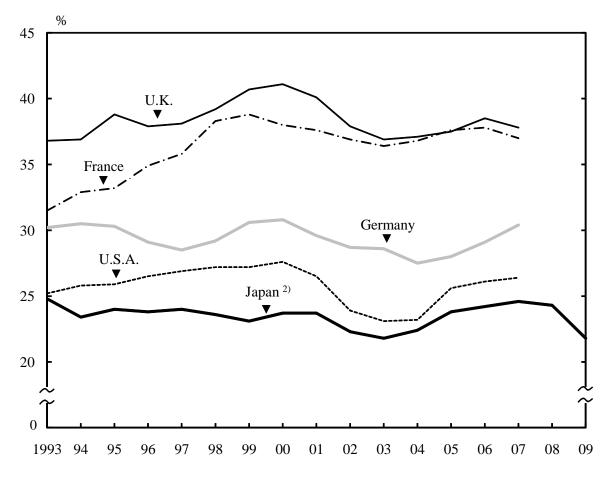
Figure 4.4 Ratio of General Government Gross Debt to GDP

Source: Ministry of Finance.

### (4) **Tax**

Taxes consist of national tax (income tax, corporation tax, etc.), which is paid to the national government, and local tax, which is paid to the local government of the place of residence. The ratio of taxation burden, which is the ratio of national and local taxes to national income, was 18.3 percent in fiscal 1975. This ratio gradually increased thereafter, reaching 27.7 percent in fiscal 1990. Since then, however, the ratio has decreased due to the decline in tax revenue arising from the recession that ensued after the bubble economy ended, showing 21.8 percent in fiscal 2003. In fiscal 2010, it was 21.5 percent in terms of national and local taxes combined (11.7 percent for national tax and 9.8 percent for local tax). Japan's ratio is lower in comparison with other major industrial countries. Nevertheless, there is a possibility that the taxation burden will become heavier due to an increase in welfare and pension-related spending as the population ages.





1) Actual basis. 2) Fiscal year. FY2009 figure is estimate. Source: Ministry of Finance.

## 2. Bank of Japan and Money Stock

As the central bank, the Bank of Japan (i) issues Bank of Japan notes, or the currency of Japan; (ii) manages and stores treasury funds and provide loans to the government; (iii) provides deposit and loan services to general financial institutions; and (iv) implements monetary policies by adjusting the level of money stock to promote sound development of the economy.

At the end of 2009, currency in circulation totaled 85.51 trillion yen (80.95 trillion yen in Bank of Japan notes and 4.56 trillion yen in coins), down 0.6 percent from the year before.

			(Billion yen)
Year	Bank of Japan notes	Coins	Total
2005	79,271	4,502	83,773
2006	79,837	4,529	84,365
2007	81,278	4,577	85,855
2008	81,478	4,590	86,069
2009	80,954	4,556	85,511

#### Table 4.5

#### Currency in Circulation (Outstanding at year-end)

Source: Bank of Japan.

#### Table 4.6

Money Stock<sup>1) 2)</sup>

						(Billion yen)
		_				Broadly-
Year	M2	M3	M1	Quasi-money	CDs	defined liquidity
2005	708,990	1,032,146	483,808	526,369	21,969	1,349,780
2006	713,793	1,026,270	484,241	519,139	22,890	1,395,605
2007	728,538	1,033,127	486,783	523,921	22,423	1,433,201
2008	741,707	1,040,615	481,752	536,253	22,610	1,425,400
2009	764,386	1,063,741	486,935	551,168	25,638	1,439,868

 Average outstanding. December of each year. 2) "Money stock" indicates the balance of currency held by corporations, individuals, local governments, etc.
 Source: Bank of Japan.

#### FINANCE

The Bank of Japan compiles and publishes statistics on the following indicators: (i) M1, or cash currency in circulation plus deposit money; (ii) M2, or cash currency in circulation plus deposits in banks, etc. in Japan; (iii) M3, or M1 plus quasi-money plus CDs (certificates of deposit); and (iv) broadly-defined liquidity, which covers a broad range of liquidity, including government securities. The average outstanding money stock as of December 2009 was 487 trillion yen in M1 and 764 trillion yen in M2.

The basic discount rate and basic loan rate (formerly referred to as the "official discount rate") is the interest rate on loans charged by the Bank of Japan to financial institutions. The rate was frozen at 0.50 percent for the period from September 1995 to February 2001. However, it was subsequently lowered gradually, reaching 0.10 percent in September 2001, and this extremely low interest rate level was maintained for several years. In view of Japan's economic recovery that followed, the rate was raised in stages, up to 0.40 percent in July 2006, and 0.75 percent in February 2007. However, the rate was cut in stages to address the rapidly deteriorating economy in the wake of the Lehman shock, down to 0.50 percent in October 2008 and then to 0.30 percent in December of the same year.

Table 4.7
<b>Financial Markets</b> (Interest rates, etc.)

					(% per annum)
End of year	Basic discount rate and basic loan rate	Call rates <sup>1)</sup>	Prime lending rates <sup>2)</sup>	Loan contract rates <sup>3)</sup>	10 years' Govt. bonds yields to subscribers
2000	0.50	0.20	1.500	1.783	1.663
2001	0.10	0.002	1.375	1.569	1.311
2002	0.10	0.002	1.375	1.525	1.007
2003	0.10	0.001	1.375	1.464	1.380
2004	0.10	0.002	1.375	1.399	1.445
2005	0.10	0.004	1.375	1.270	1.456
2006	0.40	0.275	1.625	1.450	1.634
2007	0.75	0.459	1.875	1.673	1.478
2008	0.30	0.103	1.675	1.494	1.382
2009	0.30	0.094	1.475	1.256	1.246

(% per annum)

1) Uncollateralized overnight. 2) Short-term loans.

3) Average of short-term loan contracts of domestically licensed banks.

Source: Bank of Japan.

## **3. Financial Institutions**

In addition to the Bank of Japan, Japan's financial system is comprised of private and public financial institutions. Private financial institutions include those that accept deposits (banks, credit depositories, agricultural cooperatives, etc.) and those that do not (securities companies, insurance companies, etc.).

As to the latest number of offices, including the branches of financial institutions operated domestically, post offices handling postal savings had the largest network with 24,280 offices. This was followed by domestically licensed banks, including city banks and regional banks, with a combined total of 13,437 offices and branches. Securities companies operated at 2,254 offices including branches. Major banks accelerated mergers and restructuring in the process of financial system reform, and have now generally come to an end. Regional banks and credit depositories, though, have still expanded their business base through mergers.

Institutions	Reference date	Total	Head offices	Branches	Overseas offices
Domestically licensed banks					
City banks	Sep. 2009	2,467	6	2,347	114
Regional banks	Sep. 2009	7,464	64	7,386	14
Regional banks II	Sep. 2009	3,229	44	3,185	-
Trust banks	Sep. 2009	277	6	262	9
Financial institutions for small busines	S				
Credit depositories	Feb. 2010	7,620	272	7,348	-
Credit cooperatives	Feb. 2010	1,764	160	1,604	-
Securities companies <sup>1)</sup>	Jan. 2010	2,254	307	1,947	-
Agricultural cooperatives	. Mar. 2009	8,998	-	-	-
Post offices		24,280	-	-	-

# Table 4.8Number of Financial Institutions

1) Excluding branch offices of foreign securities firms in Japan.

Source: Japanese Bankers Association; Shinkin Central Bank Research Institute;

Community Bank Shinyo Kumiai; Japan Securities Dealers Association; The Norinchukin Bank; Japan Post Net Work Co., Ltd.

#### FINANCE

For a long time, the business role of each type of financial institution had been clearly divided and regulated by specialized systems. However, the deregulation and reform of financial systems--known as the Big Bang--produced dramatic changes overseas, eventually causing significant alterations in the Japanese financial system. A rapid surge in asset prices from the mid-1980s and the following correction of asset prices in the 1990s created a massive expansion of loans and huge bad debts in their wake. In the financial crisis between 1997 and 1998, several large financial institutions went bankrupt. In 1998, laws were enacted to stabilize the financial system, and measures including temporary government control were developed to deal with bankrupt financial institutions.

In order to lead a revival of the nation's economy by solving the bad debt problems of major banks, the government launched the Program for Financial Revival in October 2002, demanding that major banks reduce their ratio of bad debts from 8.4 percent in March 2002 to approximately half that level by March 2005. As a result, the ratio of the major banks' bad debts decreased to 2.9 percent in March 2005, meeting the government's target, and the bad debt problems have thus been settled. The ratio recorded in March 2010 was 1.9 percent.

### 4. Financial Assets

The Flow of Funds Accounts Statistics, which is a comprehensive set of records of financial transactions, assets and liabilities, indicates that financial assets in the domestic sectors totaled 5,591 trillion yen according to preliminary figures at the end of March 2010. Of these assets, those of the domestic nonfinancial sector were 2,836 trillion yen. The household sector (including the business funds of sole proprietorships) had assets of 1,453 trillion yen, in the forms of deposits, stocks and other financial assets. In Japan, the household sector holds more than 50 percent of its financial assets in cash or relatively secure forms of assets.

		()	Trillion yen)
Sectors	March 2009	March 2010 *	Annual growth (%)
Financial assets			
Domestic sectors	5,402	5,591	3.5
Financial institutions	2,699	2,755	2.1
Domestic nonfinancial sector	2,703	2,836	4.9
Nonfinancial corporations	774	848	9.5
General government	469	482	2.7
Households (incl. sole proprietorships)	1,409	1,453	3.1
Private nonprofit institutions serving households	51	53	4.6
Overseas	296	301	1.9
Financial liabilities			
Domestic sectors	5,151	5,322	3.3
Financial institutions	2,719	2,744	0.9
Domestic nonfinancial sector	2,431	2,578	6.0
Nonfinancial corporations	1,083	1,184	9.3
General government	956	1,002	4.8
Households (incl. sole proprietorships)	376	373	-0.6
Private nonprofit institutions serving households	17	19	13.9
Overseas	544	565	3.7

## Table 4.9Financial Assets and Liabilities of Japan

Source: Bank of Japan.

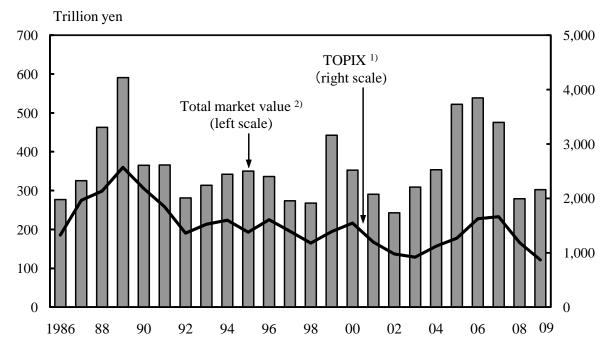
### 5. Stock Market

Stock prices in Japan rose sharply in the second half of the 1980s, spearheading the bubble economy. However, the stock market started to fall in 1990 ahead of land prices. At the end of 1989, the total market value of the first section of the Tokyo Stock Exchange was 591 trillion yen, but only three years later, at the end of 1992, it dropped by more than 50 percent to 281 trillion yen. The market recovered to reach 442 trillion yen at the end of 1999, but dipped again in 2000. Then in 2003, stock prices recovered reflecting improved corporate earnings and a positive turnaround in plant and equipment investment. At the end of 2006, the total market value of the first section of the Tokyo Stock Exchange reached 539 trillion yen. Since the subprime mortgage problem surfaced in August 2007, however, stock prices followed a downward path on account of growing anxiety over financial markets on a global scale. Although there was, subsequently, a sign of recovery in stock prices at one point, another

FINANCE

downward trend set in and then the September 2008 Lehman shock led to considerable falls in stock prices, followed by, once again, a sustained period of descent. However, the financial results of U.S. financial institutions announced in March 2009 eased apprehensions about their business, and this gave rise to signs of turnaround. At the end of 2009, the total market value amounted to 303 trillion yen.

#### Figure 4.6 Trends in Stock Price Index and Total Market Value (Talwa Stack Evaluation)



(Tokyo Stock Exchange, first section)

1) TOPIX: Index of the total market value of all stocks listed on the first section of the Tokyo Stock Exchange against a base value of 100 as of January 4, 1968. 2) End of year. Source: Tokyo Stock Exchange.

At the end of March 2010, the total number of individual stockholders (individuals of Japanese nationality and domestic groups without corporate status) in possession of stocks listed on the Tokyo/Osaka/Nagoya/ Fukuoka/Sapporo Stock Exchanges totaled 44.8 million. In value terms, the ratio of stocks they possessed was 20.1 percent. As of the end of March 2010, the ratio of Japanese stocks held by foreign investors (total of corporations and individuals) marked 26.0 percent in value terms, increased for the first time in three years.

#### FINANCE

A characteristic of the stock market in Japan is that the proportion of stocks owned by individual Japanese investors is extremely small. Recently, however, the number of individual investors is on the rise as the greater popularity of Internet trading has prompted more people to start investing in stocks.

A survey conducted of 305 securities firms by the Japan Securities Dealers Association (JSDA) showed that 17.4 percent of those companies offered Internet trading at the end of March 2010. Internet trading thus accounted for 25.2 percent of the total value of stock brokerage transactions from the period of October 2009 to March 2010.

	` <b>`</b>	6	·		
	Number	Total	Total	TOPIX <sup>2)</sup>	Nikkei
Year	of listed	market	trading	Tokyo stock	stock average
1 Cal	companies <sup>1)</sup>	value <sup>1)</sup>	value	price index,	$(225 \text{ issues})^{1)}$
	companies	(billion yen)	(billion yen)	average	(yen)
1996	1,293	336,385	97,097	1,606.37	19,361.35
1997	1,327	273,908	106,427	1,397.37	15,258.74
1998	1,340	267,784	96,001	1,178.14	13,842.17
1999	1,364	442,443	178,041	1,388.63	18,934.34
2000	1,447	352,785	242,632	1,545.22	13,785.69
2001	1,491	290,669	199,844	1,195.10	10,542.62
2002	1,495	242,939	190,870	979.49	8,578.95
2003	1,533	309,290	237,906	918.86	10,676.64
2004	1,595	353,558	323,918	1,120.07	11,488.76
2005	1,667	522,068	459,136	1,270.09	16,111.43
2006	1,715	538,630	644,309	1,625.92	17,225.83
2007	1,727	475,629	735,334	1,663.69	15,307.78
2008	1,715	278,989	568,539	1,187.82	8,859.56
2009	1,684	302,712	368,680	869.33	10,546.44
2010 Jan.	1,681	301,681	31,736	936.12	10,198.04
Feb.	1,679	299,204	26,786	896.61	10,126.03
Mar	. 1,668	325,002	30,619	936.98	11,089.94
Apr	. 1,674	332,482	35,905	987.60	11,212.66

 Table 4.10

 Stock Prices (Tokyo Stock Exchange, first section)

1) End of year or month. 2) TOPIX: Index of the total market value of all stocks listed on the first section of the Tokyo Stock Exchange against a base value of 100 as of January 4, 1968. Source: Nihon Keizai Shimbun, Inc.; Tokyo Stock Exchange.

## Chapter 5

## **Agriculture, Forestry and Fisheries**

## **1. Overview of Agriculture, Forestry and Fisheries**

Over the course of Japan's economic growth, its agricultural, forestry and fishing industries employ fewer and fewer workers every year, and their GDP share has also dropped. The number of workers decreased from 14.39 million in 1960 (32.7 percent of the total workforce) to 2.97 million in 2005 (4.8 percent), and the GDP share of the industries fell from 12.8 percent in 1960 to 1.4 percent in 2005.

				(B	illion yen)
Item	2004	2005	2006	2007	2008*
Total	10,752	10,529	10,371	# 10,353	10,546
Agriculture	8,714	8,512	8,332	# 8,259	8,474
Crops	6,183	5,940	5,818	# 5,720	5,825
Rice	1,991	1,947	1,815	1,790	1,901
Vegetables	2,143	2,033	2,051	2,089	2,111
Fruits and nuts	763	727	773	756	741
Livestock and its products	2,458	2,506	2,453	2,479	2,588
Beef cattle	446	473	478	485	459
Dairy cattle	796	783	748	731	748
Pigs	519	499	498	523	579
Chickens	635	689	658	676	744
Forestry	435	417	432	441	445
Fishery	1,604	1,601	1,607	1,653	1,627

# Table 5.1Agricultural, Forestry and Fishery Output

Source: Ministry of Agriculture, Forestry and Fisheries.

## 2. Agriculture

### (1) Agricultural Production

Japan's total agricultural output in 2008 was 8.47 trillion yen, up 2.6 percent from the previous year. Crops yielded 5.82 trillion yen, up 1.8 percent from the previous year. This was due partly to the growth in rice, pigs and chickens output, notwithstanding the lower beef cattle, fruits and nuts output.

				(Thou	sand tons)
Products	1995	2000	2005	2007	2008
Cereal grains					
Rice	10,748	9,490	9,074	8,714	8,823
Wheat	444	688	875	910	881
Vegetables, potatoes and legumes					
Potatoes	3,365	2,898	2,752	2,873	2,743
Sweet potatoes	1,181	1,073	1,053	968	1,011
Soybeans, dried	119	235	225	227	262
Cucumbers	827	767	675	641	627
Tomatoes	753	806	759	749	733
Cabbages	1,544	1,449	1,364	1,359	1,389
Chinese cabbages	1,163	1,036	924	918	921
Onions	1,278	1,247	1,087	1,265	1,271
Lettuces	537	537	552	544	544
Japanese radishes	2,148	1,876	1,627	1,626	1,603
Carrots	725	682	615	666	657
Fruits					
Mandarin oranges	1,378	1,143	1,132	1,066	906
Apples	963	800	819	840	911
Grapes	250	238	220	209	201
Japanese pears	383	393	362	297	328
Industrial crops					
Crude tea	a) 80	a) 85	100	94	96
Sugar beets <sup>1)</sup>	3,813	3,673	4,201	4,297	4,248

## Table 5.2Agricultural Production

1), a) Figures are total of main producing prefectures.

Source: Ministry of Agriculture, Forestry and Fisheries.

# Table 5.3Production Volumes of Meat, Milk and Eggs

		, 	88		(Tons)
Products	1995	2000	2005	2007	2008
Pork	1,322,065	1,270,685	1,244,963	1,250,511	1,248,801
Beef	600,099	529,674	498,428	502,969	518,704
Veal	806	629	1,042	933	1,175
Horse meat	8,433	7,215	7,129	6,087	6,053
Mutton and lamb	208	112	126	105	128
Goat meat	153	155	73	49	54
Broilers	1,631,060	1,551,101	1,702,001	1,754,396	1,787,278
Cow milk	8,382,162	8,497,278	8,285,215	8,007,417	7,982,030
Eggs	2,550,586	2,540,075	2,481,000	2,583,292	2,553,557

Source: Ministry of Agriculture, Forestry and Fisheries.

### (2) Farmers and Farmland

In 2005, the number of farm households engaged in commercial farming (which refers to households with cultivated land under management of 0.3 hectares and over, or with annual sales of agricultural products amounting to 500,000 yen and over) was 1.96 million. Of these commercial farm households, 22.6 percent were full-time farm households, 15.7 percent were part-time farm households with farming income exceeding non-farming income, and 61.7 percent were part-time farm households with non-farming income exceeding farming income.

Of the commercial farm household members, 3.35 million people were actually engaged in farming (commercial farmers) in 2005, of whom 58.2 percent were aged 65 years and over.

In 2008, the total income per commercial farm household was 4.66 million yen, down 3.7 percent from the previous year. Of that amount, 1.08 million yen was from farming income, 1.86 million yen from non-farming income, and 1.71 million yen from pension benefits and other sources.

						(Inousands)
	(	Commercial fa	rm households	8		
-		_	Part-t	ime	Commercial	Aged 65
Year	Year Total Full-time Mainly farming	5	Mainly other job	farmers	years and over (%)	
1990	2,971	473	521	1,977	4,819	33.1
1995	2,651	428	498	1,725	4,140	43.5
2000	2,337	426	350	1,561	3,891	52.9
2005	1,963	443	308	1,212	3,353	58.2

(Thomanda)

Table 5.4Commercial Farm Households and Commercial Farmers

Source: Ministry of Agriculture, Forestry and Fisheries.

Japan's cultivated acreage shrank year after year from 6.09 million hectares in 1961 to 4.61 million hectares in 2009. In the one-year period of 2009, there were 1,570 hectares of new cultivation but also a 21,200-hectare decrease. The most common cause for the decrease was cultivation abandonment, accounting for approximately 46 percent of all cases, followed by land-use conversion for residential and other lands, making up approximately 33 percent.

### **3.** Forestry

Japan's forest land area is 25.1 million hectares (approximately 70 percent of its entire surface area). Of this, natural forests account for 50 percent while planted forests, most of which are conifer plantations, make up 40 percent. Meanwhile, Japan's forest growing stock is 4.4 billion cubic meters, of which 2.7 billion cubic meters are from planted forests.

Forests that were planted after World War II are now finally ready for use. The functions that forests play in soil conservation and the prevention of global warming need to be exercised in a sustainable manner by smoothly following the cycle of cutting, planting and tending planted forests.

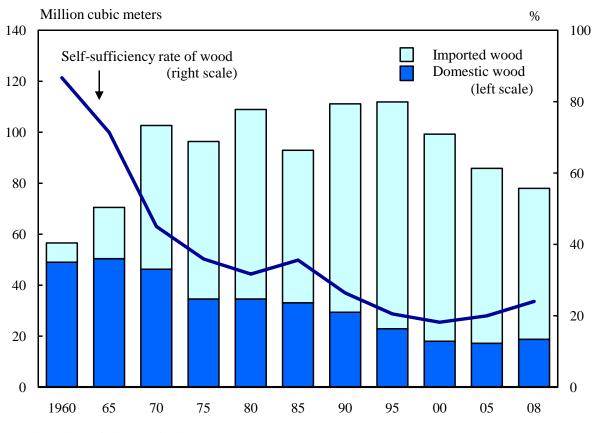
Item	Total	National	Non-	national for	rest
Item	10141	forest	Municipal	Private	Others
Forest land area (1,000 ha)	25,097	7,686	2,830	14,535	46
Forest growing stock (million m <sup>3</sup> )	4,432	1,078	484	2,864	6
Planted forest					
Land area (1,000 ha)	10,347	2,364	1,247	6,724	12
Growing stock (million m <sup>3</sup> )	2,651	424	295	1,931	2
Natural forest					
Land area (1,000 ha)	13,383	4,691	1,449	7,217	27
Growing stock (million m <sup>3</sup> )	1,779	654	190	933	3

Table 5.5Forest Land Area and Forest Resources (2007)

Source: Ministry of Agriculture, Forestry and Fisheries.

Domestic wood supply (log conversion) totaled 18.7 million cubic meters in 2008, which is equivalent to only 36 percent of the peak in 1967 (52.7 million cubic meters). In 2008, Japan's self-sufficiency rate for lumber was 24.0 percent. Currently, Japan depends mostly on imported lumber for pulp, woodchip and plywood material.

The slowdown in domestic lumber production activities has resulted in a decline in the number of workers engaged in forestry. In 2005, there were 47,000 workers engaged in forestry, a level which represented only 70 percent of the number recorded five years before. Also, one out of four workers was aged 65 and over, highlighting the aging of the labor force.



#### **Figure 5.1 Industrial Wood Supply and Self-Sufficiency Rate** <sup>1)</sup>

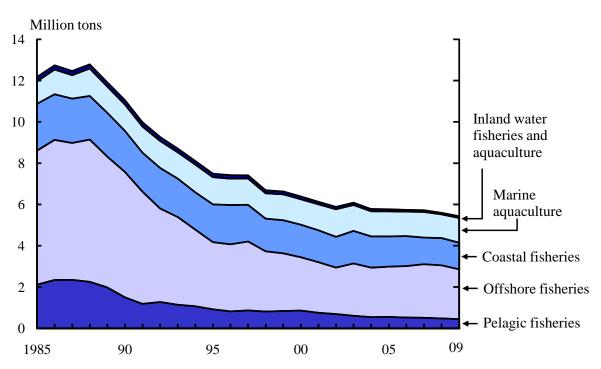
1) The volume in log equivalent. Source: Ministry of Agriculture, Forestry and Fisheries.

# 4. Fisheries

### (1) Fishery Production

In Japan, a country surrounded by ocean, the fishing industry has played an important role in supplying animal protein and bringing a healthy and rich diet to the population. Recently, however, there has been a progressing "shift away from fish," particularly among the younger generations. Japan's fishing industry is also undergoing major changes. Lower fishery production, due to deteriorating resources in surrounding waters, and the declining and increasingly aging fishery workforce are among the reasons for those changes.

Japan's fishery output has been on the decline since 1989. Its 2009 fishery production totaled 5.43 million tons, down 2.9 percent from the previous year. Of this, marine fishing and aquaculture production amounted to 5.35 million tons.



#### Figure 5.2 Production by Type of Fishery

Source: Ministry of Agriculture, Forestry and Fisheries.

	-			(Thou	isand tons)
Fishery type and species	1995	2000	2005	2008	2009*
Total	7,489	6,384	5,765	5,592	5,429
Marine fisheries	6,007	5,022	4,457	4,373	4,151
Tunas	332	286	239	216	206
Bonito	309	341	370	308	275
Sardine	661	150	28	35	61
Mackerels	470	346	620	520	471
Alaska pollack	339	300	194	211	227
Crabs	57	42	34	33	32
Squids	547	624	330	290	292
Marine aquaculture	1,315	1,231	1,212	1,146	1,197
Yellowtails	170	137	160	155	153
Oysters	227	221	219	190	209
Laver	407	392	387	339	344
Wakame (Sea weed)	100	67	63	55	61
Pearl (tons)	63	30	29	24	19
Inland water fisheries	92	71	# 54	# 33	40
Salmons and trouts	22	17	# 19	# 10	13
Sweetfish	14	11	# 7	#3	4
Shellfishes	28	20	# 14	# 11	15
Inland water aquaculture	75	61	# 42	# 40	41
Eel	29	24	20	21	22
Trouts	18	15	12	10	10
Common carp	13	11	4	3	3

# Table 5.6Production by Fishery Type and Species

Source: Ministry of Agriculture, Forestry and Fisheries.

#### (2) Fishery Workers

The number of workers in the marine fishery industry (the workers who engage in work at sea for 30 days or more yearly) has been decreasing constantly. In 2009, there was a 4.6 percent decrease from the previous year, bringing the count to 212,000 workers. Among male workers, the ratio of those aged 65 years and over was 35.3 percent, showing the progressive trend of an aging workforce.

						(Thousands)
		Enterprises			Workers	
Year	Total		Corporate	Total	Self-	Hired
			entities	Total	employed	Illieu
2000	190	138		260	194	66
2005	164	119		222	166	56
2007	151	111		204	155	49
2008	115	109	6	# 222	141	# 81
2009*	108	102	6	212	135	77

# Table 5.7Number of Enterprises and Workers Engaged in the Marine FisheryIndustry 1)

1) Including marine aquaculture.

Source: Ministry of Agriculture, Forestry and Fisheries.

### 5. Self-Sufficiency in Food

Japan's food self-sufficiency rate, in terms of calories, dropped from 73 percent in fiscal 1965 to 41 percent in fiscal 2008. The principal cause for the major drop in the food self-sufficiency rate is the fact that a significant change in the diet of Japanese led to a lower consumption of rice, a crop in which Japan is self-sufficient, while there was an increase in consumption of animal and lipid products that domestic agricultural production alone cannot supply sufficiently.

In fiscal 2008, the self-sufficiency rate (on an item-specific weight basis) was 100 percent in rice, 14 percent in wheat, 9 percent in beans, 82 percent in vegetables, 41 percent in fruits, 56 percent in meat and 62 percent in seafood. Although completely self-sufficient in rice, the staple food of its people, Japan relied almost entirely on imports for wheat and bean supply.

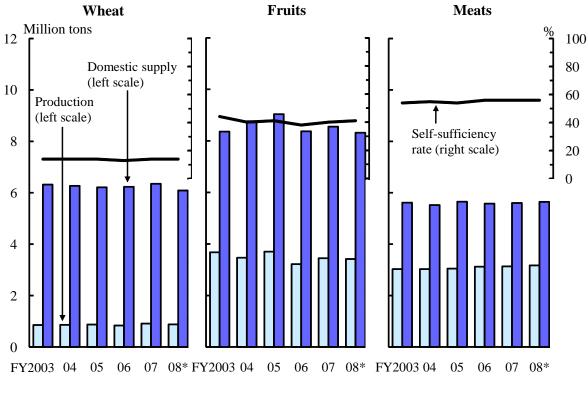
#### AGRICULTURE, FORESTRY AND FISHERIES

Fiscal year	Area planted (1,000 ha)	Production (1,000 t)	Yield per hectare (t)	Imports (1,000 t)	Supplies for domestic consumption (1,000 t)
Rice					
1995	2,118	10,748	5.07	495	10,290
2000	1,770	9,490	5.36	879	9,790
2005	1,706	9,074	5.32	978	9,222
2007	1,673	8,714	5.21	856	9,257
2008*	1,627	8,823	5.42	841	8,883
Wheat					
1995	151	444	2.93	5,750	6,355
2000	183	688	3.76	5,688	6,311
2005	214	875	4.10	5,292	6,213
2007	210	910	4.34	5,386	6,348
2008*	209	881	4.22	5,186	6,086

# Table 5.8Supply of Cereal Grains

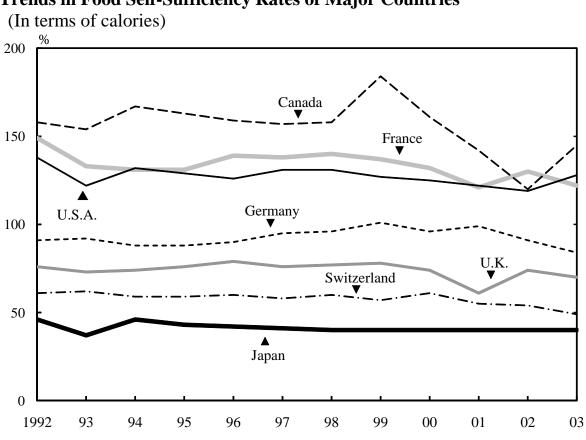
Source: Ministry of Agriculture, Forestry and Fisheries.

#### Figure 5.3 Self-Sufficiency Rates for Selected Categories of Agricultural Produce



Source: Ministry of Agriculture, Forestry and Fisheries.

Japan's present food self-sufficiency rate is the lowest among major industrialized countries, and Japan is thus the world's largest net importer of agricultural products.



#### **Figure 5.4 Trends in Food Self-Sufficiency Rates of Major Countries**

Source: Ministry of Agriculture, Forestry and Fisheries.

# Chapter 6

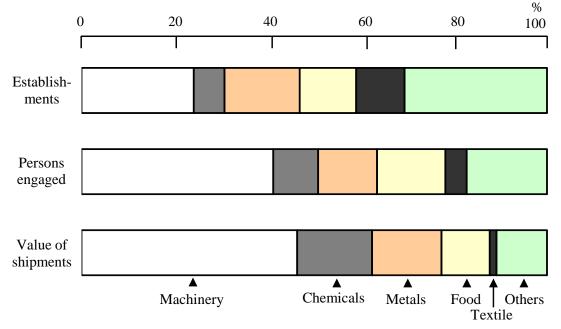
# Manufacturing and Construction

## 1. Overview of the Manufacturing Sector

The manufacturing sector has served as a driving force for economic growth in Japan, as the labor productivity growth in the sector has been far greater than that in all sectors since the 1990s. While the proportion of added value produced in Japan's manufacturing sector to its nominal GDP has still been around 20 percent recently, the sector has a large ripple effect on other sectors. With industrial products accounting for over 90 percent of Japan's exports, the manufacturing sector is indeed supporting Japan's exports.

Hit by the worldwide recession that was triggered by a financial crisis in the U.S.A., Japan's manufacturing sector has remained in an extremely challenging environment since late 2008, but signs of recovery were seen in their business from around April 2009. However, this still cannot be considered a self-sufficient recovery as it has been driven by export growth owing to demand from emerging economies, with China a leading example, as well as by increased consumer spending mainly in durable goods, such as energy-saving home appliances and cars, thanks to the effects of economic stimulus programs, including the "eco-point" program and "eco-car" tax break and subsidy program.

#### Figure 6.1 Number of Establishments, Persons Engaged and Value of Manufactured Goods Shipments by Sector <sup>1)</sup> (2008)



1) Inclusive of all establishments regardless of the number of persons engaged. Source: Ministry of Economy, Trade and Industry.

# Table 6.1Number of Establishments, Persons Engaged and Value of ManufacturedGoods Shipments of the Manufacturing Industry 11 (2008)

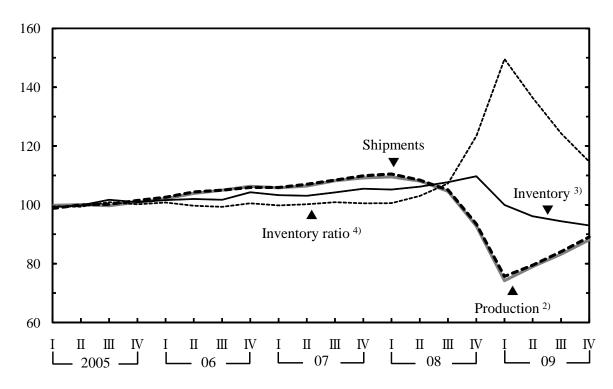
Industries	Number of establish- ments	Number of persons engaged (persons)	Value of manu- factured goods shipments (billion yen)
Manufacturing	442,562	8,726,479	337,864
Food	46,504	1,167,655	25,090
Beverages, tobacco and feed	7,219	112,140	9,990
Textile mill products	46,054	399,076	4,878
Lumber and wood products <sup>2)</sup>	14,702	126,226	2,647
Furniture and fixtures	23,947	147,445	2,187
Pulp, paper and paper products	10,613	211,888	7,833
Printing and allied industries	29,684	353,906	6,904
Chemical and allied products	5,592	351,053	28,172
Petroleum and coal products	1,130	25,016	14,026
Plastic products <sup>3)</sup>	22,477	467,849	12,171
Rubber products	5,012	128,714	3,509
Leather tanning, leather products and fur			
skins	5,477	36,094	496
Ceramic, stone and clay products	20,308	295,074	8,268
Iron and steel	6,773	239,089	24,373
Non-ferrous metals and products	4,976	158,065	10,509
Fabricated metal products	59,686	704,384	15,502
General-purpose machinery	14,426	372,983	12,625
Production machinery	40,514	646,673	19,394
Business oriented machinery	8,092	248,535	8,612
Electronic parts, devices and electronic			
circuits	7,290	524,546	20,579
Electrical machinery, equipment and supplies	15,861	520,863	16,916
Information and communication electronics			
equipment	3,034	239,922	14,490
Transport equipment	17,526	1,039,875	63,835
Miscellaneous manufacturing industries	25,665	209,408	4,856

1) Inclusive of all establishments regardless of the number of persons engaged. 2) Excluding furniture. 3) Excluding plastic furniture, plastic plates, etc., which are included in other industrial classification.

Source: Ministry of Economy, Trade and Industry.

In 2008, there were 442,562 establishments (inclusive of all establishments regardless of the number of persons engaged) and a total of 8.73 million persons engaged in the manufacturing sector. These establishments shipped 337.9 trillion yen worth of manufactured products, with added value amounting to 102.5 trillion yen.

Based on the Indices on Mining and Manufacturing (2005 average = 100), the production index for 2009 was 81.1, down 21.9 percent from the previous year, while shipments stood at 82.1, a decrease of 21.3 percent from the year before.





Seasonal adjustment indices. 2) Value added weights. 3) End of the quarter.
 Inventory ratio = Inventory quantity / Shipments quantity.
 Source: Ministry of Economy, Trade and Industry.

#### Table 6.2 Indices of Industrial Production<sup>1)</sup>

(2005 average = 100)

Industries	2006	2007	2008	2009	Annual growth (%)
Mining and manufacturing	104.5	107.4	103.8	81.1	-21.9
Manufacturing	104.5	107.4	103.8	81.0	-22.0
Food and tobacco	98.0	99.8	100.5	102.3	1.8
Textile	95.8	90.6	82.5	67.1	-18.7
Pulp, paper and paper products	100.6	101.0	99.6	85.8	-13.9
Chemicals	102.8	103.9	100.1	95.3	-4.8
Chemicals (excl. Drugs)	99.7	101.6	94.9	85.3	-10.1
Petroleum and coal products	98.0	97.6	96.0	90.1	-6.1
Plastic products	101.2	101.4	97.5	82.1	-15.8
Ceramic, stone and clay products	101.2	102.0	97.2	76.8	-21.0
Iron and steel	102.6	105.9	103.7	72.5	-30.1
Non-ferrous metals	104.3	104.4	99.0	77.4	-21.8
Fabricated metals	98.7	96.8	94.8	77.9	-17.8
General machinery	106.4	109.2	100.4	60.3	-39.9
Electronic parts and devices	117.8	131.0	126.3	100.0	-20.8
Electrical machinery	104.5	103.2	100.4	78.9	-21.4
Information and communication					
electronics equipment	106.4	108.4	103.2	83.4	-19.2
Transport equipment	105.8	111.9	110.5	74.6	-32.5
Precision instruments	108.1	114.9	117.6	85.0	-27.7
Other manufacturing	104.2	106.5	103.0	80.8	-21.6
Mining	102.6	106.6	103.1	93.6	-9.2
(Reference)					
Electricity and gas	102.0	103.9	104.7	96.9	-7.4

1) Value added weights.

Source: Ministry of Economy, Trade and Industry.

# Table 6.3Indices on Mining and Manufacturing

(Production, shipments, inventory) (2009)

(1 roduction, sinplicents, inv	Cinto	(20)	<i>(</i> )			(2005	5 averag	e = 100)
]	Produ	iction <sup>1)</sup>	Ship	ments	Inver	ntory <sup>2)</sup>	Inventor	y Ratio <sup>3)</sup>
Industries		Annual		Annual		Annual	-	Annual
industries		growth		growth		growth		growth
		(%)		(%)		(%)		(%)
Mining and manufacturing	81.1	-21.9	82.1	-21.3	93.1	-14.6	131.6	21.2
Manufacturing	81.0	-22.0	82.1	-21.3	93.0	-14.7	131.6	21.2
Food and tobacco 1	02.3	1.8	100.8	1.3	92.9	11.9	105.2	9.8
Textile	67.1	-18.7	73.4	-14.8	84.8	-13.2	125.9	14.4
Pulp, paper and paper								
1	85.8	-13.9	87.4	-11.9	93.6	-9.4	117.3	16.1
Chemicals	95.3	-4.8	93.1	-5.5	92.6	-15.4	119.7	7.8
ξ <b>υ</b> ,	85.3	-10.1	86.0	-9.1	92.6	-15.4	119.7	7.8
Petroleum and coal								
1	90.1	-6.1	89.5	-5.7	91.2	-13.1	117.8	3.4
1	82.1	-15.8	82.1	-16.5	91.6	-7.6	114.5	7.6
Ceramic, stone and clay		21.0		10.1	00.0	147	105.4	1
1	76.8	-21.0	77.6	-19.1	93.0	-14.7	135.4	15.6
	72.5	-30.1	72.2	-31.2	94.0	-7.8	130.3	34.6
	77.4	-21.8	76.3	-22.5	95.6	-8.4	121.7	18.5
	77.9	-17.8	79.3	-15.5	75.7	-12.8	119.0	17.1
5	60.3	-39.9	60.6	-39.5	89.1	-25.0	214.3	90.8
Electronic parts and devices 1		-20.8	96.8	-21.0	154.8	-27.5	188.3	23.2
5	78.9	-21.4	82.3	-19.7	106.1	14.1	107.3	7.6
Information and communication	~ <b>~</b> /				100 -	• • • •	~ <b>-</b> -	1 7 0
•••	83.4	-19.2	93.8	-14.4	103.5	-20.0	97.6	-15.9
1 1 1	74.6	-32.5	76.8	-32.4	76.4	-31.0	108.3	6.9
	85.0	-27.7	87.5	-25.6	108.1	-9.7	150.7	49.5
U	80.8	-21.6	78.8	-20.8	88.7	-12.8	134.4	20.2
Mining	93.6	-9.2	100.3	-8.2	130.7	8.0	136.2	23.4
(Reference)								
Electricity and gas	96.9	-7.4	96.9	-7.6	-	-	-	-

1) Value added weights. 2) End of the year.

3) Inventory ratio = Inventory quantity / Shipments quantity.

Source: Ministry of Economy, Trade and Industry.

# 2. Principal Industries in the Manufacturing Sector

This section describes the selected four industries in the manufacturing sector in terms of shipment value: machinery, chemicals, iron and steel, and fabricated metals. In each industry, (a) describes the number of establishments (inclusive of all establishments regardless of the number of persons engaged), persons engaged, and the value of shipments (data source: the Census of Manufacturers); and in (b), production and shipments (data source: the Indices on Mining and Manufacturing (2005 average = 100)).

### (1) Machinery Industry

(A) Transport Equipment Industry

(a) In 2008, a total of 17,526 establishments employed 1,039,875 persons, and shipped 63.8 trillion yen worth of products.

(b) In 2009, production and shipments decreased year-on-year by 32.5 percent and 32.4 percent respectively. As a result, both production and shipments recorded their second consecutive year of decrease. This was due to the decline in the production and shipments of passenger cars, motor vehicle parts, etc.

(B) Production Machinery Industry

(a) In 2008, a total of 40,514 establishments employed 646,673 persons, and shipped 19.4 trillion yen worth of products.

(b) In 2009, production and shipments decreased year-on-year by 48.3 percent and 48.6 percent respectively. As a result, both production and shipments recorded their second consecutive year of decrease.

(C) Electrical Machinery, Equipment and Supplies Industry

(a) In 2008, a total of 15,861 establishments employed 520,863 persons, and shipped 16.9 trillion yen worth of products.

(b) In 2009, production and shipments decreased by 21.4 percent and 19.7 percent compared to the previous year. As a result, both production and shipments recorded their third consecutive year of decrease. This was attributable to the decline in the production and shipments of electrical rotating machinery, etc.

(D) Electronic Parts and Devices Industry

(a) In 2008, a total of 7,290 establishments employed 524,546 persons, and shipped 20.6 trillion yen worth of products.

(b) In 2009, production and shipments decreased by 20.8 percent and 21.0 percent, respectively, from the previous year. As a result, both production and shipments recorded their second consecutive year of decrease.

(E) Information and Communication Electronics Equipment Industry

(a) In 2008, a total of 3,034 establishments employed 239,922 persons, and shipped 14.5 trillion yen worth of products.

(b) In 2009, production and shipments decreased by 19.2 percent and 14.4 percent, respectively, from the previous year. As a result, both production and shipments recorded their second consecutive year of decrease.

### (2) Chemical Industry

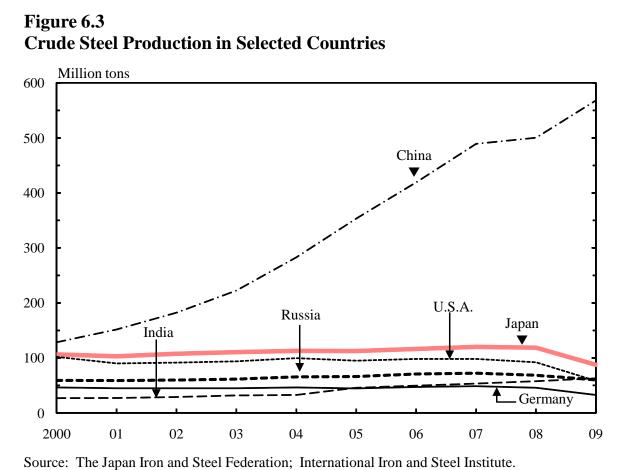
(a) In 2008, a total of 5,592 establishments employed 351,053 persons, and shipped 28.2 trillion yen worth of products.

(b) In 2009, production and shipments in the chemical industry (excluding medical and pharmaceutical products) decreased by 10.1 percent and 9.1 percent, respectively, from the previous year. As a result, both production and shipments recorded their second consecutive year of decrease.

### (3) Iron and Steel Industry

(a) In 2008, a total of 6,773 establishments employed 239,089 persons, and shipped 24.4 trillion yen worth of products.

(b) In 2009, production and shipments decreased by 30.1 and by 31.2 percent compared to the previous year. As a result, both production and shipments recorded their second consecutive year of decrease.



Source. The super non and Sect rederation, international non and Sect institute.

				(Thou	isand tons)
Products	2005	2006	2007	2008	2009
Pig iron	83,058	84,270	86,771	86,171	66,943
Ferroalloys	963	834	858	828	722
Crude steel	112,471	116,226	120,203	118,739	87,534
Semi-finished steel	109,028	112,961	116,941	115,358	85,359
Ordinary hot-rolled steel	80,828	83,139	86,704	84,299	63,417
Special hot-rolled steel	20,360	20,982	21,498	21,782	13,269
Steel pipes and tubes	9,637	9,746	9,895	9,722	6,172
Finished steel	98,797	101,379	105,431	103,297	74,415
Ordinary steel products	79,229	81,314	85,027	82,703	62,024
Special steel products	19,568	20,065	20,404	20,594	12,391

#### Table 6.4 Steel Production

Source: Ministry of Economy, Trade and Industry.

#### (4) Fabricated Metal Products Industry

(a) In 2008, a total of 59,686 establishments employed 704,384 persons, and shipped 15.5 trillion yen worth of products.

(b) In 2009, production decreased by 17.8 percent and shipments by 15.5 percent compared to the previous year, continuing the downward trend of recent years.

### **3.** Construction

The construction industry, accounting for about 10 percent of both GDP and all employed persons, is one of the core industries in Japan. However, it faces a series of challenges, including rapidly shrinking private construction investment and increasingly fierce price wars. The business environment surrounding the industry is now harsher than ever before, given the prospect that new public works will inevitably be limited by the restraints of a declining population, an aging society with low birth rates, and a severe fiscal setting. In fiscal 2009, the industry employed 5.13 million persons, and investment in construction stood at approximately 42.2 trillion yen.

 $(\mathbf{D};\mathbf{H};\mathbf{a},\mathbf{r},\mathbf{r},\mathbf{r},\mathbf{r})$ 

				(Billion yen)
	FY2006	FY2007	FY2008 *	FY2009 *
Total	51,328	47,696	47,650	42,170
Building construction	30,584	27,719	28,440	23,790
Dwellings	19,348	17,149	16,920	14,310
Public sector	598	547	530	610
Private sector	18,750	16,602	16,390	13,700
Non-dwellings	11,236	10,570	11,520	9,480
Public sector	1,447	1,404	1,530	1,720
Private sector	9,789	9,167	9,990	7,760
Mining and manufacturing	2,352	1,968		
Others	7,437	7,199		
Civil engineering works	20,745	19,977	19,210	18,380
Public sector	15,752	14,996	14,150	14,570
Public works	13,973	13,260	12,360	13,240
Others	1,779	1,736	1,790	1,330
Private sector	4,993	4,981	5,060	3,810
Total				
Public investment	17,797	16,946	16,210	16,900
Private investment	33,532	30,750	31,440	25,270
Building construction				
Public investment	2,045	1,951	2,060	2,330
Private investment	28,539	25,769	26,380	21,460
Civil engineering works				
Public investment	15,752	14,996	14,150	14,570
Private investment	4,993	4,981	5,060	3,810

# Table 6.5Construction Investment (Current prices)

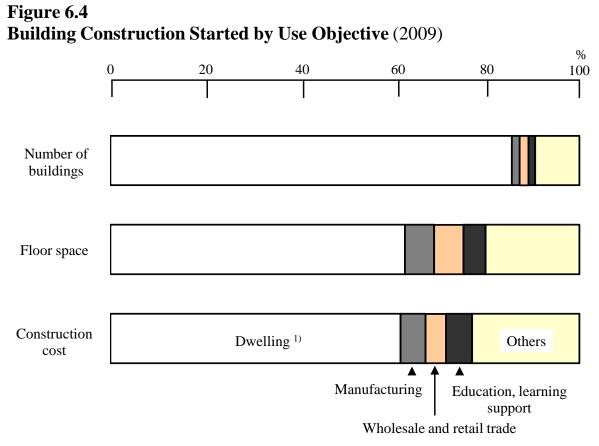
Source: Ministry of Land, Infrastructure, Transport and Tourism.

Investment in construction in fiscal 2009 showed a year-on-year decrease of 11.5 percent at current prices and a year-on-year decrease of 8.6 percent at constant prices, for the reference year 2000. Construction investment in fiscal 2009 was down 49.8 percent compared to fiscal 1992, when it hit a peak of approximately 84.0 trillion yen.

A breakdown of construction investment shows that building construction totaled 23.8 trillion yen (down 16.4 percent from the previous fiscal year), while civil engineering works amounted to 18.4 trillion yen (down 4.3 percent).

In terms of public and private construction investment in fiscal 2009, public investment amounted to 16.9 trillion yen (up 4.3 percent from the previous fiscal year), while private investment totaled 25.3 trillion yen (down 19.6 percent). Public investment accounted for 40.1 percent of total construction investment, while private investment accounted for 59.9 percent.

The 2009 total floor space of building starts was 115.5 million square meters, down 26.6 percent from the previous year. In particular, the floor space of buildings for manufacturing use dropped by 51.5 percent, compared to the previous year, to 7.2 million square meters. Meanwhile, the number of housing construction starts (counting the number of component apartments for apartment buildings) fell in owned houses, rental units and built-for-sale units alike, totaling 0.79 million housing units. This was a 27.9-percent drop from the previous year and was the first decrease in two years.



1) Including dormitories and dormitories-industry concurrent use. Source: Ministry of Land, Infrastructure, Transport and Tourism.

# Chapter 7

# Energy

# 1. Supply and Demand

Japan is dependent on imports for 82.5 percent of its energy supply. Since experiencing the two oil crises of the 1970s, Japan has taken measures to promote energy conservation, introduce alternatives to petroleum, and secure a stable supply of petroleum through stockpiling and other measures. As a result, its dependence on petroleum declined from 77.4 percent in fiscal 1973 to 46.4 percent in fiscal 2008. However, Japan is growing increasingly dependent on fossil fuels (including natural gas and coal) other than petroleum and this calls for steps such as the greater use of non-fossil fuel energy (renewable energy and nuclear power).

In fiscal 2008, the total primary energy supply in Japan was 23,219 petajoules, down 2.7 percent from the previous fiscal year. Its breakdown was: 46.4 percent in petroleum, 21.4 percent in coal, 16.7 percent in natural gas, 9.7 percent in nuclear power, and 2.9 percent in hydro power. Other sources were also used, though only in small quantities, including energy from waste, geothermal, and natural energy (solar energy, wind power, biomass energy, etc.).

In an effort to prevent global warming, the government has been reducing energy waste by taking such measures as energy saving and improving power generation efficiency. The government has also been promoting the introduction of methods of generating electricity that do not produce  $CO_2$ , including nuclear power and new energy sources.

#### **Energy units**

Joule (J) is employed as a common unit (International System of Units: SI) for energy across all energy sources in presenting international statistical information. The unit Petajoule (PJ:  $10^{15}$  or quadrillion joules) is used here to reduce the number of digits. The energy of one kiloliter of petroleum is calculated using the following formulae:

1 kiloliter of petroleum =  $3.87 \times 10^{10}$  joules 1 petajoule =  $10^{15}$  joules

Petroleum is traded internationally using the volume unit of barrels. One barrel equals approximately 158.987 liters.

Japan's final energy consumption was increasing almost steadily since the mid-1980s. It then turned downward in fiscal 2005, but a 6.0-percent increase, relative to 1990, was recorded for final energy consumption in fiscal 2008. While energy consumption in the industrial sector has remained mostly level, there were sharp increases in energy consumption in the commercial and residential sector and in the transport sector. The transport sector includes energy consumption for all transportation purposes, whether household or commercial. In the commercial and residential sector, energy consumption by the commercial sector in particular has risen in recent years. This has been mainly caused by (i) the rise in the total floor area of office buildings and large-scale retail stores; (ii) an increase in the amount of air conditioning equipment and lighting appliances used in those facilities; and (iii) the growth of office automation.

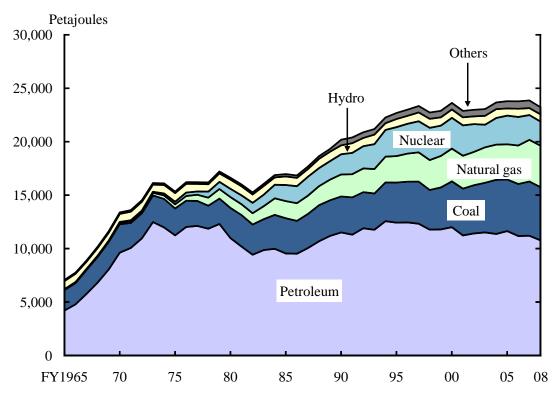


Figure 7.1 Total Primary Energy Supply <sup>1)</sup>

1) A different statistical method was used for figures of fiscal 1989 and prior. Source: Ministry of Economy, Trade and Industry.

#### ENERGY

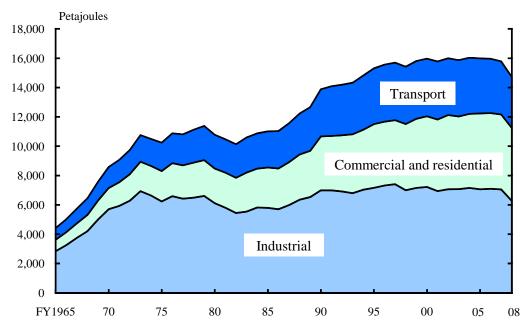
by Energy Source				(	Petajoules)
Item	FY1995	FY2000	FY2005	FY2007	FY2008
Total primary energy supply	22,685	23,622	23,784	23,855	23,219
Energy self-sufficiency $(\%)^{1)}$	19.6	19.6	18.4	17.0	17.5
Petroleum	12,430	12,008	11,641	11,206	10,776
Coal	3,750	4,286	4,829	5,074	4,978
Natural gas	2,479	3,061	3,288	3,892	3,883
Nuclear	2,700	2,873	2,677	2,317	2,248
Hydro	761	778	672	650	666
Others	564	616	676	715	669
Percentage					
Petroleum	54.8	50.8	48.9	47.0	46.4
Coal	16.5	18.1	20.3	21.3	21.4
Natural gas	10.9	13.0	13.8	16.3	16.7
Nuclear	11.9	12.2	11.3	9.7	9.7
Hydro	3.4	3.3	2.8	2.7	2.9
Others	2.5	2.6	2.8	3.0	2.9

# Table 7.1Trends in Total Primary Energy Supply and Percentageby Energy Source

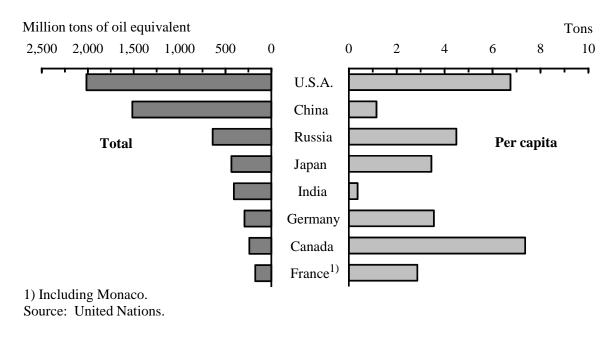
1) Domestic production of primary energy (including nuclear) / Domestic supply of primary energy  $\times\,100$ 

Source: Ministry of Economy, Trade and Industry.



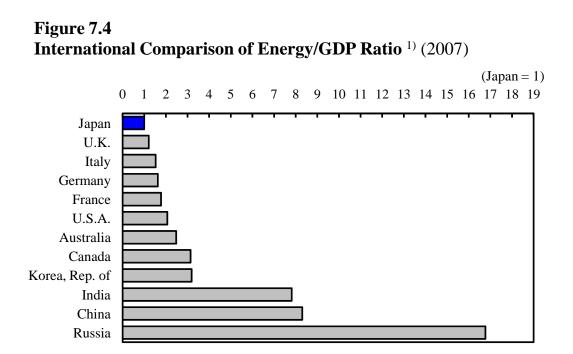


1) A different statistical method was used for figures of fiscal 1989 and prior. Source: Ministry of Economy, Trade and Industry.



#### Figure 7.3 Consumption of Commercial Energy by Country (2006)

Japan's energy consumption is thus expanding fairly consistently, yet the volume of primary energy required to generate the same level of GDP (primary energy supply per GDP) is lower in Japan compared to other industrialized countries. This indicates that Japan is one of the most energy-efficient countries in the world.



1) Total primary energy supply (tons of oil equivalent) / GDP. Converted on the basis of Japan = 1. Source: International Energy Agency.

## 2. Electric Power

Approximately half of Japan's primary energy supply of petroleum, coal and other energy sources is converted into electric power.

Electricity output (including in-house power generation) in Japan totaled 1,146 billion kWh in fiscal 2008, down 4.1 percent from the previous fiscal year. Of this total, thermal power accounted for 69.7 percent; nuclear power, 22.5 percent; hydro power, 7.3 percent; and other sources, 0.5 percent. In the field of thermal power generation, huge replacement has been made from petroleum to natural gas.

Trenus in Electricity Output a		Consum	ipuon		11. 1 33.71 \
				(M1	llion kWh)
Item	FY1995	FY2000	FY2005	FY2007	FY2008
Electricity Output					
Total	989,880	1,091,500	1,157,926	1,195,032	1,146,269
Thermal	604,206	669,177	761,841	841,289	798,930
Nuclear	291,254	322,050	304,755	263,832	258,128
Hydro	91,216	96,817	86,350	84,234	83,504
Others	3,204	3,456	4,980	5,677	5,707
Percentage					
Total	100.0	100.0	100.0	100.0	100.0
Thermal	61.0	61.3	65.8	70.4	69.7
Nuclear	29.4	29.5	26.3	22.1	22.5
Hydro	9.2	8.9	7.5	7.0	7.3
Others	0.3	0.3	0.4	0.5	0.5
Electric Power Consumption					
Total	881,559	982,066	1,043,800	1,077,492	1,035,532
Generated by electric power suppliers	776,511	858,078	918,265	959,661	925,503
Consumption of in-house generation	105,048	123,988		117,831	110,029

# Table 7.2Trends in Electricity Output and Power Consumption 1)

1) Including in-house generation.

Source: Ministry of Economy, Trade and Industry.

# 3. Gas

Gas production was 1,270 petajoules in fiscal 2008, down 4.1 percent from the previous fiscal year. Of this total, natural gas plus liquefied natural gas (LNG) accounted for 96.9 percent; and the remaining 3.1 percent were petroleum gases, such as volatile oil, liquefied petroleum gas, etc.

Gas sales for fiscal 2008 totaled 1,444 petajoules, or year-on-year drop of 3.9 percent. Of this total, 50.0 percent was sold to industry, 28.0 percent to residential use, 13.8 percent to the commercial sector, and 8.3 percent to other sources of demand.

							(Pet	ajoules)
Item	FY2	2000	FY2	2005	FY2	2007	FY2	2008
Production and purchases	1,061		1,394		1,551		1,495	
Production	952 2	(100.0)		(100.0)		(100.0)		(100.0)
Coal gases Petroleum gases	111	(0.2) (11.7)	- 67	· · ·	42	( )	40	(-) (3.1)
Natural gas and LNG Others	839	(88.2) (-)	1,168	(94.6) (-)	1,282	(96.8) (-)	1,230	(96.9) (-)
Purchases		(100.0)		(100.0)		(100.0)	-	(100.0)
Coal gases Petroleum gases	8 15	(7.2) (13.9)	2 10	(1.3) (6.4)	1 9	(0.3) (3.8)	0 8	(0.0) (3.4)
Natural gas and LNG Others	86 0	(78.8) (0.0)	147 0	(92.3) (0.0)	218 0	(95.9) (0.0)	217 0	(96.5) (0.0)
Sales	1,047	(100.0)	1,359	(100.0)	1,503	(100.0)	1,444	(100.0)
Residential	397	(37.9)	416	(30.6)	413	(27.5)	404	(28.0)
Commercial	170	(16.2)	205	(15.1)	207	(13.8)	199	(13.8)
Industrial Others	391 89	(37.4) (8.5)	619 120	(45.5) (8.8)	760 123	(50.6) (8.2)	722 119	(50.0) (8.3)

# Table 7.3Trends in Production and Purchases, and Sales of Gas

1) Figures in parentheses indicate percentage.

Source: Ministry of Economy, Trade and Industry.

# **Chapter 8**

# Science and Technology/

# **Information and Communication**

# **1. Science and Technology**

#### (1) Researchers and R&D Expenditures

Japan ranks second among major industrialized countries, following the U.S.A., in terms of expenditure on science and technology, and this expenditure supports its position as a technology-based country. Researchers in the fields of science and technology (including social sciences and humanities) as of the end of March 2009 totaled 839,000. The total research and development (R&D) spending in fiscal 2008 amounted to 18.8 trillion yen, the first decrease in nine years. As a percentage of Japan's GDP, research and development (R&D) spending marked a record high: 3.78 percent.

			I			
Year	Researchers $^{1)}$ (1,000)	Females (%)	Fiscal year	R&D expenditures (billion yen)	GDP <sup>2)</sup> (billion yen)	Ratio of R&D expenditures to GDP (%)
	(1,000)				(Unition yen)	
2000	762	10.6	1999	16,011	499,544	3.21
2001	751	10.9	2000	16,289	504,119	3.23
2002	a) 756	a) 10.7	2001	a) 16,528	493,645	a) 3.35
2003	757	11.2	2002	16,675	489,875	3.40
2004	787	11.6	2003	16,804	493,748	3.40
2005	791	11.9	2004	16,938	498,491	3.40
2006	820	11.9	2005	17,845	503,187	3.55
2007	827	12.4	2006	18,463	510,899	3.61
2008	827	13.0	2007	18,944	515,824	3.67
2009	839	13.0	2008	18,800	497,714	3.78

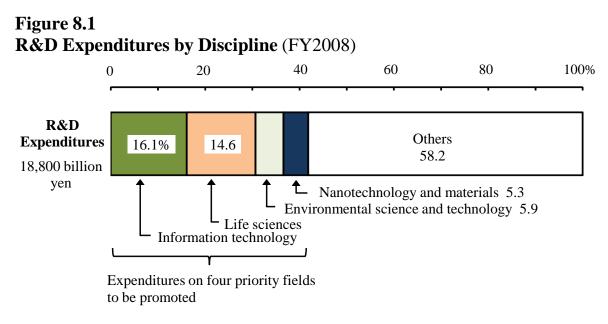
Table 8.1Trends in Research and Development

In full time equivalent, with the number of researchers partly engaged in R&D recalculated based on the real R&D hours consumed by them.
 Chained 2000.
 The survey coverage was expanded.
 Source: Statistics Bureau, MIC.

Source. Statistics Dureau, Mic.

As of the end of March 2009, the number of researchers in business enterprises amounted to 493,000 persons, while the number of researchers in universities and colleges was 306,000 persons. In terms of R&D expenditures in fiscal 2008, business enterprises spent 13.6 trillion yen (72.5 percent of total R&D expenditures), while universities and colleges spent 3.4 trillion yen (18.3 percent).

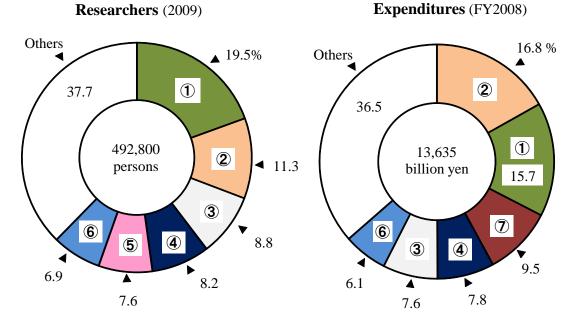
Universities and colleges spend more than 90 percent of their R&D expenditure on natural sciences for basic research and applied research, while business enterprises allocate over 70 percent for development purposes.

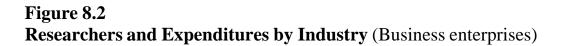


Source: Statistics Bureau, MIC.

Japan drives its science and technology policy from a long-term perspective based on the Science and Technology Basic Law, established in 1995. Now in its third phase (2006 to 2010), research is promoted in the four priority fields that were specifically so-designated. Of the total research spending in fiscal 2008, approximately 40 percent was spent in these four priority fields to be promoted: information technology (16.1 percent), life sciences (14.6 percent), environmental science and technology (5.9 percent), and nanotechnology and materials (5.3 percent).

The researchers at business enterprises totaled 493,000 persons at the end of March 2009. Approximately 90 percent of them, or 432,000 persons, were in the manufacturing industries; the largest number was in the information and communication electronics equipment industry, followed by the motor vehicle, parts and accessories industry, then by the electrical machinery, equipment and supplies industry. In terms of R&D expenditures in fiscal 2008, business enterprises spent 13.6 trillion yen. Of this amount, 11.9 trillion yen was spent by the manufacturing industries; the motor vehicle, parts and accessories industry spent the most, followed by the information and communication electronics equipment industry, then by the medical and pharmaceutical industry.





Information and communication electronics equipment.
 Motor vehicle, parts and accessories.
 Electrical machinery, equipment and supplies.
 Business oriented machinery.
 Electronic parts, devices and electronic circuits.
 Chemical products.

Source: Statistics Bureau, MIC.

#### (2) Technology Trade

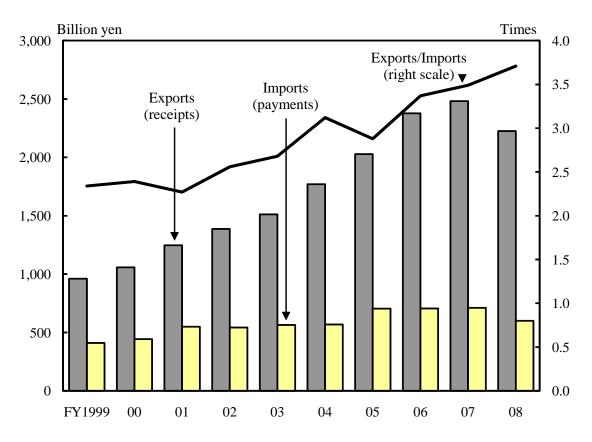
Technology trade is defined as export or import of technology by business enterprises with other countries, such as patents and expertise. In fiscal 2008, Japan earned 2,226 billion yen from technology exports, which was down 10.3 percent from the previous fiscal year, thus marking the first drop in 21 years; of the total receipts, 70.6 percent was from overseas parent/subsidiary companies. Meanwhile, Japan paid 600 billion yen for technology imports. This was down 15.5 percent from the previous fiscal year, for the first drop in six years; of this figure, 14.6 percent was payments to overseas parent/subsidiary companies.

		Technolog	gy Trade	Trade		
Fiscal	Ex	Exports		Imports		
year	Value	Annual increase	Value	Annual increase		Imports
	(billion yen)	rate (%)	(billion yen)	rate (%)		value
1990	339.4	3.0	371.9	12.7		0.91
1995	562.1	21.6	391.7	5.7		1.43
2000	1,057.9	10.1	443.3	8.0		2.39
2005	2,028.3	14.6	703.7	24.0		2.88
2006	2,378.2	17.3	705.4	0.2		3.37
2007	2,482.3	4.4	710.5	0.7		3.49
2008	2,225.5	-10.3	600.0	-15.5		3.71

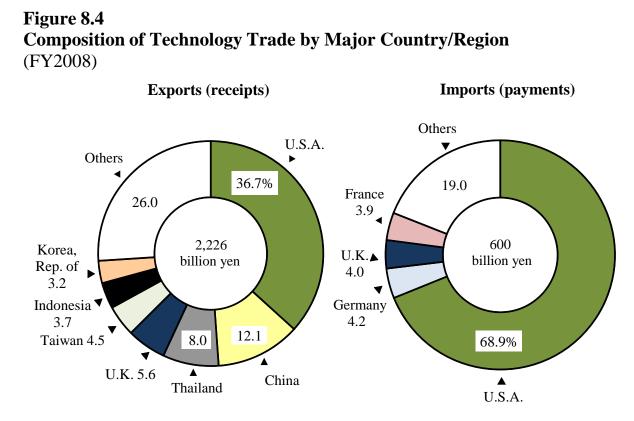
# Table 8.2Technology Trade by Business Enterprise

Source: Statistics Bureau, MIC.

#### Figure 8.3 Trends in Technology Trade by Business Enterprise <sup>1)</sup>



1) The survey coverage was expanded in FY2001. Source: Statistics Bureau, MIC. In fiscal 2008, Japan exported 2,226 billion yen of technologies; major destinations for export were: the U.S.A. (818 billion yen, or 36.7 percent of total exports), followed by China (270 billion yen), Thailand (179 billion yen), and the U.K. (125 billion yen). On the other hand, Japan imported 600 billion yen of technologies, mainly from the U.S.A. (413 billion yen, or 68.9 percent of total imports), followed by Germany (25 billion yen), the U.K. (24 billion yen), and France (23 billion yen).



Source: Statistics Bureau, MIC.

## 2. Patents

The total number of patent applications remained robust in and after 1998 as more than 400,000 applications were submitted every year, but a gradual drop has been seen since 2006. In 2008, there were 391,002 applications (down 1.3 percent from the previous year).

#### Table 8.3 Patents

					(Cases)
Item	1995	2000	2005	2007	2008
Applications	369,215	436,865	427,078	396,291	391,002
Registrations	109,100	125,880	122,944	164,954	176,950
Existing vested rights	681,459	1,040,607	1,123,055	1,206,335	1,270,367

Source: Ministry of Economy, Trade and Industry.

# Table 8.4PCT International Applications by Country of Origin

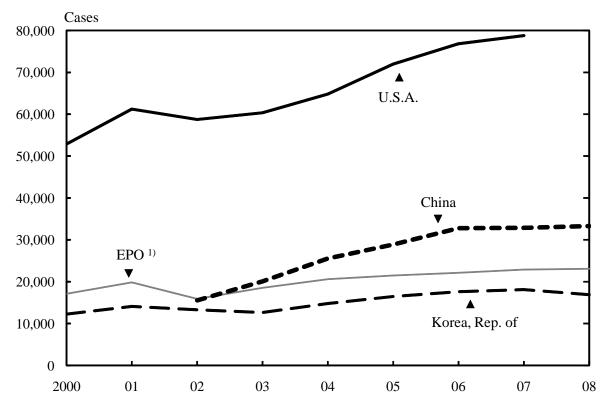
						(Cases)
Country	2005	2006	2007	2008	2009*	Annual growth (%)
Total	136,753	149,669	159,949	163,247	155,900	
U.S.A	46,857	51,296	54,037	51,653	45,790	-11.4
Japan	24,870	27,023	27,748	28,785	29,827	3.6
Germany	15,987	16,734	17,824	18,853	16,736	-11.2
Korea, Rep. of	4,689	5,946	7,065	7,901	8,066	2.1
China	2,512	3,937	5,465	6,128	7,946	29.7
France	5,756	6,264	6,570	7,074	7,166	1.3
U.K	5,095	5,092	5,539	5,514	5,320	-3.5
Netherlands	4,504	4,550	4,422	4,339	4,471	3.0
Switzerland	3,294	3,613	3,814	3,749	3,688	-1.6
Sweden	2,887	3,333	3,658	4,136	3,667	-11.3

Source: World Intellectual Property Organization.

Approximately 140 countries, including Japan, have joined the international patent system of the World Intellectual Property Organization (WIPO) as of March 2010. In 2009, the number of international patent applications made based on the Patent Cooperation Treaty (PCT) was 156,000, of which Japan filed 29,827, an increase of 3.6 percent over the previous year.

The U.S.A. ranked first among major countries/organizations with which Japanese filed patent applications in 2007, with 78,794 filings. The number of Japanese-filed patent applications in China has been on a constant rise since 2002. It reached 33,264 in 2008, more than double the 2002 figure of 15,511.





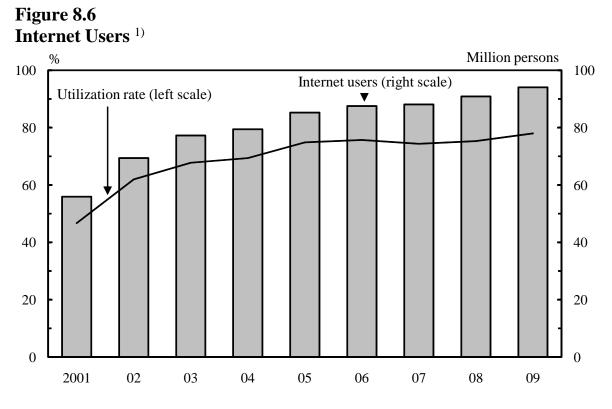
1) European Patent Office. Source: Ministry of Economy, Trade and Industry.

# **3. Information and Communication**

### (1) Diffusion of the Internet

The number of Internet users has been growing steadily since the start of commercial Internet use in 1993. As of the end of 2009, the number of people who had used the Internet in the past year (those aged 6 years and over; covering any and all types of Internet connection devices used, including PCs, cell phones, personal handyphone systems, mobile information terminals and game machines) totaled 94.08 million, or 78.0 percent of the population aged 6 years and over. An observation by age group showed that the individual Internet user rate exceeded 90 percent in people in their 10s to 40s, although the rate dropped as the age went up.

Currently, mobile networks are expanding. The number of people accessing the Internet via cell phones and other mobile devices at the end of 2009 was estimated to be 80.10 million, accounting for 85.1 percent of the people aged 6 years and over who have accessed the Internet.



<sup>1)</sup> Ages 6 years and over.

Source: Ministry of Internal Affairs and Communications.

Among enterprises, the Internet user rate at the end of 2009 was 99.5 percent (up 0.5 percentage point from the previous year).

### (2) Progress of Communication Technologies

As of the end of March 2009, the contracts of broadband (connection) service subscriptions totaled 30.32 million, marking a 5.5-percent annual increase. Among broadband subscribers, the number of DSL (digital subscriber line) subscribers reached 11.18 million, accounting for 36.9 percent of the total.

Meanwhile, IP phone services (voice phone services that use Internet Protocol technology across part or all of the communication network), which use broadband circuits as access lines, entered full-scale use between 2002 and 2003. As of the end of March 2009, the total number of IP phone subscribers was 20.22 million.

Subscribers for Internet connection service using cable television networks (cable Internet) as of the end of March 2009 totaled 4.11 million (up 6.2 percent from the previous year).

FTTH (fiber to the home) service, using optical fiber, provides an ultra-high speed network capable of communicating faster than a DSL or cable Internet connection. As of the end of March 2009, the number of FTTH (connection) subscribers was 15.02 million, marking a 23.6-percent increase over the past year. Internet users currently not using it are highly interested in switching to FTTH, given its faster communication speed and falling fees. This service is therefore expected to further grow in the future.

### (3) Telephone

The number of fixed phone subscription contracts was 37.92 million (down 8.4 percent year-on-year) at the end of March 2010. Meanwhile, the number of mobile phone subscribers (cell phones and personal handyphone systems) totaled 112.05 million at the end of March 2009, marking a rise by 3.8 percent year-on-year to 116.30 million at the end of March 2010.

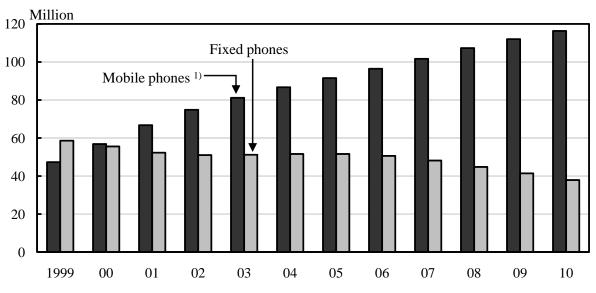
					(T)	housands)
Item	1995	2000	2005	2007	2008	2009
Public phones (NTT <sup>1)</sup> only)	801	736	442	361	329	307
Fixed phone service						
subscribers	59,940	55,550	51,630	48,170	44,780	41,370
Mobile phone subscribers	4,331	56,846	91,474	101,698	107,339	112,050
ISDN (Integrated Services						
Digital Network) subscribers	340	6,680	7,980	7,000	6,450	5,930
DSL (Digital Subscriber Line)						
subscribers	-	0	13,676	14,013	12,711	11,184
Cable Internet subscribers	-	216	2,961	3,607	3,872	4,111
FTTH (Fiber to the home)						
subscribers	-	-	2,889	8,795	12,154	15,017
International phone calls,						
sent and received	599,400	801,200	# 1,103,700	1,430,000	1,293,100	1,106,900

## Table 8.5Telecommunications Services

1) Nippon Telegraph and Telephone Corporation.

Source: Ministry of Internal Affairs and Communications.

#### Figure 8.7 Telephone Service Subscribers



1) Subscribers of cell phones and car phones plus PHS (personal handyphone system). Source: Ministry of Internal Affairs and Communications.

### (4) Postal Service

As of the end of March 2009, there were, nationwide, 24,539 post offices run by Japan Post Network Co., Ltd. and 192,213 mailboxes set up and serviced by Japan Post Service Co., Ltd.

Japan Post Service Co., Ltd. handled 22.86 billion pieces of domestic mail (letters and parcels) in fiscal 2009 (a 1.8-percent decrease from the previous fiscal year).

Meanwhile, the total number of international mail (including letters, express mail services (EMS) and parcels) sent in fiscal 2009 amounted to 61.31 million pieces (a decrease of 11.5 percent from the previous fiscal year), representing an enormous decrease from that of fiscal 1995 (122.78 million). This decline is attributable to the shift of business mails to e-mails.

#### Table 8.6 Postal Services

						(Millions)
Item	FY1995	FY2000	FY2005	FY2007	FY2008	FY2009
Domestic						
Letters	24,262.9	26,114.4	22,666.1	21,317.8	20,587.5	20,054.2
Parcels	400.2	310.5	2,075.0	2,527.9	2,702.0	2,804.7
International						
Sent	122.8	106.0	77.5	72.7	69.2	61.3
Letters <sup>1)</sup>	119.9	104.3	76.1	71.2	67.7	59.8
Parcels	2.9	1.7	1.5	1.6	1.6	1.5

1) Including express mail services (EMS).

Source: Japan Post Service Co., Ltd.

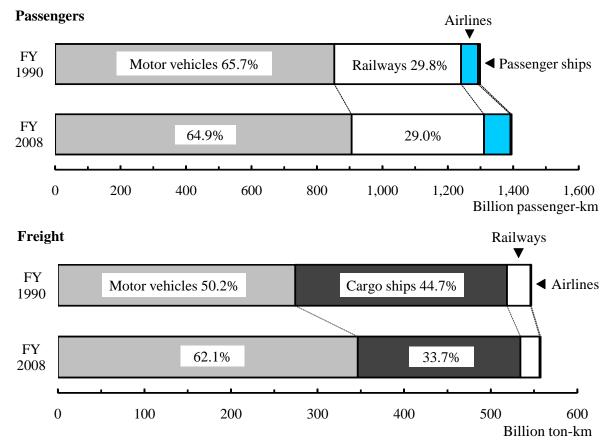
## Chapter 9

## Transport

### **1. Domestic Transport**

Various modes of domestic transport are used in Japan; almost all passenger transport is by motor vehicle and railway, while nearly all freight transport is by motor vehicle and cargo ship. A comparison of data between fiscal 1990 and fiscal 2008 showed a marked growth in motor vehicle transportation for both passengers and freight. Currently, in the face of the increasing importance of  $CO_2$  emissions reduction, a series of efforts, including improving the energy efficiency of cars and promoting the broader use of environmentally-friendly cars, resulted in Japan's transport sector recording 235 million tons in  $CO_2$  emissions in fiscal 2008, the first success in meeting the emissions target of 240 million to 243 million tons that is the reference level for fiscal 2010 set in the Kyoto Protocol Target Achievement Plan. In an attempt to further reduce emissions, the government is encouraging a shift from driving to public transportation and the development of next-generation low-emission vehicles, etc.

#### Figure 9.1 Composition of Domestic Transport



Source: Ministry of Land, Infrastructure, Transport and Tourism.

#### (1) Domestic Passenger Transport

No major changes have been observed in recent years in the volume of domestic passenger transport. In public transportation, among other domains, a variety of actions have been taken to boost ridership, for example, by introducing multiple-use IC (integrated circuit) cards covering different railway/bus operators and bus location systems designed to provide bus location tracking information, as well as varying commute times to relieve road traffic jams on a city- or region-wide scale.

In fiscal 2008, the number of domestic transport passengers was 89.94 billion (almost the same as the previous fiscal year). The total volume of passenger transport was 1.39 trillion passenger-kilometers (down 1.3 percent).

## Table 9.1Domestic Passenger Transport

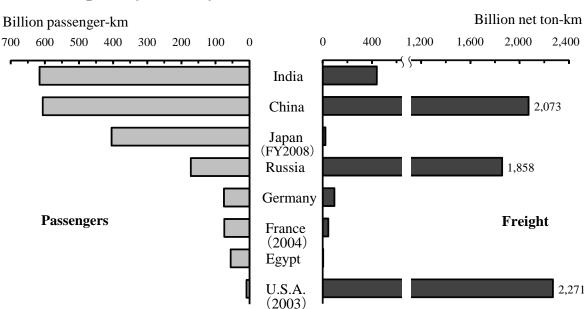
Item	Passenger (millie		Passenger kilometers (billions)		
	FY2007	FY2008	FY2007	FY2008	
Total transport volume	89,945	89,940	1,412.77	1,394.83	
Railways	22,841	22,976	405.54	404.59	
JR (Japan Railways)	8,988	8,984	255.21	253.56	
Other than JR	13,853	13,992	150.33	151.03	
Motor vehicles	66,909	66,774	919.06	905.91	
Buses	5,963	5,930	88.97	89.92	
Commercial use	4,560	4,607	71.98	73.26	
Non-commercial use	1,403	1,322	16.99	16.66	
Passenger cars	38,762	38,049	570.63	552.88	
Taxis and limousine hires	2,137	2,025	11.10	10.57	
Private cars <sup>1)</sup>	36,625	36,025	559.53	542.30	
Light vehicles <sup>2)</sup>	20,180	20,889	210.80	216.20	
Trucks	2,004	1,907	48.66	46.91	
Airlines	95	91	84.33	80.93	
Passenger ships	101	99	3.83	3.51	

1) Includes both family- and business-owned cars. 2) Cars with gasoline engine sizes under 660cc, and motorcycles.

Source: Ministry of Land, Infrastructure, Transport and Tourism.

#### TRANSPORT

In fiscal 2008, the Japan Railways (JR) group reported 8.98 billion passengers (down 0.1 percent from the previous fiscal year) and 253.56 billion passenger-kilometers (down 0.8 percent). Railways other than JR reported 13.99 billion passengers (up 1.0 percent) and 151.03 billion passenger-kilometers (up 0.5 percent).



#### Figure 9.2 Rail Transport by Country (2005)

Source: Ministry of Land, Infrastructure, Transport and Tourism; United Nations.

In order to encourage the use of buses, various efforts to improve their convenience have been promoted. Commercial buses transported 4.61 billion passengers (up 1.0 percent from the previous fiscal year) and achieved 73.26 billion passenger-kilometers (up 1.8 percent); both figures increased in fiscal 2008.

Taxi and limousine hire services have marked a long-term downward trend in passengers. They carried 2.03 billion passengers (down 5.2 percent from the previous fiscal year) and reported 10.57 billion passenger-kilometers (down 4.8 percent); both figures of passengers and passenger-kilometers declined in fiscal 2008. Passenger transport via private cars registered 36.03 billion passengers (down 1.6 percent) and 542.30 billion passenger-kilometers (down 3.1 percent).

				T)	housands)
Type of vehicles	FY1995	FY2000	FY2005	FY2007	FY2008
Trucks and trailers	20,235	18,065	16,707	16,265	15,859
Buses	243	236	232	231	230
Passenger cars	45,069	52,449	57,098	57,551	57,682
Special purpose vehicles		1,754	1,619	1,578	1,528
Two-wheeled vehicles <sup>1)</sup>	3,036	3,021	3,337	3,456	3,502

## Table 9.2Number of Motor Vehicles Owned

1) Two-wheeled vehicles with engine displacement of more than 125cc.

Source: Ministry of Land, Infrastructure, Transport and Tourism.

Fiscal 2008 air transport records show that there were 90.66 million passengers (down 4.4 percent from the previous fiscal year), and passenger-kilometers amounted to 80.93 billion (down 4.0 percent).

In fiscal 2008, passenger ships reported 99.03 million passengers (down 1.7 percent from the previous fiscal year) and 3.51 billion passenger-kilometers (down 8.5 percent).

#### (2) Domestic Freight Transport

In the area of domestic freight, a total of 5.14 billion metric tons (down 4.6 percent from the previous fiscal year) of freight was transported for a total of 557.61 billion ton-kilometers (down 4.2 percent) in fiscal 2008.

As for transport tonnage volume in fiscal 2007, motor vehicle transport accounted for more than 90 percent of the total. Major items transported by motor vehicles were: foodstuffs, textiles and household equipment; and wastes and feed. In terms of transport ton-kilometers, cargo ships, next to motor vehicles, accounted for a substantial portion of volume. The principal items transported by cargo ships were nonferrous ores and metals, petroleum products, etc.

#### TRANSPORT

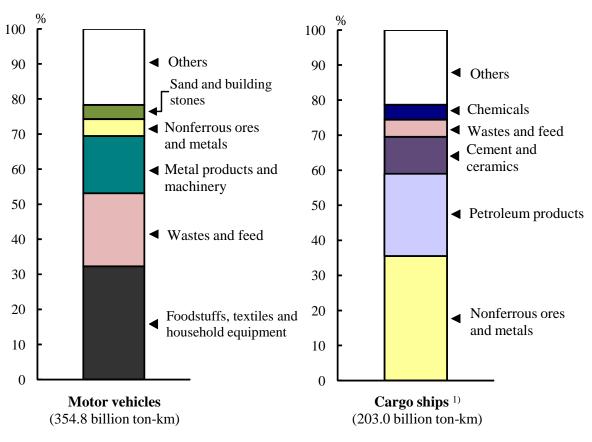
Item	Freight t (milli	e	Ton kilometers (billions)		
	FY2007	FY2008	FY2007	FY2008	
Total transport volume	5,394.2	5,144.3	582.24	557.61	
Railways	50.9	46.2	23.33	22.26	
JR (Japan Railways)	36.0	32.8	23.14	22.08	
Other than JR	14.9	13.4	0.19	0.17	
Motor vehicles	4,932.5	4,718.3	354.80	346.42	
Commercial use	2,927.9	2,808.7	310.19	302.82	
Non-commercial use	2,004.6	1,909.7	44.62	43.60	
Cargo ships	409.7	378.7	202.96	187.86	
Airlines <sup>1)</sup>	1.1	1.1	1.15	1.08	

## Table 9.3Domestic Freight Transport

1) Including overweight baggage and postal mail.

Source: Ministry of Land, Infrastructure, Transport and Tourism.





<sup>1)</sup> Including non-commercial use.

Source: Ministry of Land, Infrastructure, Transport and Tourism.

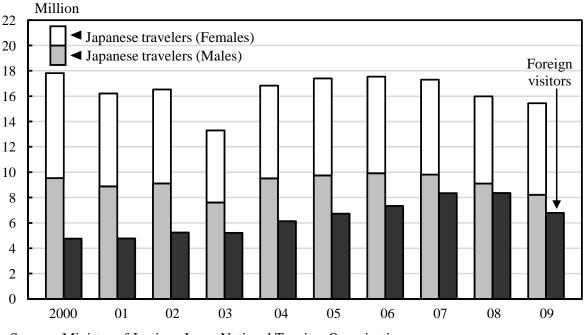
### 2. International Transport

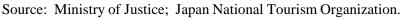
#### (1) International Passenger Transport

Since 2008, fuel price hikes and global economic downturns have quickly shrunk demand for international air passenger transport with Japanese airlines. In 2009, they transported 15.39 million passengers (down 6.3 percent from the previous year) on international flights, and registered 67.20 billion passenger-kilometers (down 7.7 percent).

The number of Japanese overseas travelers in 2009 dropped from the previous year to 15.45 million (down 3.4 percent). According to reports on arrivals by tourist offices in countries around the world, China, Republic of Korea and the U.S.A. had many Japanese visitors in 2009.

#### Figure 9.4 Japanese Overseas Travelers and Foreign Visitor Arrivals





#### TRANSPORT

	200	2006		)7	2008		
Country or area	Number	Annual	Number	Annual	Number	Annual	
of destination	of arrivals	growth	of arrivals	growth	of arrivals	growth	
	(1,000)	(%)	(1,000)	(%)	(1,000)	(%)	
China	3,746	10.5	3,977	6.2	3,446	-13.4	
U.S.A. <sup>1)</sup>	3,673	-5.4	3,531	-3.8	3,250	-8.0	
Korea, Rep. of	2,339	-4.1	2,236	-4.4	2,378	6.4	
Hong Kong SAR	1,311	8.3	1,324	1.0	1,325	0.0	
Thailand	1,312	9.6	1,278	-2.6	1,147	-10.3	
Taiwan	1,161	3.3	1,166	0.4	1,087	-6.8	
France	696	4.5	698	0.3	674	-3.4	
Germany <sup>2)</sup>	760	4.1	662	-12.9	598	-9.′	

## Table 9.4Japanese Travelers

1) Including territories and dependencies (Northern Mariana Islands, Guam, American Samoa, Puerto Rico and United States Virgin Islands, etc.). 2) Arrivals in registered tourist accommodations.

Source: Japan National Tourism Organization.

	200	8	2009			
Country or area of origin	Number of arrivals (1,000)	Percent distribution	Number of arrivals (1,000)	Percent distribution		
Total arrivals	8,351	100.0	6,790	100.0		
Korea, Rep. of	2,382	28.5	1,587	23.4		
Taiwan	1,390	16.6	1,024	15.1		
China	1,000	12.0	1,006	14.8		
U.S.A	768	9.2	700	10.3		
Hong Kong SAR	550	6.6	450	6.6		
Australia	242	2.9	212	3.1		
U.K	207	2.5	181	2.7		
Thailand	192	2.3	178	2.6		
Canada	168	2.0	153	2.2		
Singapore	168	2.0	145	2.1		

## Table 9.5Foreign Visitors

Source: Japan National Tourism Organization.

#### TRANSPORT

The number of foreign visitors to Japan was 6.79 million in 2009 (down 18.7 percent from the previous year). Broken down by country/region, the number of visitors from Asian countries was highest, totaling 4.81 million persons (down 21.8 percent from the previous year). Among Asian countries, the number of visitors from Republic of Korea was highest, amounting to 1.59 million, a figure that accounted for 23.4 percent of the total number of foreign visitors to Japan.

Of the total number of foreign visitors to Japan, tourists numbered 4.76 million persons, or 70.1 percent of total foreign visitors. The highest number of tourists came from Republic of Korea with 1.15 million travelers, followed by Taiwan with 0.91 million travelers.

#### (2) International Freight Transport

The volume of seaborne foreign transport in 2008 was 866.45 million tons, up 4.0 percent over the previous year. Of this figure, total exports decreased by 15.7 percent to 47.78 million tons, but total imports increased by 3.9 percent to 547.89 million tons.

				(Thousand tons)
Year	Total	Exports	Imports	Cross Transport
1995	703,606	38,761	529,929	134,916
2000	739,377	34,960	538,875	165,542
2005	777,869	45,403	529,239	203,225
2006	803,051	54,697	503,152	245,203
2007	833,217	56,702	527,467	249,048
2008	866,453	47,781	547,888	270,784

## Table 9.6Seaborne Foreign Transport

Source: Ministry of Land, Infrastructure, Transport and Tourism.

Air-shipped international freight in 2009 totaled 1.17 million tons in terms of volume (down 10.9 percent from the previous year) and 6.07 billion tons in terms of ton-kilometers (down 18.5 percent).

## **Chapter 10**

### Commerce

### 1. Wholesale and Retail

The 2007 Census of Commerce showed that 1.47 million wholesale and retail stores were in operation in Japan, following the pattern of constant decrease, with its 1982 peak of 2.15 million. The number of persons engaged became 11.69 million, of which 11.11 million were persons regularly engaged (which means persons engaged remaining after temporary employees and workers dispatched from outside units are excluded). A total of 548 trillion yen was generated in annual sales.

#### **Table 10.1**

#### **Trends in the Commercial Sector**<sup>1)</sup>

Trenus in the Commerci		101				(Thou	isands)
	1999	<b>)</b> <sup>2)</sup>	2002	200	2004		7 <sup>3)</sup>
Stores	1,833	(-7.0)	1,680 (-8.4)	1,613	(-3.9)	1,473	(-8.7)
Wholesale	426	(-5.2)	380 (-10.9)	375	(-1.1)	335	(-10.8)
Retail	1,407	(-7.5)	1,300 (-7.6)	1,238	(-4.8)	1,138	(-8.1)
Persons engaged <sup>4)</sup>	13,198	(-)	12,613 (-4.4)	12,334	(-2.2)	11,685	(-5.3)
Wholesale	4,675	(-)	4,173 (-10.8)	3,957	(-5.2)	3,623	(-8.4)
Retail	8,522	(-)	8,441 (-1.0)	8,377	(-0.8)	8,062	(-3.8)
Persons regularly engaged	12,525	(-0.5)	11,975 (-4.4)	11,566	(-3.4)	11,106	(-4.0)
Wholesale	4,496	(-5.9)	4,002 (-11.0)	3,804	(-5.0)	3,526	(-7.3)
Retail	8,029	(2.6)	7,973 (-0.7)	7,762	(-2.6)	7,579	(-2.4)
Annual sales (trillion yen)	639	(-9.3)	548 (-14.2)	539	(-1.8)	548	(1.8)
Wholesale	495	(-9.7)	413 (-16.6)	405	(-1.9)	414	(2.0)
Retail	144	(-8.0)	135 (-6.1)	133	(-1.4)	135	(1.1)

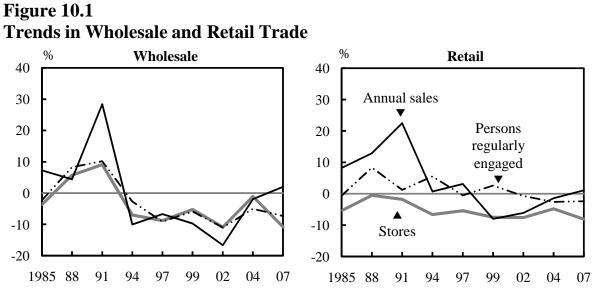
Figures in parentheses indicate changes in percentage over preceding figures. 2) The 1999 increase rates are calculated by using 1999 adjusted figures, which are not reported.
 Coverage was expanded to include retail stores located within railway stations and toll road rest areas. 4) The count began in 1999. Figures for and before 2002 include persons regularly engaged and temporary employees dispatched to outside units. Source: Ministry of Economy, Trade and Industry.

#### (1) Wholesale Trade

The number of wholesale stores dropped to 335,000 in 2007, from 375,000 in 2004, showing a decrease of 10.8 percent. Observed by size of operation in terms of persons engaged, approximately 90 percent of the stores were small- and medium-scale operations (with less than 20 persons). A total of 81.7 percent was incorporated establishments, while 18.3 percent sole proprietorships.

#### COMMERCE

The number of persons engaged in wholesale was 3.62 million in 2007, of which there were 552,000 part-timers (15.2 percent). Annual sales in wholesale amounted to 414 trillion yen.



Source: Ministry of Economy, Trade and Industry.

## Table 10.2Stores, Persons Engaged and Annual Sales in the Commercial Sector (2007)

		(	Thousands)
	Total	Wholesale	Retail
Number of stores	1,473	335	1,138
Size of operation (persons engaged)			
1-2 persons	574	74	500
3-4	355	80	276
5-9	319	92	227
10-19	145	53	92
20-29	37	16	20
30-49	24	11	13
50-99	13	6	7
100 and over	5	3	3
Persons engaged <sup>1)</sup>	11,685	3,623	8,062
Persons regularly engaged A	11,106	3,526	7,579
Regular employees	9,313	3,036	6,277
Full-timers	4,792	2,484	2,308
Part-timers	4,521	552	3,970
Temporary employees B	222	59	163
Workers dispatched from outside units C	413	80	333
Persons regularly engaged and temporary employees dispatched to outside units D	56	42	13
Annual sales (billion yen)	548,237	413,532	134,705

1) Persons engaged = A+B+C-D.

Source: Ministry of Economy, Trade and Industry.

### (2) Retail Trade

The number of retail stores in operation totaled 1.14 million in 2007, showing a continual downtrend since the 1985 Census. Observed by size of operation in terms of persons engaged, approximately 90 percent of the stores were small- and medium-scale operations (with less than 10 persons). By type of organization, 49.7 percent of retail stores were incorporated establishments, while 50.3 percent were sole proprietorships. Although the proportion of sole proprietorships was higher in the retail sector than in the wholesale sector, it has been declining since its peak (90.1 percent) in 1958.

The number of persons engaged in retail was 8.06 million in 2007, of which 3.97 million part-timers comprised 49.2 percent of the total. Annual sales in retail was 135 trillion yen.

	Stores	Persons engaged	Persons regularly engaged	Annual sales	Sales floor space per store
		(1,000)	(1,000)	(Billion yen)	$(m^2)$
Total1	1,137,859	8,062	7,579	134,705	156
Department stores	271	341	118	7,709	23,630
General merchandise supermarkets.	1,585	387	378	7,447	9,403
Large-scale stores	1,380	365	357	6,947	10,443
Specialty supermarkets	35,512	1,238	1,206	23,796	1,126
Apparel	7,153	83	81	1,681	698
Food	17,865	902	879	17,106	1,075
Housing	10,494	253	245	5,009	1,506
Home centers	4,045	140	135	3,046	2,613
Convenience stores	43,684	649	635	7,007	115
24-hours operation	36,808	583	572	6,247	119
Drugstores	12,701	143	141	3,013	375
Other supermarkets	55,615	436	426	5,949	167
Specialty stores	986,650	4,858	4,667	79,631	86
Other retail stores	1,841	10	9	154	135

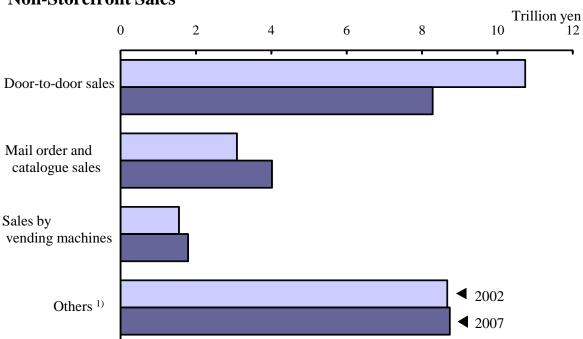
## Table 10.3Retail Establishments by Sales Form Classification (2007)

Source: Ministry of Economy, Trade and Industry.

#### COMMERCE

The 2007 average sales floor space per retail establishment was by far the largest in department stores (23,630 square meters), followed by general merchandise supermarkets (9,403 square meters), specialty supermarkets (1,126 square meters) and drugstores (375 square meters). Store size growth was evident relative to the 2004 level, with a significant increase of 33.5 percent in drugstores serving as a major example.

Of the total annual sales at retail business establishments, roughly 80 percent were storefront sales, while about 20 percent were non-storefront sales. Compared to the 2002 survey on non-storefront sales, door-to-door sales dropped by about 20 percent, while mail order and catalogue sales grew by approximately 30 percent.



#### Figure 10.2 Non-Storefront Sales

1) Including co-op sales, catering sales, monthly newspaper subscriptions, and milk delivery sales, etc.

Source: Ministry of Economy, Trade and Industry.

### 2. Food Service Establishments

According to the 2006 Establishment and Enterprise Census, there were approximately 724,000 food service establishments in operation and 4.12 million employed persons (persons regularly or temporarily engaged). Compared to the 2001 survey, the number of establishments decreased by 8.9 percent while the number of the employed persons declined by 4.0 percent.

## Table 10.4Food Service Establishments

Size of		Establishments				Employed persons <sup>1)</sup>			
operation	200	2001		2006		2001		)6	
(employed persons)	Number	Ratio	Number	Ratio	Number	Ratio	Number	Ratio	
	(1,000)	(%)	(1,000)	(%)	(1,000)	(%)	(1,000)	(%)	
Total	795	100.0	724	100.0	4,293	100.0	4,121	100.0	
1-4 persons	549	69.1	488	67.4	1,207	28.1	1,048	25.4	
5-9	145	18.2	129	17.8	925	21.5	831	20.2	
10-19	62	7.8	65	9.0	821	19.1	876	21.3	
20-29	21	2.6	24	3.3	493	11.5	562	13.6	
30 and over	19	2.4	18	2.5	846	19.7	804	19.5	

1) Persons regularly or temporarily engaged.

Source: Statistics Bureau, MIC.

## **Chapter 11**

## Trade, International Balance of Payments, and

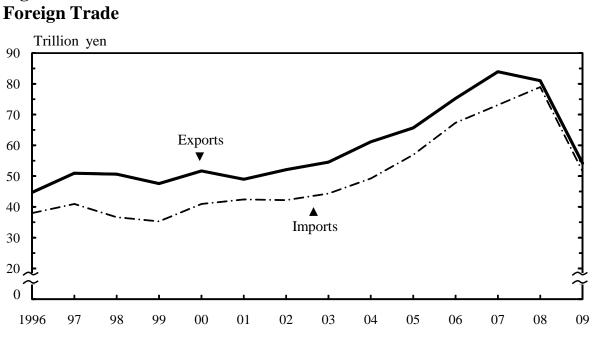
## **International Cooperation**

### 1. Trade

### (1) Overview of Trade

Figure 11.1

Japan has continued to produce a trade surplus since 1981. In terms of Japan's international trade on a customs clearance basis in 2009, exports (in FOB value) showed an annual decrease of 33.1 percent to 54.2 trillion yen, the second consecutive year of decrease. Imports (in CIF value) dropped by 34.8 percent to 51.5 trillion yen, thus falling for the first time in seven years. As a result, Japan's trade surplus increased for the first time in two years, growing by 29.5 percent from the previous year to 2.7 trillion yen.



Source: Ministry of Finance.

## TRADE, INTERNATIONAL BALANCE OF PAYMENTS, AND INTERNATIONAL COOPERATION

	Value (billion yen)				Indices of trade (2005=100)						
	(Custon	ns clearar	nce basis)		Exports			Imports			
Year	Exports (FOB)	Imports (CIF)	Balance	Value index	Quantum index <sup>1)</sup>	Unit value index	Value index	Quantum index <sup>1)</sup>	Unit value index		
2000	51,654	40,938	10,716	78.7	87.4	90.0	71.9	84.8	84.7		
2001	48,979	42,416	6,564	74.6	79.2	94.2	74.5	83.2	89.6		
2002	52,109	42,228	9,881	79.4	85.4	92.9	74.1	84.8	87.4		
2003	54,548	44,362	10,186	83.1	89.6	92.7	77.9	90.8	85.8		
2004	61,170	49,217	11,953	93.2	99.2	93.9	86.4	97.2	88.9		
2005	65,657	56,949	8,707	100.0	100.0	100.0	100.0	100.0	100.0		
2006	75,246	67,344	7,902	114.6	107.7	106.4	118.3	103.8	113.9		
2007	83,931	73,136	10,796	127.8	112.9	113.2	128.4	103.7	123.9		
2008	81,018	78,955	2,063	123.4	111.2	111.0	138.6	103.0	134.6		
2009	54,171	51,499	2,671	82.5	81.6	101.1	90.4	88.2	102.5		

## Table 11.1Trends in Foreign Trade and Indices of Trade

1) Quantum index = Value index / Unit value index  $\times$  100

Source: Ministry of Finance.

Japan's 2009 exports decreased by 8.9 percent from the previous year in terms of unit value index (a decrease for the second consecutive year), and decreased by 26.6 percent from the previous year in terms of quantum index (a decrease for the second consecutive year).

Japan's 2009 imports dropped by 23.8 percent from the previous year in terms of unit value index (the first decrease in six years), and decreased by 14.4 percent from the previous year in terms of quantum index (a decrease for the third consecutive year).

#### (2) Trade by Commodity

The leading export item category was transport equipment, which accounted for 21.9 percent of the total value exported, followed by electrical machinery and general machinery, making up 19.9 percent and 17.8 percent, respectively. Motor vehicles, which are in the transport equipment category, constituted 12.4 percent of the total export value, down 47.1 percent in quantity and 51.3 percent in value from the previous year. One characteristic of Japan's exports is an increasing proportion of high value-added products manufactured with advanced technology, such as motor vehicles, steel and integrated circuits.

The leading import item category was mineral fuels, which represented 27.6 percent of the total value imported, followed by electrical machinery and foodstuffs, with 12.6 percent and 9.7 percent, respectively. Crude petroleum and partially refined petroleum, both in the mineral fuels category, constituted 14.7 percent of the total import value, down 11.9 percent in quantity and 53.5 percent in value from the previous year. Energy resource imports decreased greatly in value in 2009, with crude oil being the foremost example, as a result of worldwide resource price declines. Japan's chief imports used to be energy resources and raw materials, though the proportion of product imports is gradually on the rise due to the further industrialization of the Asian region and overseas production relocations by Japanese companies.

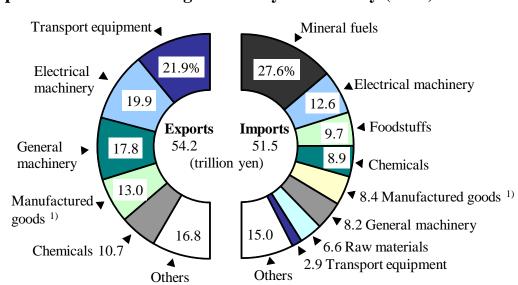


Figure 11.2 Component Ratios of Foreign Trade by Commodity (2009)

1) Consisting of iron and steel products, non-ferrous metals, textile yarn and fabrics, etc. Source: Ministry of Finance.

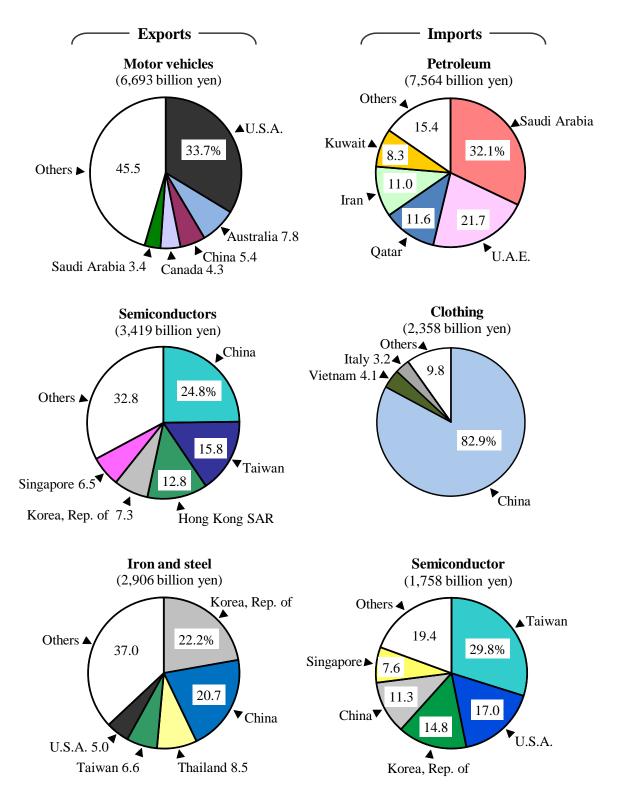
## TRADE, INTERNATIONAL BALANCE OF PAYMENTS, AND INTERNATIONAL COOPERATION

## Table 11.2Value of Exports and Imports, by Principal Commodity

	incipa	Commo	ulty	(Bil	lion yen)
				-	Annual
Item	2006	2007	2008	2009	growth
					(%)
Exports, total	75,246	83,931	81,018	54,171	-33.1
Foodstuffs	358	417	403	366	-9.4
Raw materials	900	1,046	1,054	826	-21.6
Mineral fuels	645	1,026	1,869	948	-49.3
Chemicals	6,794	7,745	7,269	5,780	-20.5
Plastics	2,043	2,339	2,232	1,844	-17.4
Manufactured goods <sup>1)</sup>	8,674	9,876	10,177	7,017	-31.1
Iron and steel products	3,485	4,042	4,574	2,906	-36.5
General machinery	14,800	16,631	15,928	9,669	-39.3
Power generating machinery	2,320	2,593	2,509	1,839	-26.7
Electrical machinery Semiconductors and	16,076	16,950	15,368	10,771	-29.9
other electronic parts	4,855	5,243	4,625	3,419	-26.1
Transport equipment	18,244	20,839	20,068	11,850	-41.0
Motor vehicles	12,300	14,317	13,736	6,693	-41.0
Others	8,757	9,400	8,883	6,944	-21.8
Scientific and optical instruments	2,469	9,400 2,090	8,883 2,024	1,578	-21.8
	2,409	2,070	2,024	1,576	-22,1
Imports, total	67,344	73,136	78,955	51,499	-34.8
Foodstuffs	5,710	6,041	6,212	4,999	-19.5
Fish and shellfish	1,573	1,501	1,453	1,208	-16.9
Raw materials	4,733	5,670	5,538	3,395	-38.7
Mineral fuels	18,657	20,206	27,658	14,202	-48.7
Petroleum, crude and partly refined	11,535	12,279	16,262	7,564	-53.5
Chemicals	4,909	5,471	5,737	4,583	-20.1
Medical and pharmaceutical products	991	1,078	1,142	1,329	16.3
Manufactured goods <sup>1)</sup>	6,554	7,409	7,336	4,345	-40.8
Non-ferrous metals	2,162	2,619	2,531	1,013	-60.0
General machinery	6,240	6,515	6,074	4,225	-30.4
Electrical machinery	8,645	9,310	8,628	6,509	-24.6
Semiconductors and	0,045	),510	0,020	0,507	-24.0
other electronic parts	2,873	2,852	2,479	1,758	-29.1
Transport equipment	2,259	2,534	2,316	1,501	-35.2
Others	9,637	9,980	9,454	7,742	-18.1
Clothing and clothing accessories	2,754	2,796	2,643	2,358	-10.8

1) Consisting of iron and steel products, non-ferrous metals, textile yarn and fabrics, etc. Source: Ministry of Finance.





Source: Ministry of Finance.

#### (3) Trade by Country/Region

Japan has maintained a trade surplus with Asia, the U.S.A. and the EU, while has been in a continuous deficit with the Middle East and Oceania.

(Rillion von)

Table 11.3
Trends in Exports and Imports by Country/Region

								(B1	non yen)
Year	Total	Asia	China	Korea, Rep. of	Taiwan	U.S.A.	EU 27 <sup>1)</sup>	Middle East	Oceania
Exports	from Japa	n							
2005	65,657	31,796	8,837	5,146	4,809	14,805	9,652	1,823	1,714
2006	75,246	35,776	10,794	5,849	5,131	16,934	10,912	2,233	1,801
2007	83,931	40,400	12,839	6,384	5,274	16,896	# 12,398	3,078	2,104
2008	81,018	39,966	12,950	6,168	4,782	14,214	11,430	3,508	2,200
2009	54,171	29,338	10,236	4,410	3,399	8,733	6,749	2,013	1,409
Imports	to Japan								
2005	56,949	25,279	11,975	2,695	1,994	7,074	6,470	9,664	3,098
2006	67,344	29,360	13,784	3,178	2,365	7,911	6,955	12,692	3,691
2007	73,136	31,564	15,035	3,210	2,334	8,349	# 7,663	13,370	4,189
2008	78,955	32,034	14,830	3,052	2,258	8,040	7,292	17,351	5,378
2009	51,499	22,989	11,436	2,051	1,711	5,512	5,518	8,640	3,542

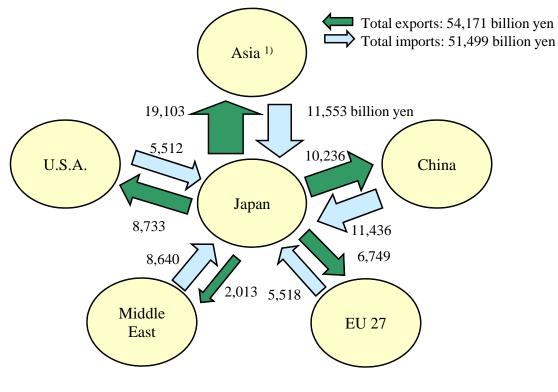
1) EU member countries were: 25, before Jan. 2007; 27, from Jan. 2007 onward. Source: Ministry of Finance.

#### (A) Trade with Asia

Japan's 2009 trade balance with Asia resulted in 6.3 trillion yen in surplus, a decrease for the second consecutive year (down 20.0 percent). Exports (in FOB value) totaled 29.3 trillion yen (down 26.6 percent), marking the second consecutive year of decrease; this was mainly due to the contributions for the drop in general machinery and electrical machinery. Imports (in CIF value) amounted to 23.0 trillion yen (down 28.2 percent), the first decrease in twelve years; this was mainly attributed to the drop in mineral fuels and electrical machinery.

In recent years, mainland China has taken an increasingly greater share in imports and exports. In 2002, China outperformed the U.S.A. to become the largest source of imports to Japan. Further still, in 2009, China overtook the U.S.A. in exports as well to become the largest export destination from Japan. In 2009, Japan's trade with China amounted to 10.2 trillion yen in exports and 11.4 trillion yen in imports.





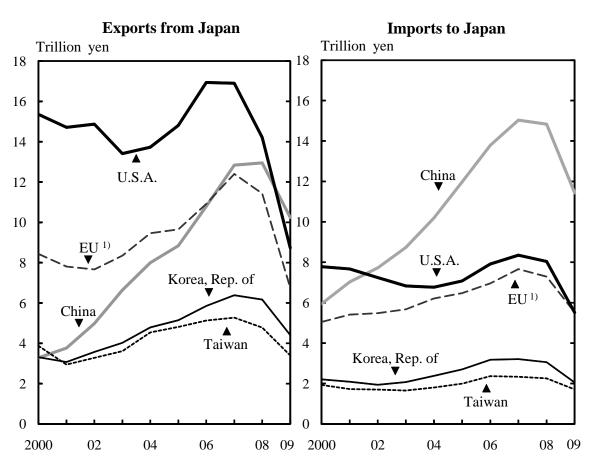
1) Excluding China. Source: Ministry of Finance.

#### (B) Trade with U.S.A.

Japan's 2009 trade balance with the U.S.A. was 3.2 trillion yen in surplus, much smaller than the previous year (down 47.8 percent from the previous year). Exports (in FOB value) amounted to 8.7 trillion yen (down 38.6 percent), recording a decrease for the third consecutive year; major contribution for the drop was in transport equipment and general machinery. Imports (in CIF value) totaled 5.5 trillion yen (down 31.4 percent), marking a drop for the second consecutive year; the decrease was due mainly to the contributions in foodstuffs and general machinery.

(C) Trade with EU

Japan's 2009 trade balance with the 27 member countries of the EU registered a significantly-narrowed surplus of 1.2 trillion yen (down 70.2 percent). Exports (in FOB value) totaled 6.7 trillion yen (down 41.0 percent), due mainly to the contributions for the drop in general machinery and transport equipment. Imports (in CIF value) totaled 5.5 trillion yen (down 24.3 percent), because of contributions for the drop in general machinery and transport equipment, etc.



#### Figure 11.5 Trends in Japan's Trade by Country/Region

1) EU member countries were: 15 countries, before May 2004; 25, from May 2004 to Dec. 2006; 27, from Jan. 2007 onward. Source: Ministry of Finance.

### **2. International Balance of Payments**

Japan's current account has consistently recorded a surplus in recent years. In 2009, the surplus narrowed for the second consecutive year to 13.3 trillion yen, down 18.9 percent from the previous year. A breakdown of Japan's current account showed that its trade balance was 4.0 trillion yen, a level of surplus more or less the same as in the previous year, in contrast to the fact that both exports and imports were down substantially from the previous year's level. Also shown is that the services balance was 1.9 trillion yen in deficit, a reduction in the deficit for the second consecutive year to 12.3 trillion yen, marking a decline in the surplus for the second consecutive year.

On the other hand, the balance of the capital and financial account registered the fifth consecutive year of deficit (excess outflow), being 12.6 trillion yen in the red.

				(Billion yen)
Item	2006	2007	2008	2009
Current account	19,848.8	24,793.8	16,379.8	13,286.7
Goods and services	7,346.0	9,825.3	1,889.9	2,124.9
Trade balance	9,464.3	12,322.3	4,027.8	4,038.1
Exports	71,630.9	79,725.3	77,334.9	50,857.2
Imports	62,166.5	67,403.0	73,307.1	46,819.1
Services	-2,118.3	-2,497.1	-2,137.9	-1,913.2
Income	13,745.7	16,326.7	15,841.5	12,325.4
Current transfers	-1,242.9	-1,358.1	-1,351.5	-1,163.5
Capital and financial account <sup>1)</sup>	-12,466.5	-22,538.3	-18,389.5	-12,644.7
Financial account	-11,913.2	-22,065.3	-17,831.2	-12,179.4
Direct investment	-6,602.5	-6,005.4	-10,707.4	-5,872.5
Portfolio investment	14,796.1	8,251.5	-29,188.9	-20,505.3
Financial derivatives	283.5	324.9	2,456.2	948.7
Other investment	-20,390.3	-24,636.2	19,608.9	13,249.7
Capital account	-553.3	-473.1	-558.3	-465.3
Changes in reserve assets <sup>1)</sup>	-3,719.6	-4,297.4	-3,200.1	-2,526.5
Errors and omissions	-3,662.7	2,041.9	5,209.8	1,884.4

## Table 11.4International Balance of Payments

1) Negative figures (-) show outflow of capital (an increase in assets or a decrease in liabilities).

Source: Ministry of Finance.

Japan's foreign assets (the balance of overseas assets held by residents in Japan) as of the end of 2009 amounted to 554.8 trillion yen, while its foreign liabilities (assets held in Japan by nonresidents) was 288.6 trillion yen. As a result, Japan's net foreign assets (foreign assets minus foreign liabilities) reached a record high of 266.2 trillion yen.

## Table 11.5Trends in Japan's Foreign Assets and Liabilities 1)

				(E	Sillion yen)
Item	2005	2006	2007	2008	2009
Assets	506,191	558,106	610,492	519,179	554,826
Liabilities	325,492	343,024	360,271	293,671	288,603
Net assets	180,699	215,081	250,221	225,508	266,223

1) End of year.

Source: Ministry of Finance.

Japan's foreign reserve assets remained at around \$220 billion during the period from 1996 to 1998. However, they started to increase from 1999, reaching \$1,049.4 billion at the end of 2009. This represented an increase of \$18.8 billion (1.8 percent) from the end of the previous year.

### Table 11.6

#### **Reserve Assets**<sup>1)</sup>

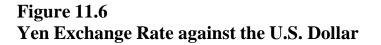
(Million U.S. dollars)

					(	
End of year	Total	Foreign currency <sup>2)</sup>	Reserve position in IMF	SDRs	Gold <sup>3)</sup>	Other reserve assets <sup>4)</sup>
2005	846,897	828,813	2,878	2,585	12,621	-
2006	895,320	874,596	1,933	2,812	15,639	340
2007	973,365	947,987	1,395	3,034	20,580	369
2008	1,030,647	1,003,300	2,659	3,033	21,281	374
2009	1,049,397	996,552	4,313	20,968	27,161	403

1) End of year. 2) Including securities in market value. 3) Market value. 4) Including Asian Bond Fund.

Source: Ministry of Finance.

The yen became super-strong against the U.S. dollar in Spring 1995, hitting a high of nearly 80 yen. The trend subsequently shifted to a progressively weaker yen, which eventually reached 143.79 yen in July 1998. After hovering between the 100 and 120 yen ranges for the most part since 1999, the yen began appreciating sharply in late 2008 and marked 86.15 yen in November 2009. As of the end of June 2010, the rate was 88.66 yen.





Source: Bank of Japan.

### **3. International Cooperation**

International cooperation donors are becoming increasingly diverse: official development assistance (ODA) by the government, direct investments and export credits by private corporations, donations by nonprofit organizations, aid activities by NGOs and volunteer citizen groups, etc. In addition, there are various forms of assistance, including bilateral assistance and assistance through multilateral institutions.

#### **Table 11.7**

			(Milli	ion U.S.	dollars)
Item	1995	2000	2005	2007	2008
Total value	42,295	11,423	23,259	30,315	31,783
Official flows	20,033	8,467	10,726	7,890	7,593
Official development assistance (ODA)	14,489	13,508	13,147	7,679	9,579
Bilateral official development assistance	10,419	9,768	10,406	5,778	6,823
Grants	6,298	5,678	9,195	5,983	7,764
Grants-in-aid	2,876	2,100	6,524	3,414	4,777
Technical cooperation	3,422	3,578	2,671	2,569	2,987
Loans, etc	4,120	4,090	1,212	-205	-940
Contributions to multilateral institutions, etc	4,071	3,740	2,740	1,901	2,756
Other official flows (OOF)	5,544	-5,041	-2,421	211	-1,986
Official export credits (over one year)	981	-1,239	-1,202	-772	-629
Direct investment finance, etc	3,541	-3,709	-222	543	-1,952
Concessional lending to multilateral institutions, etc	1,021	-93	-997	441	594
Private flows at market terms (PF)	22,046	2,725	12,278	21,979	23,738
Private export credits (over one year)	3,054	-799	-3,433	2,586	-4,878
Direct investments	9,398	2,874	14,472	18,037	25,710
Bilateral investment in securities, etc	9,543	702	1,158	3,251	3,952
Concessional lending to multilateral institutions, etc	50	-52	81	-1,896	-1,046
Grants by private voluntary agencies	216	231	255	446	452
ODA as percentage of GNI (%)	a) 0.28	0.28	0.28	0.17	* 0.19
ODA as percentage of GNI (DAC average) (%)	a) 0.27	0.22	0.33	0.28	* 0.31

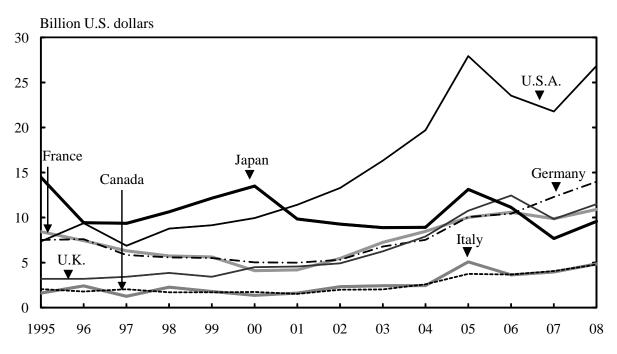
#### Net Flow of Development Cooperation<sup>1)</sup>

1) Net disbursement at current prices. A minus sign indicates that the amount recovered was greater than the amount lent. a) ODA as percentage of GNP (%).

Source: Ministry of Foreign Affairs; Ministry of Finance; OECD.

In the ODA framework, Japan has contributed to the growth of developing countries as the world's number-one ODA donor for ten consecutive years up until 2000. Recently, Japan's ODA budget has been declining because of the country's severe economic and financial situation. However, its 2008 ODA spending (on the basis of net disbursement at current prices) was \$9.6 billion, up 24.7 percent from the previous year, increasing for the first time in three years. The main factors for the increase were an increase in contributions to multilateral organizations and the high yen.

In 2008, the 22 member countries of the Development Assistance Committee (DAC) of the OECD provided \$121.5 billion in ODA. Of this total, Japan's ODA contribution accounted for approximately 8 percent, making Japan the fifth-largest contributor behind the U.S.A., Germany, the U.K and France. The ratio of Japan's ODA to Gross National Income (GNI) was 0.19 percent, or an increase of 0.02 percentage point compared with that of the previous year.



#### Figure 11.7 Trends in ODA by Country <sup>1)</sup>

1) Net disbursement at current prices. Source: Ministry of Foreign Affairs; OECD. Of the \$9.6 billion in ODA provided by Japan in 2008, \$6.8 billion or 71.2 percent was bilateral ODA (up 18.1 percent year-on-year), and \$2.8 billion or 28.8 percent was ODA contributed through multilateral institutions (up 45.0 percent).

Bilateral ODA provided in 2008 consisted of \$4.8 billion in grants-in-aid, \$3.0 billion in technical cooperation, and negative \$0.9 billion in loans, etc. (negative value indicates a larger amount of repayment received in 2008 than the amount lent in the same year).

By region, bilateral ODA (including aid to Eastern European countries and graduated countries) was distributed as follows: Middle East, 34.2 percent; Africa, 20.1 percent; Asia, 15.5 percent; Latin America, 3.9 percent; Europe, 2.2 percent; and Oceania, 1.1 percent.

<u> </u>					(Million U.S	S. dollars)
Region	1995	2000	2005	2006	2007	2008
Total	10,557	9,640	10,464	7,430	5,840	6,939
Asia	5,745	5,284	3,841	1,974	1,633	1,074
ASEAN	2,229	3,126	1,968	686	612	-356
Middle East	721	727	3,477	1,049	949	2,372
Africa	1,333	970	1,139	2,533	1,701	1,396
Latin America	1,142	800	409	431	226	269
Oceania	160	151	94	76	70	73
Europe	153	118	309	220	109	150
Unspecified	1,303	1,592	1,194	1,146	1,152	1,605

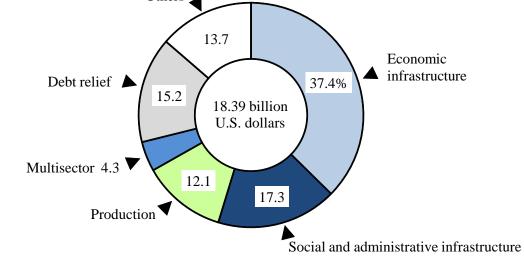
## Table 11.8Regional Distribution of Bilateral ODA 1)

1) Net disbursement at current prices. Including aid to Eastern European countries and graduated countries.

Source: Ministry of Foreign Affairs.

Bilateral ODA in 2008 (including aid to Eastern European countries and graduated countries) was broken down by purpose (on a commitment basis) as follows: 37.4 percent for improving the economic infrastructure (including transport and energy), followed in descending order by social and administrative infrastructure, and then the production sector.





1) Commitment basis. Including aid to Eastern European countries and graduated countries. Source: Ministry of Foreign Affairs.

In addition to the financial assistance described above, Japan has also been active in the areas of human resources development and technology transfer, both vital to the growth of a developing country, through its ODA activities. This not only contributes to sustainable economic growth, poverty reduction and improved living standards in developing countries, but also plays an important role in deepening mutual understanding between Japan and developing countries, and it has also led to efforts to address global issues, including the economy, the environment and climate change.

# Table 11.9Number of Persons Involved in Technical Cooperationby Type and Program <sup>1)</sup>

Type of cooperation	FY2000	FY2005	FY2006	FY2007	FY2008
Total	31,968	37,291	42,546	34,216	47,397
Trainees received	17,513	24,504	30,334	21,280	36,319
Dispatched					
Experts	3,381	3,488	4,541	4,940	4,597
Research team	9,428	6,862	5,747	6,104	4,624
Japan Overseas					
Cooperation Volunteers	1,370	1,804	1,529	1,482	1,365
Other volunteers	276	633	395	410	492

1) Numbers of persons newly received/dispatched in the aforementioned fiscal year. Source: Japan International Cooperation Agency.

## Chapter 12

### Labor

### 1. Labor Force

Japan's labor force was on a continuous decline after recording a historical high of 67.93 million people in 1998. It showed growth from 2005 due to the increased labor force participation rate of, mainly, the elderly, but fell again in 2008. The labor force is expected to shrink in the long run as the falling birthrate and the aging population change the population composition.

The labor force, defined as the sum of the employed and unemployed, numbered 66.17 million people in Japan in 2009, down 330,000 (0.5 percent) from the previous year and was the second consecutive year of decrease.

(Thousands)

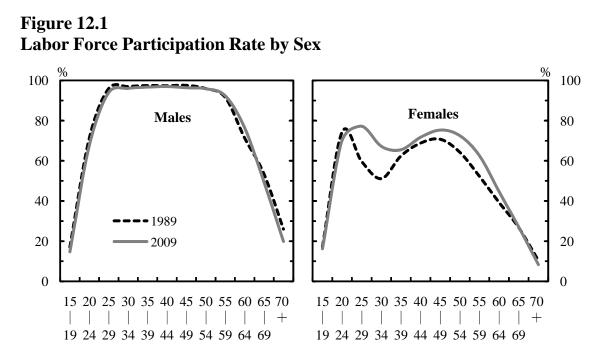
	D 1.1					(Thousands)
Year	Population aged 15 years		Labor force	2	Not in labor force	Unemploy- ment rate
	and over	Total	Employed	Unemployed	Torce	(%)
Total						
1995	105,100	66,660	64,570	2,100	38,360	3.2
2000	108,360	67,660	64,460	3,200	40,570	4.7
2005	110,070	66,500	63,560	2,940	43,460	4.4
2006	110,200	66,570	63,820	2,750	43,550	4.1
2007	110,430	66,690	64,120	2,570	43,670	3.9
2008	110,500	66,500	63,850	2,650	43,950	4.0
2009	110,500	66,170	62,820	3,360	44,300	5.1
Males						
1995	51,080	39,660	38,430	1,230	11,390	3.1
2000	52,530	40,140	38,170	1,960	12,330	4.9
2005	53,230	39,010	37,230	1,780	14,160	4.6
2006	53,270	38,980	37,300	1,680	14,250	4.3
2007	53,420	39,060	37,530	1,540	14,320	3.9
2008	53,440	38,880	37,290	1,590	14,530	4.1
2009	53,420	38,470	36,440	2,030	14,930	5.3
Females						
1995	54,020	27,010	26,140	870	26,980	3.2
2000	55,830	27,530	26,290	1,230	28,240	4.5
2005	56,840	27,500	26,330	1,160	29,290	4.2
2006	56,930	27,590	26,520	1,070	29,300	3.9
2007	57,010	27,630	26,590	1,030	29,350	3.7
2008	57,060	27,620	26,560	1,060	29,420	3.8
2009	57,090	27,710	26,380	1,330	29,360	4.8

## Table 12.1Population by Labor Force Status

Source: Statistics Bureau, MIC.

The 2009 labor force participation rate (rate of the labor force to the population aged 15 years and over) was 59.9 percent (down 0.3 percentage point from the previous year). Observed by sex, the rate was 72.0 percent for men (down 0.8 percentage point) and 48.5 percent for women (up 0.1 percentage point).

The female labor force participation rate by age group shows an M-shaped curve. This curve indicates that women leave the labor force when they get married or give birth to a child and then rejoin the labor force after their child has grown and the burden of child-rearing is reduced. Compared with the situation twenty years ago (1989), the participation rate of women in the 25-29 age group has increased by 17.6 percentage points, while the participation rate of women in the 30-34 age group, which formed the bottom of the M-shaped curve, has risen 16.1 percentage points. There has thus been a noticeable change in the M-shaped curve, which has become flatter over the decade.



Source: Statistics Bureau, MIC.

## 2. Employment

The number of employed persons in Japan had declined continuously since 1998, but it began to rise in 2004 and continued rising for four years in a row. However, a downward trend set in once again in 2008, which led to a decrease of 1.03 million in 2009, from 63.85 million (57.8 percent of the population aged 15 years and over) in the previous year to 62.82 million (56.9 percent).

### (1) Employment by Industry

In 2009, the primary industry accounted for 4.2 percent of employment; the secondary industry, 25.4 percent; and the tertiary industry, 69.5 percent.

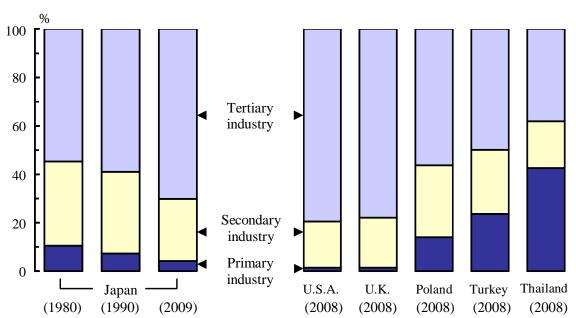


Figure 12.2 Structure of Employment by Country

Source: Statistics Bureau, MIC; International Labour Organization.

## Table 12.2Employment by Industry

				(Tho	usands)	
Tu destaises	2007	2009	2000	Perce	Percentage	
Industries	2007	2008	2009	Males	Females	
Total <sup>1)</sup>	64,120	63,850	62,820	58.0	42.0	
Primary industry	2,720	2,680	2,620	59.2	40.8	
Agriculture and forestry	2,510	2,450	2,420	57.9	42.1	
Fisheries	210	230	200	75.0	25.0	
Secondary industry	17,210	16,840	15,930	75.1	24.9	
Mining and quarrying of stone and gravel	40	30	30	100.0	0.0	
Construction	5,520	5,370	5,170	85.7	14.3	
Manufacturing	11,650	11,440	10,730	70.0	30.0	
Tertiary industry	43,450	43,590	43,660	51.7	48.3	
Electricity, gas, heat supply and water	330	320	340	88.2	11.8	
Information and communications	1,920	1,890	1,930	75.1	24.9	
Transport and postal activities	3,300	3,420	3,480	81.3	18.7	
Wholesale and retail trade	10,770	10,670	10,550	49.8	50.2	
Finance and insurance	1,550	1,640	1,650	48.5	51.5	
Real estate and goods rental and leasing	1,130	1,110	1,100	63.6	36.4	
Scientific research,						
professional and technical services	1,980	2,000	1,950	66.8	33.2	
Accommodations eating						
and drinking services	3,800	3,730	3,800	38.9	61.1	
Living-related and personal services						
and amusement services	2,330	2,360	2,410	40.7	59.3	
Education, learning support	2,790	2,830	2,870	45.1	54.9	
Medical, health care and welfare	5,790	5,980	6,210	24.2	75.8	
Compound services	710	560	520	59.6	40.4	
Services, n.e.c.	4,780	4,850	4,630	57.9	42.1	
Government, except elsewhere classified	2,270	2,230	2,220	76.6	23.4	

1) Including "Industries unable to classify."

Source: Statistics Bureau, MIC.

As the Japan Standard Industrial Classification (JSIC) was revised in 2007, a strict comparison cannot be made between the figures for 2007 and later and those for 2006 and before. Nevertheless, there was an obvious decline in the number of employed persons in the secondary industry, particularly in manufacturing. The decline continued for thirteen consecutive years from 1993 to 2005. The figure turned upward in 2006, but has been declining again since 2008.

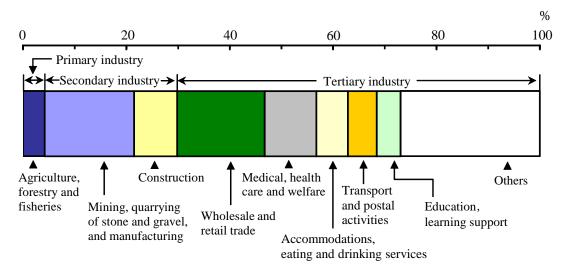
#### Revisions to the Japan Standard Industrial Classification (JSIC)

The Japan Standard Industrial Classification was revised in 2007 so that it should be compatible with changes in the industrial structure that came with more advanced information and telecommunications, the further shift to a service-oriented economy, and more diverse ways to operate a business in Japan. As a result, the Classification now has new or revised major groupings and also provides better comparability with international classifications. The table below outlines the revisions made.

JSIC, 2002 rev. JSIC, 2007 rev. A Agriculture and forestry A Agriculture **B** Forestry C Fisheries **B** Fisheries D Mining C Mining and quarrying of stone and gravel E Construction D Construction E Manufacturing F Manufacturing F Electricity, gas, G Electricity, gas, heat supply and water heat supply and water H Information and communications -G Information and communications 1) ➤ H Transport and postal activities I Transport I Wholesale and retail trade J Wholesale and retail trade -2) K Finance and insurance J Finance and insurance L Real estate ► K Real estate and goods rental and leasing ► L Scientific research, professional and technical services M Eating and drinking places, ► M Accommodations, accommodations eating and drinking services → N Living-related and personal services and amusement services N Medical, health care and welfare O Education, learning support O Education and learning support P Medical, health care and welfare P Compound services Q Compound services O Services, n.e.c. -R Services, n.e.c. S Government, except elsewhere classified R Government, n.e.c. T Industries unable to classify T Industries unable to classify

Note: An arrow indicates a major industrial grouping shift.

1) Postal activities, including mail delivery. 2) Food take out and delivery services.



#### **Figure 12.3 Distribution of Employment by Industry** (2009)

Source: Statistics Bureau, MIC.

In the tertiary industry, employment increased from the previous year by 230,000 in the "medical, health care and welfare" sector and by 70,000 in the sector of "accommodations, eating and drinking services." Meanwhile, employment in "services, not elsewhere classified" and "wholesale and retail trade" decreased by 220,000 and 120,000, respectively.

Depending on the industrial sector, a difference was seen in the employment tendency between men and women. The percentage of female employment was highest in "medical, health care and welfare" (75.8 percent), followed by "accommodations, eating and drinking services" (61.1 percent) and "living-related and personal services and amusement services" (59.3 percent).

### (2) Employment by Occupation

In terms of occupation, employment in the "craftsmen and manufacturing and construction workers" category declined for seven consecutive years since 1998, due to the overseas relocation of production sites and increased imports of manufactured goods. The figure once reversed to rise in 2005, but then began to fall again in 2008, marking a drop of 0.96 million from the previous year in 2009. In contrast, the trend toward a service-oriented economy, the aging population, and improvements to the welfare services have contributed to a steady rise in the number of "protective service and other service workers," such as home-care workers. At the same time, the expansion of the information industry gave a steady boost to the number of "professional and technical workers."

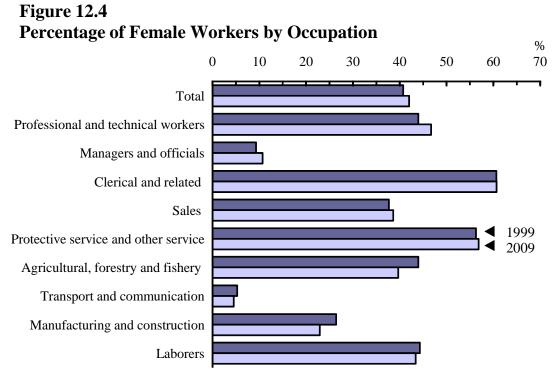
## Table 12.3Employment by Occupation

						(The	ousands)
Occupation	1995 2000		2005	2008	2009 -	Perce	ntage
Geedparlon	1775	2000	2005	2000	2007 -	Males	Females
Total <sup>1)</sup>	64,570	64,460	63,560	63,850	62,820	58.0	42.0
Professional and technical							
workers	7,900	8,560	9,370	9,500	9,680	53.3	46.7
Managers and officials	2,360	2,060	1,890	1,720	1,680	89.3	10.7
Clerical and related							
workers	12,520	12,850	12,470	12,920	12,950	39.3	60.7
Sales workers	9,450	9,110	8,920	8,700	8,570	61.4	38.6
Protective service and other							
service workers	6,100	6,770	7,570	7,890	8,040	43.2	56.8
Agricultural, forestry and							
fishery workers	3,630	3,210	2,790	2,640	2,570	60.3	39.7
Workers in transport and							
communication	2,370	2,210	2,040	1,990	1,980	95.5	4.5
Craftsmen and manufacturing							
and construction workers	16,870	15,800	14,160	14,010	13,050	77.1	22.9
Laborers	3,100	3,470	3,630	3,770	3,710	56.6	43.4

1) Including "Labor force status not reported."

Source: Statistics Bureau, MIC.

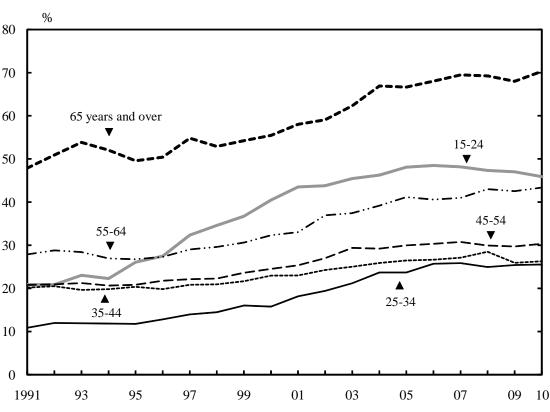
In 2009, women were particularly prominent among "clerical and related workers" (60.7 percent) and "protective service and other service workers" (56.8 percent). On the other hand, the percentage of women was particularly low among "managers and officials" and "workers in transport and communication."

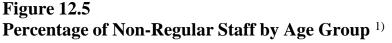


Source: Statistics Bureau, MIC.

### (3) Employment by Employment Pattern

An observation of employment patterns in Japan shows that the ratio of regular staff members has been on a declining trend since the 1980s, while that of non-regular staff members, including part-time workers and agency-dispatched workers, has increased. The latter figure soared in younger age groups from the mid-1990s to the beginning of the 2000s. However, it has been following a downward path since 2009 due to the deteriorating economy.





1) February figures for the respective years are used for data prior to 2002. The average of January-March figures are used for data from 2002 onward. Source: Statistics Bureau, MIC.

In 2009, there were 51.02 million employees (excluding company executives), of whom 17.21 million, or 33.7 percent, were non-regular staff members. The ratio of non-regular staff members among all male employees was 18.4 percent, while the corresponding ratio for females was 53.3 percent, revealing a large difference between the sexes.

#### LABOR

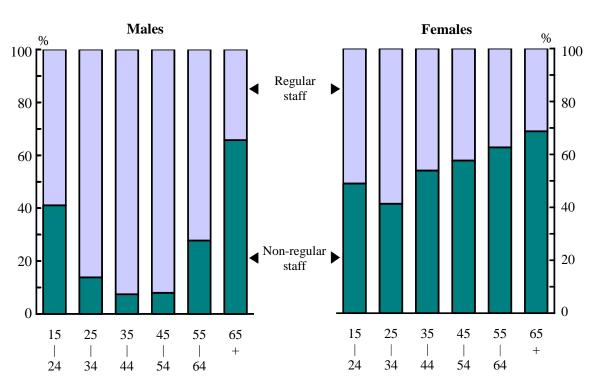
A breakdown of non-regular staff members by age group shows that among men, many young and elderly men are employed as non-regular staff members relative to other age groups. Among women, the older the age group is, the greater the non-regular staff ratio is.

## Table 12.4Employment by Employment Pattern (2009)

		-			(Thousands)
	Employees <sup>1)</sup>	Regular staff	Percentage	Non-regular staff	Percentage
Total	51,020	33,800	66.3	17,210	33.7
Males	28,600	23,340	81.6	5,270	18.4
Females	22,420	10,460	46.7	11,960	53.3

1) Excluding company executives.

Source: Statistics Bureau, MIC.



#### **Figure 12.6 Employment Pattern by Sex and Age** (2009)

Source: Statistics Bureau, MIC.

Such a diversification in employment patterns is attributable to businesses changing the proportion of regular staff members to non-regular staff members as a result of a greater drive to reduce costs. This diversification has also been accelerated by changes in the labor supply structure, which has been affected by the aging population and changes in the overall mentality of workers. As a result of this, more young people are employed as non-regular staff members.

The employment rate of new graduates has been worsening as a result of economic slowdowns since 2008.

## 3. Unemployment

In 2009 the unemployed numbered 3.36 million persons, recording an increase for the second consecutive year. The unemployment rate was 5.1 percent, up 1.1 percentage points from the previous year. The unemployment rate still remains at high levels in 2010, marking 5.2 percent (a seasonally adjusted figure) in May 2010.

The ratio of job offers to job seekers marked 1.08 in July 2006 when it peaked out in recent years. It has been on a falling trend since then, marking 0.50 in May 2010 (a seasonally adjusted figure).

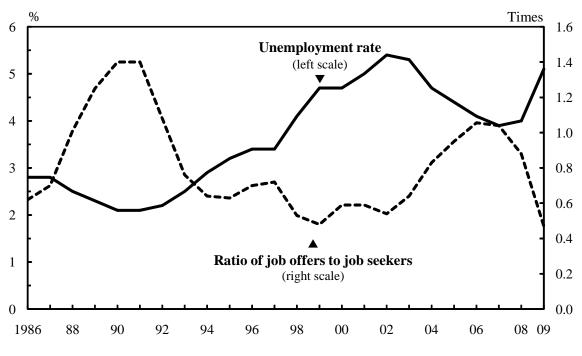


Figure 12.7 Unemployment Rate and Ratio of Job Offers to Job Seekers

Source: Statistics Bureau, MIC; Ministry of Health, Labour and Welfare.

A breakdown by sex shows that the unemployment rate in 2009 was 5.3 percent among men, and 4.8 percent among women. The unemployment rate has been higher among men for twelve consecutive years since 1998.

The unemployment rate was seen as notably higher in younger age groups than in other age groups, in men and women alike.

LABOR

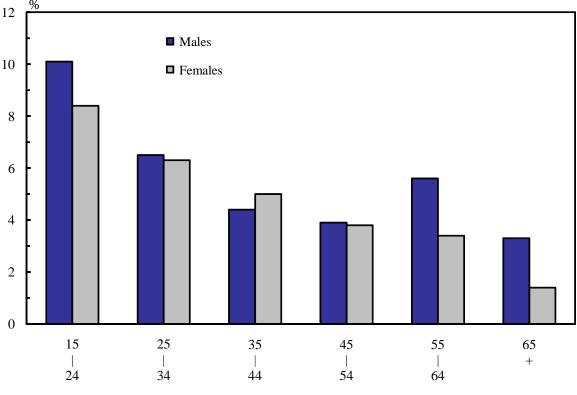


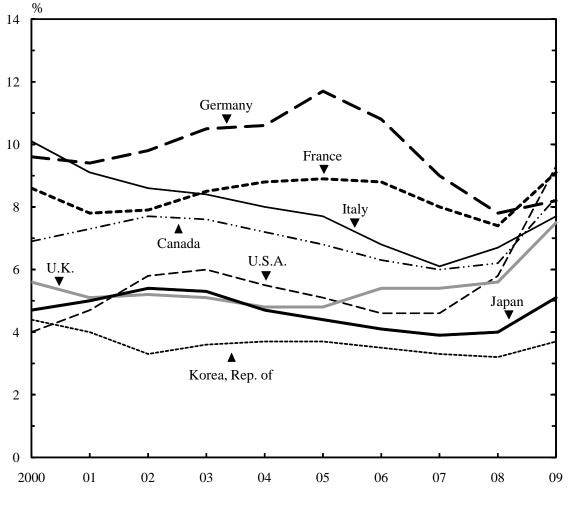
Figure 12.8 Unemployment Rates by Sex and Age (2009)

Analyzing the total number of unemployed in 2009 (3.36 million people), by reasons for job-seeking, the major reasons were: (i) involuntarily dismissed due to corporate or business circumstances, or reaching retirement age limit, 1.45 million persons; (ii) voluntarily left their jobs for personal or family reasons, 1.03 million persons; (iii) new job seekers due to the necessity to earn income, 0.45 million; and (iv) new job seekers just graduated from schools, 0.14 million.

In terms of the duration of unemployment, most were unemployed for "less than 3 months" (1.17 million persons), followed by "1 year or more" (0.95 million persons). The younger a job seeker is, the shorter the job-seeking period tends to be; on the other hand, the older a person, the longer the job-seeking period tends to be.

Source: Statistics Bureau, MIC.





Source: Statistics Bureau, MIC; Cabinet Office.

## 4. Hours of Work and Wages

In 2009, the monthly average of total hours worked was 144.4 per regular employee (in establishments with five or more regular employees), down 2.9 percent from the previous year, and the third consecutive year of decrease. Multiplied by 12, this amounts to an annual average of 1,733 hours.

Of the total monthly hours worked, 135.2 were scheduled working hours, representing a decrease of 1.9 percent from the previous year. Non-scheduled work such as overtime work averaged 9.2 hours per month, representing a decrease of 15.2 percent. Working days averaged 18.9 days per month in 2009.

In 2009, the monthly average of total cash earnings for regular employees (in establishments with five or more regular employees) was 315,000 yen. This total amount includes 262,000 yen in "contractual cash earnings" (which include "scheduled cash earnings" plus "non-scheduled cash earnings" for working overtime, on holidays and late at night, as well as other allowances), and 53,000 yen in "special cash earnings" (which include summer and year-end bonuses, payments to celebrate employees' marriages, etc.).

**Table 12.5** 

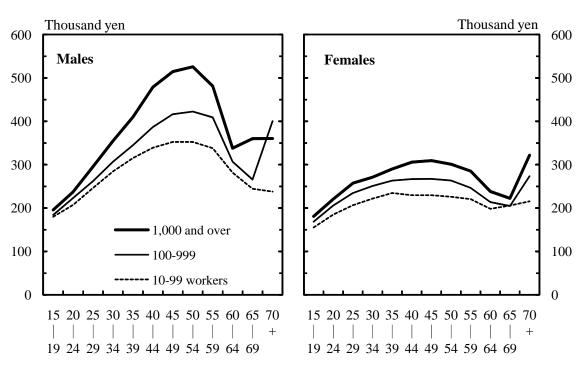
	Dove -	]	Hours of Wo	ork		Wag	ges (1,000 y	ven)	
Year	Days worked	Total	Scheduled	Non- scheduled	Total	Contractual	Scheduled	Non- scheduled	Special <sup>2)</sup>
1995	20.3	159.2	149.6	9.6	363	282	264	18	81
2000	20.0	154.4	144.6	9.8	355	284	265	19	72
2005	19.5	150.2	139.8	10.4	335	273	253	19	62
2007	19.4	150.7	139.7	11.0	330	270	250	20	61
2008	19.3	149.3	138.6	10.7	331	271	251	19	61
2009	18.9	144.4	135.2	9.2	315	262	246	17	53
				Increas	e rates (%	6) <sup>3)</sup>			
1995	-	0.1	0.0	2.0	1.1	1.5	1.4	3.7	-0.4
2000	-	0.7	0.4	4.4	0.1	0.5	0.3	4.0	-1.5
2005	-	-0.6	-0.7	1.1	0.6	0.3	0.2	1.6	2.1
2007	-	-0.7	-0.8	1.3	-1.0	-0.5	-0.5	0.4	-3.4
2008	-	-1.2	-1.1	-1.5	-0.3	-0.2	-0.1	-2.2	-0.4
2009	-	-2.9	-1.9	-15.2	-3.8	-2.1	-1.3	-13.5	-11.8

Hours of Work and Wages<sup>1)</sup> (Monthly average)

1) Establishments with 5 or more regular employees. 2) Bonuses and other special allowances. 3) Increase rates for "Hours of Work" and "Wages" are recalculated annually for sample adjustments.

Source: Ministry of Health, Labour and Welfare.

Generally, the average earnings (scheduled cash earnings) in Japan go up with age until roughly the forties to mid-fifties are reached and then declines. This reflects one characteristic of Japan's seniority employment system in which salaries are determined mainly on the basis of employment duration. Into the 1990s, an increasing number of enterprises reviewed their salary system, resulting in more widespread introduction of a merit-based pay system placing emphasis on performance. However, there has been a trend in recent years, particularly among large enterprises, to value the practice of long-term employment once again and attach importance to job execution skills.





Source: Ministry of Health, Labour and Welfare.

## Chapter 13

## **Family Budgets and Prices**

## 1. Family Budgets

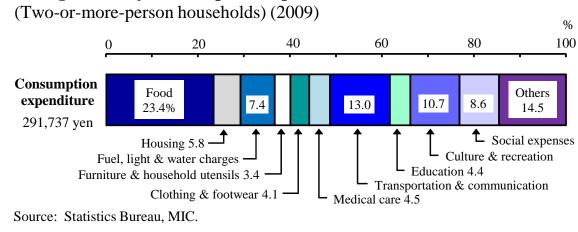
There are approximately 49 million households in Japan, of which about 70 percent are two-or-more-person households and about 30 percent are one-person households. Family budgets vary significantly depending on the employment situation and ages of their members. In this section, family budgets in various types of households are described on the basis of the 2009 results of the Family Income and Expenditure Survey.

## (1) Income and Expenditure

### (A) Two-or-more-person Households

The 2009 average monthly consumption expenditure per two-or-more-person households (the average number of household members being 3.11 and the average age of the household head being 55.8 years) was 291,737 yen. It decreased from the previous year by 1.7 percent in nominal terms and 0.2 percent in real terms. The share of food expenses to the whole consumption expenditure (Engel's coefficient) was 23.4 percent.

#### Figure 13.1 Average Monthly Consumption Expenditure



### (a) Workers' Households

A workers' household means a household of which the head is employed by a company, public office, school, factory, store, etc. The average income of workers' households (the average number of household members being 3.43 and the average age of the household head being 47.1 years) was 518,226 yen in 2009, of which over 80 percent came from the household head's income.

#### **Table 13.1**

Average Monthly Income and Expenditure (Workers' households <sup>1</sup>)

				(Thous	and yen)
Item	2005	2006	2007	2008	2009
Income (A)	524.6	525.7	528.8	534.2	518.2
Wages and salaries	493.8	495.0	497.4	500.7	484.9
Others	30.8	30.7	31.4	33.5	33.3
Disposable income (A-C)	441.2	441.4	442.5	442.7	427.9
Expenditure	412.9	404.5	409.7	416.4	409.4
Consumption expenditure (B)	329.5	320.2	323.5	324.9	319.1
Non-consumption expenditure (C) <sup>2)</sup>	83.4	84.3	86.3	91.5	90.3
Surplus ((A-C)-B)	111.7	121.2	119.0	117.8	108.9
Net increase in savings and insurance	71.8	82.2	80.9	81.2	69.5
Average propensity to consume (%) <sup>3)</sup>	74.7	72.5	73.1	73.4	74.6
Ratio of net savings and insurance $(\%)^{4)}$	16.3	18.6	18.3	18.3	16.2
Engel's coefficient (%)	21.5	21.7	21.7	21.9	22.0
Annual rate of increase (%) (real terms)					
Disposable income	-0.7	-0.2	0.1	-1.5	-1.9
Consumption expenditure	-0.2	-3.1	0.9	-1.1	-0.3

1) Two-or-more-person households. 2) Direct taxes, social insurance contributions, etc.

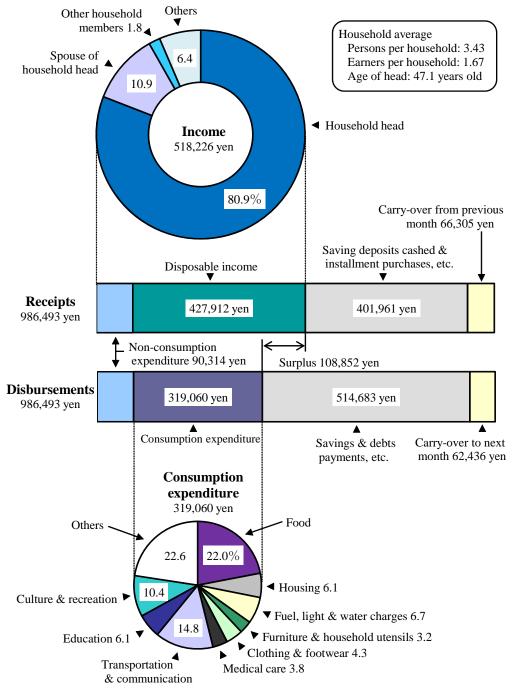
3) Ratio of consumption expenditure to disposable income. 4) Ratio of net savings and insurance to disposable income.

Source: Statistics Bureau, MIC.

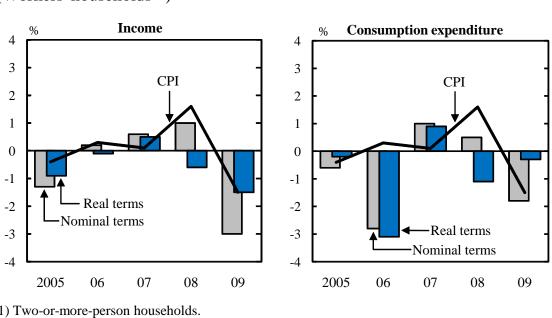
Disposable income, calculated as income minus non-consumption expenditure such as taxes and social insurance contributions, was 427,912 yen. Of this disposable income, 319,060 yen was used for living expenses (consumption expenditure), such as food and housing expenses, while the remainder (surplus), totaling 108,852 yen, was applied to savings, life insurance premiums and repaying debt such as housing loans.

A comparison of consumption expenditure by category showed that spending on "transportation and communication" and "culture and recreation" increased in real terms compared with the previous year, while that on "food" and "clothing and footwear" decreased in real terms.

#### **Figure 13.2 Balance of Income and Expenditure** (Monthly average, workers' households <sup>1</sup>) (2009)



1) Two-or-more-person households. Source: Statistics Bureau, MIC.

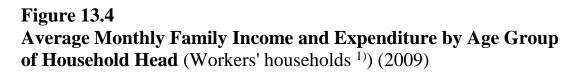


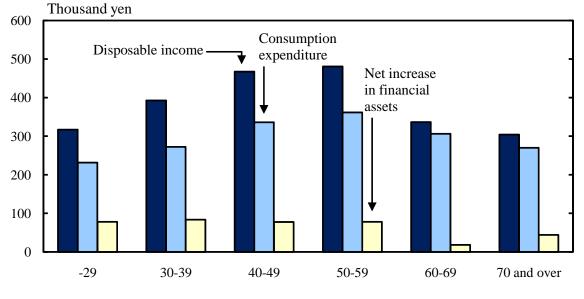
**Figure 13.3 Annual Change in Household Income and Expenditure** (Workers' households <sup>1)</sup>)

Family budgets differ among households according to their stages in life. Observed by age group of the household head, the 2009 average monthly disposable income of workers' households was the highest in households in the 50s group (480,804 yen), followed by those in the 40s group (467,293 yen) and the 30s group (392,592 yen).

The 2009 average propensity to consume (the ratio of consumption expenditure to disposable income) was the lowest in households in the 30s group (69.3 percent). The figure was 71.9 percent in those in the 40s group, 75.2 percent in the 50s group, and 91.0 percent in the 60s group. The percentage tends to be higher as the age goes up, except for the under-30 group (72.9 percent) and the 70-and-over group (88.7 percent). Meanwhile, a net increase in financial assets (an amount added to savings) was the highest in households in the 30s group, followed by those in the under-30 group.

<sup>1)</sup> Two-or-more-person households. Source: Statistics Bureau, MIC.





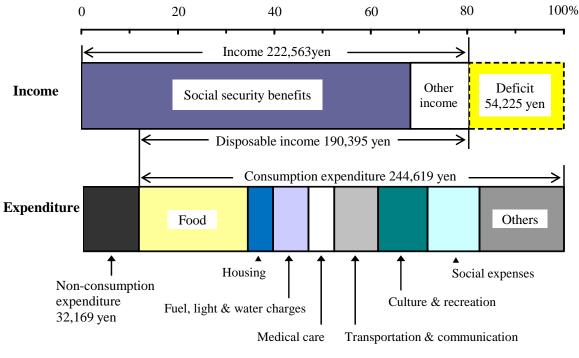
1) Two-or-more-person households. Source: Statistics Bureau, MIC.

### (b) Non-working Elderly Households

With the rapid aging of the population, the number of households consisting of elderly people is increasing. According to an analysis of the average monthly income and expenditure of non-working elderly households (two-or-more-person households where the age of the household head is 60 and over), the average income was 222,563 yen in 2009. Social security benefits amounted to 188,816 yen, thus accounting for 84.8 percent of income.

Disposable income averaged 190,395 yen, while consumption expenditure averaged 244,619 yen. The average propensity to consume in non-working elderly households was 128.5 percent, which means consumption expenditure exceeded disposable income. The deficit of disposable income to consumption expenditure (54,225 yen) decreased from that of the previous year (60,622 yen). This deficit was financed by the proceeds from private and/or corporate pension insurance, and by withdrawing financial assets.

#### **Figure 13.5 Average Monthly Income and Expenditure** (Non-working elderly households <sup>1</sup>) (2009)



1) Two-or-more-person households.

Source: Statistics Bureau, MIC.

### (B) One-person Households

The average monthly consumption expenditure of one-person households in 2009 was 162,731 yen, down 5.2 percent in nominal terms and down 3.8 percent in real terms from the previous year. The average monthly consumption expenditure decreased in real terms in all age groups from the previous year: down 9.7 percent for the under 35-year-old age group; down 1.0 percent for the 35-59; and down 1.7 percent for the 60-and-over. Spending on categories such as "fuel, light and water charges," "furniture and household utensils" and "medical care" tended to be larger in older age groups. Meanwhile, older age groups were found to spend increasingly "housing" categories such "transportation less on as and and communication."

						(1011)
	2005	2006	2007	2008	2009	Annual growth <sup>1)</sup> (%)
Average	177,343	163,699	169,153	171,602	162,731	-3.8
Under 35 years	177,597	171,858	183,562	192,515	171,233	-9.7
35-59	204,710	185,371	188,947	188,158	183,380	-1.0
60 and over	159,081	145,555	149,844	151,670	146,861	-1.7

(Yen)

Table 13.2Average Monthly Consumption Expenditure of One-Person Householdsby Age Group

1) Real terms.

Source: Statistics Bureau, MIC.

### (2) Savings and Debts

An observation of the savings and debts situation of two-or-more-person households in 2009 showed that the average amount of savings per workers' household was 12.03 million yen, resulting in its ratio to average yearly income (7.09 million yen) amounting to 169.7 percent. On the other hand, the average amount of debts per household was 6.43 million yen, which was 90.7 percent relative to yearly income. The portion for "housing and land" accounted for 5.96 million yen of the debts (6.43 million yen). A total of 38.4 percent of workers' households held "debts for housing and land."

**Table 13.3** 

Average Amount of Savings and Debts (Workers' households <sup>1</sup>)

						(T	housand yen)
Year	Yearly income	Savings	Ratio of savings to yearly income (%)	Debts	Housing and land	Ratio of debts to yearly income (%)	Ratio of households holding debts (%)
2005	7,190	12,920	179.7	6,160	5,610	85.7	49.8
2006	7,130	12,640	177.3	6,240	5,770	87.5	51.2
2007	7,180	12,680	176.6	6,640	6,140	92.5	51.3
2008	7,170	12,500	174.3	6,520	6,030	90.9	52.4
2009	7,090	12,030	169.7	6,430	5,960	90.7	52.8

1) Two-or-more-person households.

Source: Statistics Bureau, MIC.

By age group of the head of the household, the average amount of savings was found to be the highest in the 70-and-over group, while debts were the highest in the 40s group.

# Table 13.4Amount of Savings and Debts by Age Group of Household Head

(Workers' households <sup>1)</sup>) (2009)

						(Milli	on yen)
Item	Average	-29	30-39	40-49	50-59	60-69	70 and over
Yearly income	. 7.09	4.61	5.87	7.46	8.48	6.42	5.80
Savings	12.03	2.91	6.09	10.88	15.93	19.40	20.80
Financial institutions	11.45	2.73	5.66	10.23	15.07	19.11	20.58
Demand deposits	2.40	1.37	1.91	2.00	2.75	3.59	4.43
Time deposits		0.83	2.01	3.95	6.14	8.45	7.54
Life insurance	3.22	0.37	1.35	3.41	4.42	4.49	3.69
Securities	1.24	0.17	0.40	0.86	1.76	2.59	4.92
Non-financial institutions	0.58	0.17	0.43	0.65	0.85	0.28	0.22
Debts	6.43	3.14	7.62	9.06	5.38	1.87	0.52
Housing and land	5.96	2.86	7.24	8.56	4.74	1.65	0.42
Other than housing and land	0.27	0.12	0.18	0.28	0.43	0.13	0.07
Monthly and yearly installments .		0.16	0.20	0.23	0.21	0.10	0.04

1) Two-or-more-person households.

Source: Statistics Bureau, MIC.

By yearly income group, a positive correlation was observed between yearly income and savings/debts: the higher the yearly income, the higher the amount of savings as well as debts.

## 2. Prices

A general overview of Japan's price movements in recent years showed that corporate goods prices were going up since 2004, reflecting the recovering economy and rising prices in raw material imports. Meanwhile, consumer prices, which had been deflationary for the past decade, changed their pattern in 2006 to later take on an upward trend in the start of 2008. However, since September 2008, corporate goods prices and consumer prices have both been on a continuous decline. This was due to falling prices of petroleum products, etc. which resulted from a global economic slowdown triggered by the failure of an American securities investment bank in September 2008. In this section, recent trends of the two basic price indices will be examined.

## (1) Consumer Price Index (CPI)

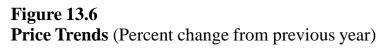
The overall index of consumer prices (with base year 2005 = 100) was 100.3 in 2009, down 1.4 percent from the previous year. This was due to, among other factors, substantial price drops for gasoline and kerosene as a result of crude oil prices falling in the wake of hikes the previous year.

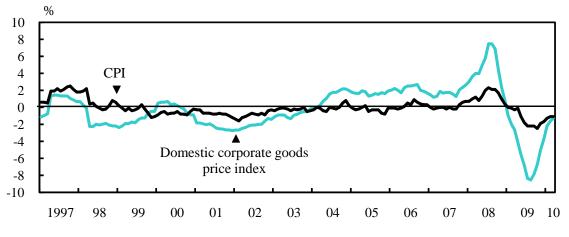
The May 2010 overall index (2005 = 100) marked 99.7, up 0.1 percent from the previous month. Compared year on year, it dropped by 0.9 percent. The program to make high school tuition free, which came into effect in April, contributed to 0.4 to 0.5 percent of the index decline.

					(200	05=100)
Item	Weight	1995	2000	2007	2008	2009
Overall	10000	100.7	102.2	100.3	101.7	100.3
Overall, excluding imputed rent	8578	101.8	102.8	100.4	102.0	100.5
Food	2586	101.0	101.6	100.8	103.4	103.6
Housing	2039	96.7	100.3	99.8	100.0	99.8
Fuel, light and water charges	676	97.4	100.2	104.4	110.7	106.1
Furniture and household utensils	344	128.1	117.5	96.3	96.0	93.9
Clothing and footwear	464	102.5	106.0	101.4	101.9	101.0
Medical care		87.8	97.6	99.7	99.4	99.3
Transportation and communication	1392	103.6	101.3	100.4	102.4	97.4
Education	364	87.9	96.1	101.4	102.1	103.0
Culture and recreation	1100	110.7	109.4	97.2	96.7	94.3
Miscellaneous	586	95.1	98.2	101.7	102.1	101.7
Goods	4937	105.4	104.4	100.6	103.0	100.5
Services	5063	96.1	100.1	100.0	100.4	100.2

# Table 13.5CPI for Major Categories of Goods and Services

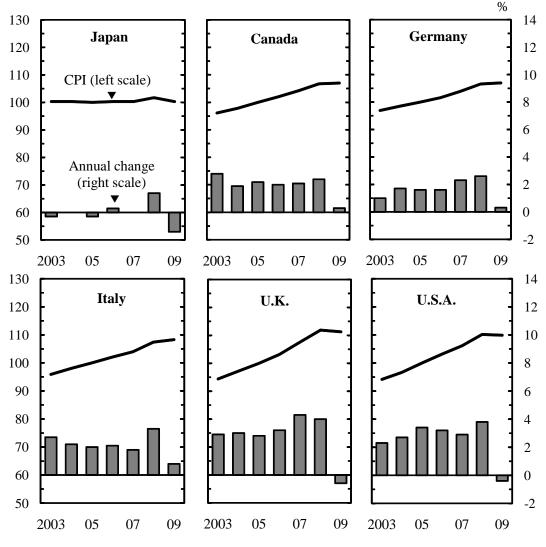
Source: Statistics Bureau, MIC.





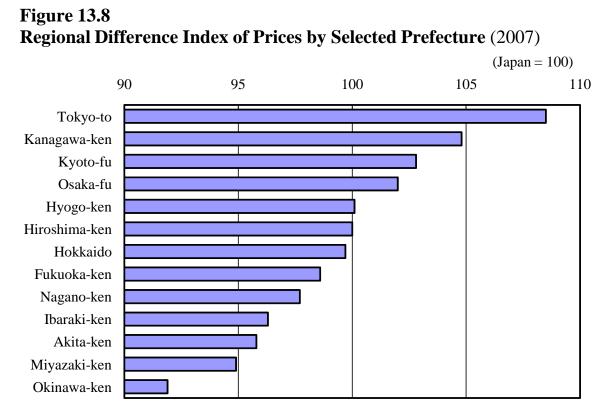
Source: Statistics Bureau, MIC; Bank of Japan.

#### **Figure 13.7 CPI by Country** (2005=100)



Source: Statistics Bureau, MIC; International Monetary Fund.

According to the regional difference index of prices, which compares the difference in consumer price levels by prefecture, Tokyo-*to* had the highest score in 2007, with a figure of 108.5 against the national average set at 100. Following Tokyo-*to* were Kanagawa-*ken* (104.8) and Kyoto-*fu* (102.8). On the other hand, Okinawa-*ken* registered the lowest score at 91.9. Comparing Tokyo-*to* and Okinawa-*ken*, price index of Tokyo-*to* was 18.1 percent higher than that of Okinawa-*ken*.



Source: Statistics Bureau, MIC.

### (2) Corporate Goods and Services Price Indices

The corporate goods price index measures the price developments of goods traded between companies. It is comprised of the domestic corporate goods price index (index of transaction prices between companies for domestic products targeted at the domestic market), the export price index, and the import price index.

In 2009, the domestic corporate goods price index (2005 as the base year = 100) was 103.0, down 5.2 percent from the previous year, recording the first drop in six years. In May 2010, it reached 103.2, marking a 0.4-percent year-on-year increase.

In 2009, the export price index, on a contract currency basis, decreased to 98.2 (down 3.3 percent from the previous year); measured in yen basis, the index decreased for the second consecutive year to 88.6 (down 10.5 percent). Meanwhile, the import price index, on a contract currency basis, slid to 112.6 (down 19.1 percent), registering its first decrease in seven years. In yen basis, the index dropped for the first time in six years, to 99.5 (down 25.3 percent).

The corporate services price index measures the price developments of services traded between companies, and is the index counterpart of the corporate goods price index. In 2009, the corporate services price index (2005 as the base year = 100) was 98.2, down 2.7 percent from the previous year.

• 					(200	5=100)
Item	Weight	2000	2006	2007	2008	2009
Corporate goods price index						
Domestic corporate goods price index	1000.0	102.4	102.2	104.0	108.7	103.0
Manufactured products	918.8	102.3	102.1	103.8	108.4	102.8
Export price index (yen basis)	1000.0	101.7	103.1	105.4	99.0	88.6
Import price index (yen basis)	1000.0	84.7	113.9	122.4	133.2	99.5
Corporate services price index						
All items	1000.0	107.4	99.8	100.3	100.9	98.2
Information and communications	216.5	112.3	99.1	98.6	98.2	96.6
Transportation	210.3	96.7	100.7	104.3	107.6	99.7
Leasing and rental	84.6	146.6	97.6	94.6	91.5	88.2
Advertising services	68.5	102.3	99.6	99.4	97.2	91.2

# Table 13.6Corporate Goods and Services Price Indices

Source: Bank of Japan.

## Chapter 14

## **Environment and Life**

## **1. Environmental Issues**

The list of environmental issues is wide-ranging, from waste management to global warming. Japan is, while pursuing regional development at home, taking the initiative in efforts to prevent global warming and conserve the natural environment to help achieve sustainable growth of the entire world.

In fiscal 2008, Japan's total emission of greenhouse gases, which are a major cause of global warming, amounted to 1.28 billion tons (calculated after their conversion into carbon dioxide), representing a decrease of 6.4 percent from the previous fiscal year. Carbon dioxide accounted for 95 percent of these greenhouse gases, with an emission volume of 1.21 billion tons. A breakdown of carbon dioxide emissions by sector revealed that emissions from the industrial sector accounted for 34 percent of the total, followed in order by emissions from the transport sector, the commercial sector (office buildings, etc.), the residential sector, and the energy sector (electric power plants, etc.).

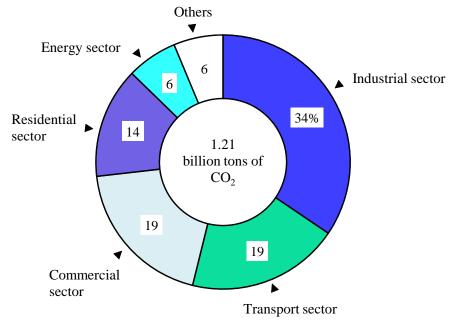
					(M1	llion tons)
Item	FY1990	FY1995	FY2000	FY2005	FY2007	FY2008
Total	1,143	1,226	1,254	1,286	1,301	1,214
Industrial sector	482	471	467	459	467	419
Transport sector	217	258	265	254	245	235
Commercial sector	164	185	206	236	243	235
Residential sector	127	148	158	174	180	171
Energy sector	68	73	71	79	83	78
Industrial processes	62	64	57	54	54	50
Waste (incineration, etc.)	22	27	31	30	28	26

A 1.11.

# Table 14.1Breakdown of Carbon Dioxide Emissions in Japan 1)

1) Volume of carbon dioxide after reallocation to the end-use sector. Source: Ministry of the Environment.





1) Volume of carbon dioxide after reallocation to the end-use sector. Source: Ministry of the Environment.

The state of waste management in Japan had remained grave due to the shrinking remaining capacity of final disposal sites and increased illegal dumping. This led to the Basic Act for Establishing a Sound Material-Cycle Society (brought into force in January 2001), which defines basic principles for the creation of a sound material-cycle society. This law has established a legal framework to address issues such as waste disposal and automobile and electrical appliance recycling. Other ongoing efforts include promotion of the "3Rs" (reduce, reuse, and recycle) in waste management, and research and development for the use of waste as a source of energy, with a view to generating a synergy between efforts to manage waste and tackle global warming.

Of various types of waste generated as a result of business activities, 20 of them, including sludge, waste oil, and soot and particulates, are designated as "industrial waste." The fiscal 2007 nationwide industrial waste generation totaled 419.43 million tons. Sludge, animal waste and debris, which account for approximately 80 percent of the total industrial waste, are now increasingly recycled into construction materials, organic fertilizers, and other materials. Thanks to this development, the volume of final disposal (to be put into landfills) fell from 89.73 million tons in fiscal 2007.

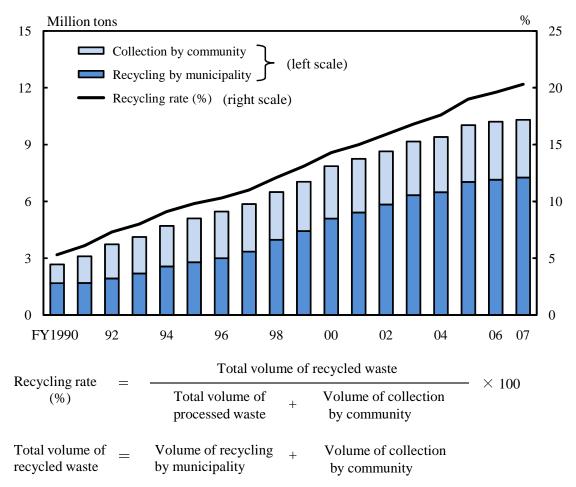
Meanwhile, a total of 50.82 million tons of "nonindustrial waste" (household waste and also shop, office and restaurant waste) was generated in fiscal 2007. This translates to 1,089 grams per person per day. In terms of nonindustrial waste disposal in fiscal 2007, the total volume processed was 47.73 million tons. The total volume of recycled waste was 10.30 million tons, with the recycling rate at 20.3 percent. Both the total volume of recycled waste and the recycling rate have been rising every year.

**Table 14.2** 

Waste Generation and Disposal	(Industrial and nonindustrial waste)
	(51)

				(Thous	and tons)
Item	FY1990	FY1995	FY2000	FY2005	FY2007
Industrial waste					
Total volume of waste generation	394,736	393,812	406,037	421,677	419,425
Recycling		146,620	184,237	218,888	218,811
Treatment for waste reduction	154,443	177,941	176,933	178,560	180,471
Final disposal	89,725	69,257	44,868	24,229	20,143
Nonindustrial waste					
Total volume of waste generation		52,224	54,834	52,720	50,816
Municipally scheduled and collected	42,495	44,100	46,695	44,633	42,629
Directly brought to			ŗ	,	
waste treatment facilities	6,776	5,806	5,373	5,090	5,138
Recyclable waste					
collected by community	986	2,318	2,765	2,996	3,049
Waste generated		,	,	,	,
daily per person (in grams)	1,115	1,138	1,185	1,131	1,089
Total volume of processed waste	49,282	49,899	52,090	49,754	47,725
Direct incineration	36,192	38,048	40,304	38,486	37,011
Intermediate treatment for recycling, etc	] 2 200	] (121	6,479	7,283	6,901
Direct recycling	S 3 3111	6,131	2,224	2,541	2,635
Direct final disposal		5,721	3,084	1,444	1,177
Source: Ministry of the Environment					

Source: Ministry of the Environment.



#### Figure 14.2 Recycling of Nonindustrial Waste

Source: Ministry of the Environment.

## 2. Housing

According to the Housing and Land Survey conducted in October 2008, the total number of dwellings (in case of apartment buildings, counting the number of component apartments) in Japan was 57.59 million, up by 3.70 million (6.9 percent) from 2003. The number of households was 49.97 million, representing the excess in number of dwellings over households by 7.61 million.

In 2008, the number of occupied dwellings (where people usually live) amounted to 49.60 million, accounting for 86.1 percent of the total number of dwellings. Of these, the number of dwellings used exclusively for living totaled 48.28 million, accounting for 97.3 percent of the occupied dwellings.

A breakdown of occupied dwellings by class of ownership showed that owned houses totaled 30.32 million, accounting for 61.1 percent of the total, which represented a decrease of 0.1 percentage point from the figure of 61.2 percent in 2003. Rented houses, on the other hand, numbered 17.77 million, accounting for 35.8 percent of the total.

							(Thousands)
	_			Ownership			
Year	Total households	Total number of dwellings	Occupied dwellings	Owned	Rented	Dwellings exclusively for living	Floor space per dwelling (m <sup>2</sup> )
1983	35,197	38,607	34,705	21,650	12,951	31,935	81.6
1988	37,812	42,007	37,413	22,948	14,015	34,701	85.0
1993	41,159	45,879	40,773	24,376	15,691	38,457	88.4
1998	44,360	50,246	43,922	26,468	16,730	41,744	89.6
2003	47,255	53,891	46,863	28,666	17,166	45,258	92.5
2008	49,973	57,586	49,598	30,316	17,770	48,281	92.4

Table 14.3Housing Conditions

Source: Statistics Bureau, MIC.

# Table 14.4Occupied Dwellings by Type of Building

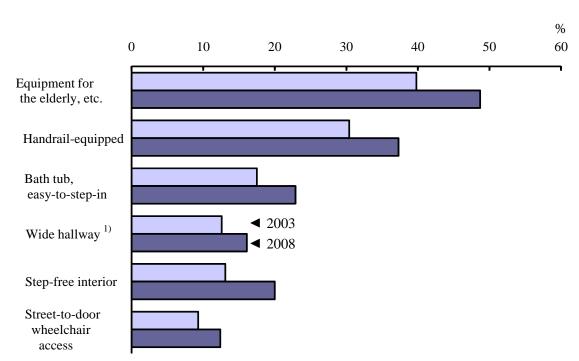
					(Thousands)
Year	Total	Detached houses	Tenement houses	Apartments	Others
1983	34,705	22,306	2,882	9,329	187
1988	37,413	23,311	2,490	11,409	203
1993	40,773	24,141	2,163	14,267	202
1998	43,922	25,269	1,828	16,601	224
2003	46,863	26,491	1,483	18,733	156
2008	49,598	27,450	1,330	20,684	134

Source: Statistics Bureau, MIC.

Occupied dwellings by building type showed that 27.45 million or 55.3 percent were detached houses, and 20.68 million or 41.7 percent were apartments. The proportion of apartments has consistently increased in recent years.

In terms of construction materials, 25.42 million or 92.6 percent of the detached houses were wood-frame houses (including fire-resistant ones). On the other hand, 15.04 million or 72.7 percent of the component apartments were steel-framed concrete structures.

A study of housing with accessibility equipment for the elderly and physically challenged persons showed that the number of housing units "with equipment for the elderly, etc." was 24.15 million, or 48.7 percent of all housing, up 8.9 percentage points from 18.66 million (39.8 percent) in 2003. Housing "equipped with handrails" accounted for 37.3 percent of all housing, and housing "with no steps" made up 20.0 percent. Figures increased from 2003 in all categories of equipment surveyed.





1) Wheelchair-accessible hallway. Source: Statistics Bureau, MIC.

## 3. Traffic Accidents

In 1970, the annual number of fatalities from traffic accidents hit a record high of 16,765, leading to the enactment of the Traffic Safety Measures Basic Law in the same year. Based on this law, the government has since promoted traffic safety measures in a comprehensive and systematic manner. As a result, the number of traffic accident fatalities declined to 5,155 in 2008, being about one third of that of 1970.

In 2008, traffic deaths per 100,000 population were 4.0 persons, while the number of persons killed per 10,000 motor vehicles was 0.7 persons.

Year	Traffic accidents	Injuries	Deaths <sup>1)</sup>	Traffic deaths <sup>1)</sup>			
				per 10,000 motor vehicles	per 100,000 population		
1970	718,080	981,096	16,765	9.0	16.2		
1980	476,677	598,719	8,760	2.2	7.5		
1990	643,097	790,295	11,227	1.9	9.1		
2000	931,934	1,155,697	9,066	1.2	7.1		
2005	933,828	1,156,633	6,871	0.9	5.4		
2007	832,454	1,034,445	5,744	0.7	4.5		
2008	766,147	945,504	5,155	0.7	4.0		

# Table 14.5Traffic Accidents and Casualties

1) Death within 24 hours of the accident.

Source: National Police Agency.

## 4. Crime

In 2009, the reported number of penal code offenses (excluding cases related to traffic accidents) was 1.70 million, a decrease of 114,979 (6.3 percent) compared to the previous year. The proportion of thefts was the highest, accounting for approximately 76 percent, or 1.30 million cases (down 5.4 percent from the previous year).

The number of persons arrested for penal code offenses was 332,888 in 2009, a decrease of 6,864 (2.0 percent) compared to the previous year, marking a five-consecutive-year decline.

The ratio of arrests to reported number of offenses marked a post-World War II low at 19.8 percent in 2001. Since 2002, however, it has shown signs of recovery, accounting for 32.0 percent in 2009.

Year	Reported offenses	Resultant arrests	Persons arrested	Arrest rate <sup>2)</sup> (%)	Crime rate per 100,000 population
1980	1,357,461	811,189	392,113	59.8	1,159.6
1985	1,607,697	1,032,879	432,250	64.2	1,328.1
1990	1,636,628	692,593	293,264	42.3	1,324.0
1995	1,782,944	753,174	293,252	42.2	1,419.9
2000	2,443,470	576,771	309,649	23.6	1,925.5
2005	2,269,293	649,503	386,955	28.6	1,775.7
2008	1,818,023	573,392	339,752	31.5	1,423.7
2009	1,703,044	544,699	332,888	32.0	1,335.7

<b>Table 14.6</b>	
<b>Trends in Crime</b>	(Penal code offenses) <sup>1)</sup>

1) Excluding traffic offenses. 2) The ratio of arrests to reported number of offenses. Source: National Police Agency.

Various kinds of computers and computer networks are currently playing an essential role as a social foundation. In line with this, crimes utilizing computer networks are becoming increasingly diversified. The number of arrests for cybercrime in 2009, involving the abuse of computer technology and telecommunications technology, was 6,690, up 5.8 percent from the previous year. This represented about a sevenfold increase from the 913 cases registered in 2000.

The police organization consists of the National Public Safety Commission and the National Police Agency, both of which are state organizations, as well as the Prefectural Public Safety Commission and prefectural police, both of which are organizations under the authority of individual prefectures. As of April 2009, the prefectural police operated police headquarters, police schools, 1,201 police stations, 6,216 police boxes (*Koban*) and 6,926 police substations in 47 prefectures.

Local police officers at their respective police boxes/substations are engaged in standing guard over their communities, patrolling, and dealing with criminal cases and accidents to prevent crimes and catch criminals.

## Chapter 15

## Social Security, Health Care, and Public Hygiene

## 1. Social Security

In Japan, where the birthrate is continuing to fall while the number of elderly people is growing, society is facing the prospect of a population decline beginning in earnest. Meanwhile, its social security system is required to address various changes in the socioeconomic environment, including the expanding deficit.

In April 2000, a long-term care insurance system was launched. This is due to the fact that the issue of elderly care, including the excessive burden of care resting on family members alone, had loomed as a social problem as the aging of society progressed. At the onset of the system (in 2000), the number of care service users was approximately 1.5 million. It subsequently jumped, coinciding with rapid rises in the aggregate long-term care insurance cost (long-term care insurance finances). Therefore, an all-round revision was made to the system in 2005, including putting greater emphasis on disease prevention. As of April 2009, the number of long-term care service users amounted to approximately 3.84 million.

				(Bi	llion yen)
Item	FY2000	FY2004	FY2005	FY2006	FY2007
Total	78,119	85,866	87,783	89,110	91,430
Medical insurance	14,573	15,277	16,141	16,534	17,424
Health and medical services for the aged $^{1)}$	10,447	10,676	10,754	10,379	10,372
Long-term care insurance	3,252	5,577	5,823	6,000	6,305
Pension benefits	39,173	43,814	44,669	45,772	46,799
Employment insurance <sup>2)</sup>	2,665	1,528	1,435	1,337	1,309
Workers' accident compensation insurance	1,019	959	953	966	957
Family allowance <sup>3)</sup>	712	1,124	1,158	1,351	1,523
Public assistance	1,930	2,553	2,592	2,636	2,603
Social welfare	2,186	2,540	2,505	2,600	2,689
Public health	555	536	547	428	384
Gratuities for retired public employees	1,420	1,132	1,059	984	975
Aid for war victims	188	151	146	124	91

# Table 15.1Trends in Social Security Benefit Expenditures by Institutional Scheme

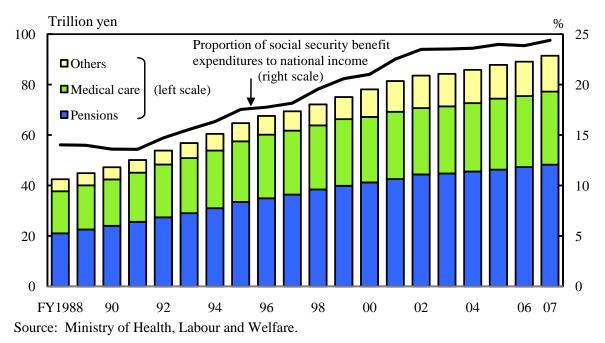
1) Including public health measures (e.g., medical check-ups and counseling, etc.).

2) Including unemployment benefits for Seamen's insurance. 3) Including income support for single parent families and families with challenged children.

Source: Ministry of Health, Labour and Welfare.

Total expenditure on social security benefits is increasing annually, thus making a review of benefits and burdens an urgent issue in order to ensure that the social security system is sustainable over the long term. In fiscal 2007, social security benefit expenditures totaled 91.4 trillion yen (up 2.6 percent from the previous fiscal year), a figure which amounted to 715,600 yen per person. The proportion of Japan's social security expenditure to national income registered 24.4 percent. Benefits for the aged accounted for approximately 70 percent of total social security benefit expenditures.

#### Figure 15.1 Trends in Social Security Benefit Expenditures by Sector

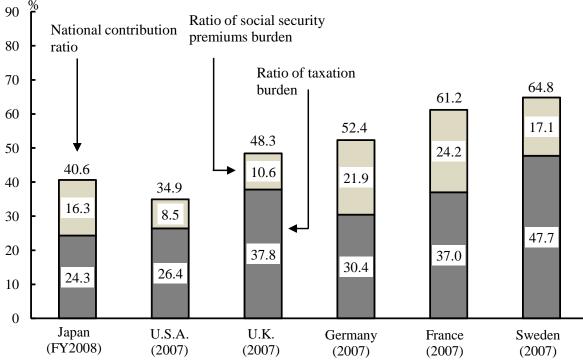


Trends in social security benefit expenditures by sector showed that the proportion of pension to the total social security benefit expenditures has recently risen. In fiscal 2007, pensions accounted for more than half (52.8 percent) of total social security benefit expenditures, while medical care accounted for 31.7 percent, and social welfare and others for 15.5 percent. Social security benefit expenditures are forecasted to continue growing, and are projected to reach 141 trillion yen in fiscal 2025.

In accordance with the rise in social security benefit expenditures, the amount of funds necessary to cover these expenditures has also increased, reaching 100.4 trillion yen in fiscal 2007. This was financed by 56.9 trillion yen from social insurance contributions, 31.0 trillion yen from taxes and 12.5 trillion yen from other sources.

The national contribution ratio (the combined ratios of taxes and social security costs to national income) was 40.6 percent in fiscal 2008 (taxation burden: 24.3 percent; social security premiums: 16.3 percent), up 1.1 percentage points from 39.5 percent in fiscal 2007. The national contribution ratio in 2007 was 34.9 percent in the U.S.A., 48.3 percent in the U.K., and 64.8 percent in Sweden. While the ratio in Japan was higher than that of the U.S.A., it was lower than European countries.

#### Figure 15.2 National Contribution Ratio by Country



Source: Ministry of Finance.

The social welfare institutions shown below provide users with various services either for free or partially free.

Type of institutions	Institutions	Users	Workers <sup>1)</sup>
Total	61,778	2,776,077	782,681
Institutions under the Protection Law <sup>2)</sup>	300	20,054	6,196
Welfare for the elderly	9,236	145,173	51,291
Nursing homes	964	62,075	17,581
Welfare centers	2,228	-	7,354
Support for the physically challenged, etc	2,898	28,373	25,750
Rehabilitation for the physically challenged	972	39,872	21,635
Rehabilitation for the mentally challenged	3,315	151,983	63,224
Rehabilitation for the mentally ill	782	15,564	4,339
Support for social participation of the physically challenged	374		3,342
Protection for women	48	569	378
Child welfare <sup>3)</sup>	33,431	2,213,149	520,388
Day nurseries	22,898	2,137,692	444,727
Maternal and child welfare	69		246
Others <sup>4)</sup>	10,353	161,340	85,893
Pay nursing homes for the elderly	3,400	140,798	74,321

# Table 15.2Social Welfare Institutions (As of October 1, 2008)

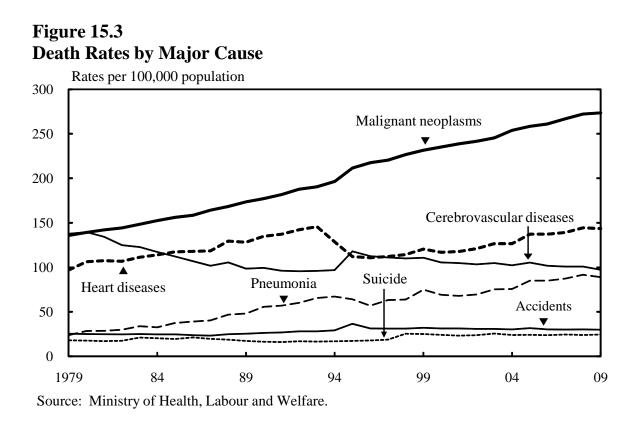
Full time equivalent. 2) "Users" and "workers" exclude medical care aid institutions.
 "Users" excludes homes of living assistance for mothers and children, and maternity homes; "workers" excludes maternity homes, and children's playgrounds. 4) "Users" excludes those of homes for the visually impaired, facilities for medical treatment that is free of charge or low-cost, and recreational facilities for the elderly; "workers" excludes those of facilities for medical treatment that is free of charge or low-cost. Source: Ministry of Health, Labour and Welfare.

## 2. Health Care and Public Hygiene

Japan has a national health insurance system to ensure that anyone can receive necessary medical treatment. Under this system, every citizen belongs to a public medical insurance system, such as employees' health insurance or national health insurance.

This medical care system is highly regarded internationally because, along with improvements in the living environment and better nutrition, it has contributed to Japan's achieving the highest life expectancy and healthy life expectancy in the world, as well as a high standard of healthcare. Currently, reform of the whole system is being undertaken in order to sustain this medical insurance system in the future.

Life expectancy at birth was 86.44 years for women and 79.59 years for men in 2009. Japan's life expectancy remains the highest in the world. Japan's infant mortality rate fell to as little as 2.4 per 1,000 births in 2009.



The death rate was 907.6 per 100,000 population in 2009. The leading cause of death was malignant neoplasms (273.4 per 100,000 population). Other major causes were lifestyle diseases such as heart diseases (143.5; excluding hypertensive diseases) and cerebrovascular diseases (97.2), in

which people's daily diet and behavior are significant factors therefore. Together, these causes accounted for approximately 60 percent of all deaths. Malignant neoplasms became the leading cause of death in 1981. The death rate by malignant neoplasms has continued to increase since, reaching 30.1 percent of all deaths in 2009.

Due to the increasingly complex social environment created by a highly-technological, competition-oriented society, the stress levels felt by all age groups are rising. The number of suicides in Japan surpassed the 30,000 mark for the first time in 1998 and has since remained in the range of 30,000 per year, registering at 30,649 in 2009. The number of suicides was particularly high for men in their 20s, 30s and 40s.

Due to the increased international movement of people and goods, and to the impact on the environment caused by land development, emerging infectious diseases and re-emerging infectious diseases, including AIDS, Influenza A (H1N1) and tuberculosis, pose a serious threat to the health of the Japanese people.

In terms of healthcare provision, Japan had 283,915 physicians engaged in medical care, or 222.3 physicians per 100,000 population, in 2008. While the number of physicians providing healthcare is increasing nationwide, their uneven distribution has become a problem due to the lack of physicians specializing in certain areas of medicine and the lack of physicians operating in regional parts of the country.

#### **Table 15.3**

Personnel	2000	2002	2004	2006	2008
Number					
Physicians	253,469	260,500	267,943	275,127	283,915
Dentists	89,668	91,783	94,022	95,944	98,063
Pharmacists	199,797	212,720	223,564	234,429	249,251
Nurses & Assistant nurses	1,042,468	1,097,326	1,146,181	1,194,121	1,252,224
Rates per 100,000 population					
Physicians	199.7	204.3	209.7	215.3	222.3
Dentists	70.6	72.0	73.6	75.1	76.8
Pharmacists	157.4	166.9	175.0	183.5	195.2
Nurses & Assistant nurses	821.3	860.7	896.9	934.6	980.7

Source: Statistics Bureau, MIC; Ministry of Health, Labour and Welfare.

The number of hospital beds in Japan (excluding those in general clinics and dental clinics) totaled 1,260.4 per 100,000 population in 2008.

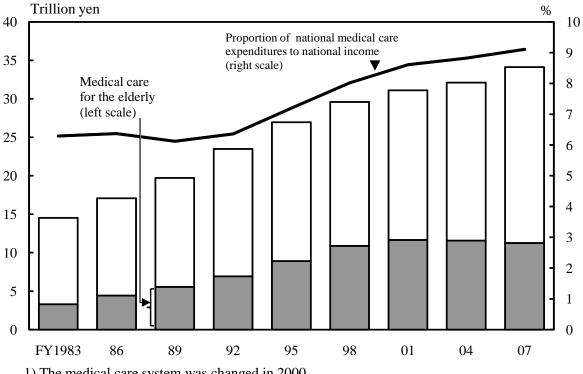
Type of Institution	1999	2002	2005	2007	2008
Institutions					
Number					
Total	163,270	169,079	173,200	176,192	175,656
Hospitals	9,286	9,187	9,026	8,862	8,794
General clinics	91,500	94,819	97,442	99,532	99,083
Dental clinics	62,484	65,073	66,732	67,798	67,779
Rates per 100,000 population					
Total	128.9	132.7	135.6	137.9	137.6
Hospitals	7.3	7.2	7.1	6.9	6.9
General clinics	72.2	74.4	76.3	77.9	77.6
Dental clinics	49.3	51.1	52.2	53.1	53.1
Beds					
Number					
Total	1,872,518	1,839,376	1,798,637	1,775,481	1,756,115
Hospitals	1,648,217	1,642,593	1,631,473	1,620,173	1,609,403
General clinics	224,134	196,596	167,000	155,143	146,568
Dental clinics	167	187	164	165	144
Rates per 100,000 population					
Total	1,478.1	1,443.4	1,407.7	1,389.6	1,375.3
Hospitals	1,301.0	1,289.0	1,276.9	1,268.0	1,260.4
General clinics	176.9	154.3	130.7	121.4	114.8
Dental clinics	0.1	0.1	0.1	0.1	0.1

# Table 15.4Number of Medical Care Institutions and Beds

Source: Ministry of Health, Labour and Welfare.

National medical care expenditures have been increasing gradually. In fiscal 2007, the expenditures totaled 34.1 trillion yen or 9.11 percent of Japan's national income. The cost of medical care per person averaged 267,200 yen in fiscal 2007.

Medical costs for treating the elderly in fiscal 2007 were 11.3 trillion yen, or about one-third of national medical care expenditure, and accounted for 3.01 percent of the national income. The per-capita cost of medical care for the elderly averaged 869,604 yen for the year. Rising medical costs for the elderly, resulting from the rapidly aging population, etc., is one of the major contributors to the overall uptrend in national medical care expenditures.



#### Figure 15.4 Trends in Medical Care Expenditures <sup>1)</sup>

1) The medical care system was changed in 2000. Source: Ministry of Health, Labour and Welfare.

## **Chapter 16**

## **Education and Culture**

## **1. School-Based Education**

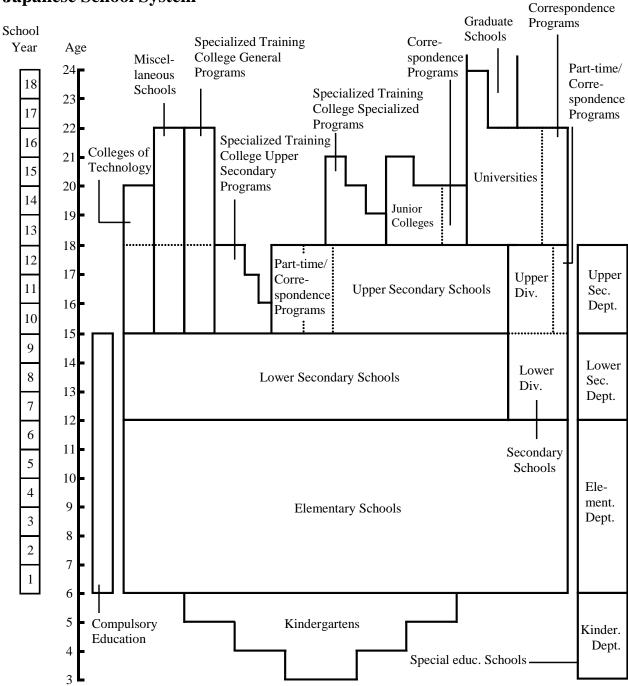
Japan's primary and secondary education is based on a 6-3-3 system: 6 years in elementary school, 3 years in lower secondary school, and 3 years in upper secondary school. The period of compulsory schooling is the 9 years at elementary and lower secondary schools. Higher education institutions are universities, junior colleges, and colleges of technology. Other education establishments include kindergartens, which provide pre-school education, and special education schools for mentally and/or physically challenged children. There are also specialized training colleges and miscellaneous schools for a wide range of vocational and other practical skills learning. Given the nearly 100-percent upper secondary school entrance rate, the School Education Law was amended in 1998 to authorize combined lower and upper secondary schools in 1999. On an additional note, school years in Japan start in April and end in March.

Type of institution –	Schools				Full-time teachers	Students	s (1,000)
Type of institution	Total	National	Public	Private	(1,000)	Males	Females
Kindergartens	13,516	49	5,206	8,261	111	825	805
Elementary schools	22,258	74	21,974	210	420	3,615	3,449
Lower secondary schools	10,864	75	10,044	745	251	1,839	1,761
Upper secondary schools	5,183	16	3,846	1,321	239	1,695	1,652
Secondary schools	42	4	25	13	2	10	10
Special educ. schools <sup>1)</sup>	1,030	45	971	14	71	76	41
Colleges of technology	64	55	6	3	4	50	9
Junior colleges	406	2	26	378	10	17	143
Universities	773	86	92	595	172	1,688	1,158
Graduate schools	613	85	81	447	100	183	81
Specialized training							
colleges	3,348	11	204	3,133	41	283	341
Miscellaneous schools	1,533	-	10	1,523	10	67	68

# **Table 16.1Educational Institutions in Japan** (As of May 1, 2009)

1) Schools for mentally and/or physically challenged children, inclusive of kindergarten to upper secondary school levels.

Source: Ministry of Education, Culture, Sports, Science and Technology.



#### Figure 16.1 Japanese School System

Source: Ministry of Education, Culture, Sports, Science and Technology.

Of the March 2009 upper secondary school graduates, 53.9 percent went straight on to enter a university or junior college. The ratio of upper secondary school graduates who entered a university, junior college, etc. in 2009 was 56.2 percent (57.2 percent of male and 55.3 percent of female graduates), including graduates from previous years.

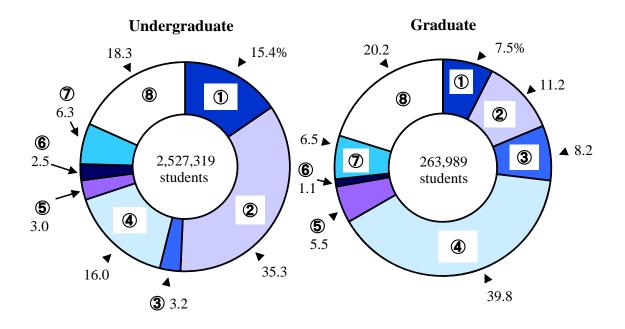
				(Thousa	nd persons)
	2000	2005	2007	2008	2009
Total	2,740	2,865	2,829	2,836	2,846
Undergraduate	2,472	2,508	2,514	2,521	2,527
Graduate schools	205	254	262	263	264
Others <sup>1)</sup>	63	102	52	53	55
Females	992	1,125	1,127	1,141	1,158
Undergraduate	913	1,009	1,024	1,037	1,053
Graduate schools	54	76	80	80	81
Others <sup>1)</sup>	25	40	23	24	25
National	624	628	627	624	622
Public	107	125	130	132	137
Private	2,009	2,112	2,072	2,080	2,087

# Table 16.2Number of University Students (As of May 1, 2009)

1) Students enrolled at advanced courses and limited term courses, auditing students, researchers, etc.

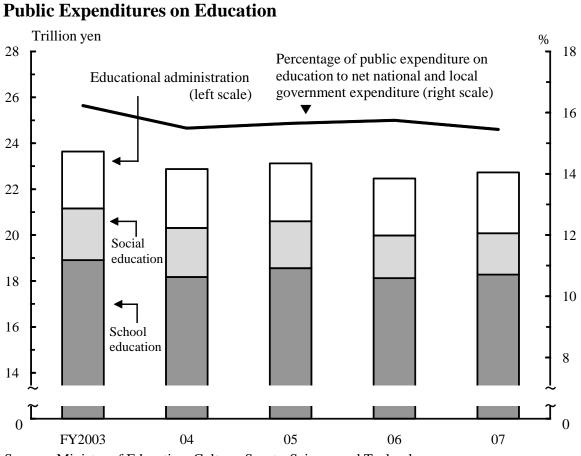
Source: Ministry of Education, Culture, Sports, Science and Technology.

## **Figure 16.2 University Students by Major Subject** (As of May 1, 2009)



Humanities. 2 Social sciences. 3 Natural sciences. 4 Engineering. 5 Agriculture.
 Medicine and dentistry. 7 Education and teacher training. 8 Others.
 Source: Ministry of Education, Culture, Sports, Science and Technology.

Fiscal 2007 public expenditure on education in Japan was 22.7 trillion yen, which was equivalent to 15.5 percent of the net expenditure of national and local governments. Fiscal 2008 school expenditure by households with children attending public school averaged 56,019 yen per elementary school pupil, 138,042 yen per lower-secondary school student and 356,937 yen per upper-secondary school student.



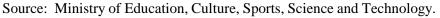


Figure 16.3

As of May 1, 2009, a total of 101,956 foreign students were enrolled in Japanese junior colleges, universities, and graduate schools. Of the total foreign students, 90.5 percent were from Asia, including 60,833 from China, 14,341 from the Republic of Korea and 3,380 from Taiwan.

## 2. Lifelong Learning

A broad range of changes are occurring in Japan in line with the maturation of society, including aging of the population, the social advancement of women, the rapid progress of informatization and the expansion of leisure time. Amidst these changes, the mindset of the Japanese people is shifting from a focus on materialistic wealth to a focus on cultural/spiritual wealth and leading a meaningful life.

Facilities	Number	Facilities	Number
Citizens' public halls	15,943	Botanical gardens	11
Libraries	3,165	Zoological and botanical	
Museums	1,245	gardens	10
General museums	149	Aquariums	41
Science museums	105	Centers for children and youths	1,130
Historical museums	433	Women's education centers	380
Art museums	449	Culture halls	1,893
Outdoor museums	18	Cultural centers <sup>1)</sup>	698
Zoological gardens	29		

Table 16.3Social Education Facilities (As of October 1, 2008)

1) As of November 1, 2005.

Source: Ministry of Education, Culture, Sports, Science and Technology.

#### **Table 16.4**

#### Sports Facilities (As of October 1, 2008)

Facilities	Public	Private	Facilities	Public	Private
Total	47,925	17,323	Tennis courts, indoor	188	323
Fields and tracks	927	16	Tennis courts, outdoor	4,965	1,026
Baseball grounds	6,240	180	Physical training gyms	1,605	1,410
Other ball game grounds	1,361	275	Dance halls	99	1,185
Playgrounds	7,106	234	Golf courses	120	2,298
Swimming pools, indoor	1,627	1,702	Golf practice ranges	28	1,802
Swimming pools, outdoor	2,257	129	Camping sites	1,636	485
Gymnasiums	6,825	380	Gate ball and croquet fields	2,127	199
Judo and Kendo gyms	2,416	484			

Source: Ministry of Education, Culture, Sports, Science and Technology.

Today, efforts are being made to link school education, social education, cultural activities, sports activities, recreational activities, volunteer activities, and corporate in-house education, in order to create a society where people have the freedom to continue learning throughout their lives. In providing places and opportunities for such lifelong learning, educational institutions, social education facilities (public halls, libraries, museums, etc.) and sports facilities play a vital role. Staff members of these institutions and facilities regularly consult and exchange views with prefectural boards of education, private education organizations, NPOs and business groups.

## **3. Leisure Activities**

The results of the 2006 Survey on Time Use and Leisure Activities conducted with people aged 10 and over show that the per-day average amount of free time was 6 hours and 23 minutes, which is the time remaining after activities that are physiologically necessary (sleeping, eating, etc.) and societally essential (work, housework, etc.). It was found that 1 hour and 17 minutes of free time was spent for hobbies, sports, studies, volunteer activities, etc.

#### **Table 16.5**

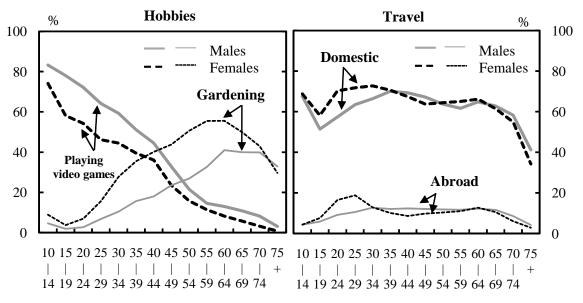
Major Leisure Activities by Gender	(10 years old and over) (2006)
------------------------------------	--------------------------------

Leisure Activities	Total	Males	Females
Free time per day (hours and minutes)	6:23	6:31	6:15
Active leisure time (hours and minutes)	1:17	1:28	1:06
Participation rate (%) <sup>1)</sup>			
Hobbies and amusements	84.9	85.2	84.6
Sports <sup>2)</sup>	65.3	70.4	60.5
Studies and researches <sup>2)</sup>	35.2	34.4	36.0
Internet use <sup>3)</sup>	59.4	62.5	56.5
Travel (domestic) <sup>4)</sup>	62.2	62.0	62.5
Travel (abroad) <sup>4)</sup>	10.1	10.2	10.0
Volunteer activities	26.2	25.1	27.2

1) Total participants / Population (10 years old and over) × 100 2) Excluding school and professional activity. 3) Excluding use at work or school. 4) Excluding day trips. Source: Statistics Bureau, MIC.

The participation rate (percentage of people who engaged in the activity within the past 12 months) for "sports" was 65.3 percent. The most popular sport for both genders was "walking and light exercise" (men: 30.6 percent; women: 39.0 percent). Other popular sports for men were "bowling" (21.0 percent) and "fishing" (16.0 percent). For women, such sports were "bowling" (16.3 percent) and "swimming" (12.8 percent). The participation rate for "studies and researches (excluding school and professional activities)" was 35.2 percent. Men preferred "information processing using PCs and other related technologies" (14.6 percent) and "commercial skills and other business-related topics" (11.1 percent), while preferred "cooking, sewing and other household women management-related topics" (13.8 percent), as well as "arts and culture" (13.3 percent).





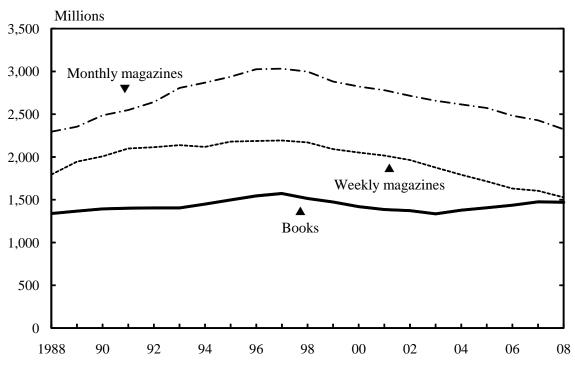
Source: Statistics Bureau, MIC.

## 4. Publishing and Mass Media

The total number of books and magazines published in Japan during 2008 was 1.47 billion and 3.85 billion, respectively, of which 2.32 billion were monthlies and 1.53 billion were weeklies. It is estimated that 11.5 books and 30.2 magazines (18.2 monthlies and 12.0 weeklies) were printed per Japanese citizen in 2008.

A total of 78,013 new book titles were released in 2008. The number of magazine titles published was 4,353 (including 2,532 monthlies and 118 weeklies) in 2008.

A total of 121 daily newspapers were in circulation, and the penetration was 1.0 newspaper per household as of October 2009.



## Figure 16.5 Trends in Number of Publications

Source: Shuppan News Co., Ltd.

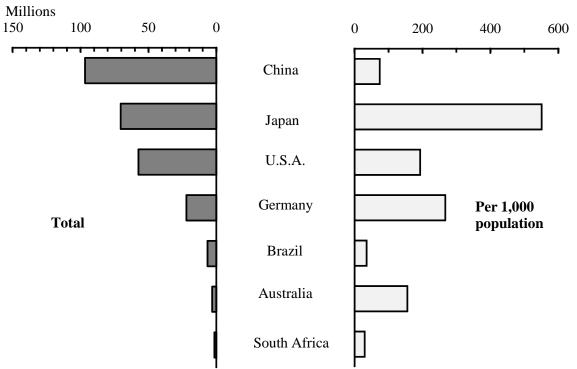
Subject	1995	2000	2005	2007	2008
Total	58,310	65,065	78,304	76,978	78,013
General works	2,794	2,587	2,551	2,540	2,372
Philosophy	2,731	2,997	3,763	3,805	3,933
General history	3,917	4,634	5,102	5,059	5,131
Social sciences	12,578	14,099	16,201	16,354	16,196
Natural sciences	4,460	5,218	6,226	6,441	6,563
Technology and engineering	4,774	6,105	8,104	8,397	8,623
Industry and commerce	2,160	3,000	3,337	3,278	3,500
Art	7,540	8,895	10,884	10,775	10,921
Languages	1,391	1,766	2,063	2,009	1,971
Literature	11,427	11,484	13,595	12,220	12,759
Others <sup>1)</sup>	4,538	4,280	6,478	6,100	6,044

# Table 16.6New Publications

1) Children's books and school textbooks.

Source: Shuppan News Co., Ltd.

#### **Figure 16.6 Newspaper Circulation by Country** (2004)

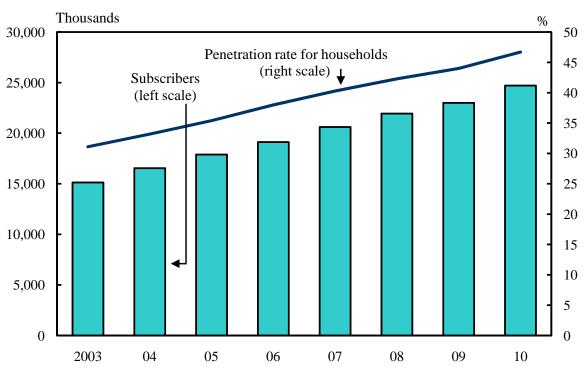


Source: UNESCO; World Association of Newspapers.

Japan has a public broadcasting network (NHK: Nippon Hoso Kyokai, or Japan Broadcasting Corporation), as well as commercial networks. NHK was the pioneer broadcasting station, and has been funded through fees paid by subscribers.

Major broadcasting services can be divided roughly into three categories: terrestrial, satellite, and cable television. Terrestrial digital broadcasting was launched in some areas of the Kanto, Kinki and Chukyo regions in December 2003 and then also in other areas, including all prefectural capitals, in December 2006. Satellite broadcasters offer an increasing number of channels through, for example, new digital broadcasting which began in March 2002. Currently, terrestrial television is in the process of going digital, with analog broadcasting scheduled to end by July 2011.

## **Figure 16.7 Subscribers of Cable TV Service** (Self-originating broadcasting using licensed facilities)<sup>1)</sup>



<sup>1)</sup> As of March each year. Source: Ministry of Internal Affairs and Comm

Subscribers of cable TV services (self-originating broadcasting using licensed facilities) have steadily increased to 24.7 million households, or 46.7 percent of all households in March 2010.

In 2009, advertising expenditures on the four major media types in Japan (newspapers, magazines, radio and television) totaled 2.8 trillion yen, marking a drop from the previous year. This accounted for 47.8 percent of total 2009 advertising expenditures, which were 5.9 trillion yen. Advertisement on the Internet, a new advertising medium, was 11.9 percent, up 1.2 percent from the previous year.

Year	Total	News-	Maga-	Radio	TV	Satellite media-	Internet	Others
I cui	Totur	papers	zines	Ruulo	1 V	related	internet	Others
Advertis	ing expend	itures (bill	ion yen)					
1995	5,426.3	1,165.7	374.3	208.2	1,755.3	15.8	-	1,907.0
2000	6,110.2	1,247.4	436.9	207.1	2,079.3	26.6	59.0	2,053.9
2005	6,823.5	1,037.7	484.2	177.8	2,041.1	48.7	377.7	2,656.3
2008	6,692.6	827.6	407.8	154.9	1,909.2	67.6	698.3	2,627.2
2009	5,922.2	673.9	303.4	137.0	1,713.9	70.9	706.9	2,316.2
Percenta	ge distribu	tion (%)						
1995	100.0	21.5	6.9	3.8	32.3	0.3	-	35.2
2000	100.0	20.4	7.2	3.4	34.0	0.4	1.0	33.6
2005	100.0	15.2	7.1	2.6	29.9	0.7	5.6	38.9
2008	100.0	12.4	6.1	2.3	28.5	1.0	10.4	39.3
2009	100.0	11.4	5.1	2.3	29.0	1.2	11.9	39.1

Table 16.7Advertising Expenditures by Medium

Source: Dentsu Inc.

## 5. Cultural Assets

As a country with a long history, Japan has been endowed with an abundance of valuable cultural assets, including works of art, historic landmarks, and many natural monuments. To pass on this cultural heritage to future generations, the Japanese government has accorded many of the most important assets as national treasures, designated important cultural properties, historic sites, places of scenic beauty, or natural monuments, based on the Cultural Assets Preservation Law. The government has also been engaged in efforts to preserve and repair existing cultural assets, search for and recover other buried artifacts and restore historic landmarks.

# Table 16.8 Cultural Properties Designated by the National Government (A) (M) = 1, 2010

(As of May 1, 2010)

Type of cultural and natural heritage	Num	ber
Designated important cultural properties <sup>1)</sup>	12,709	(1,079)
Fine and applied arts <sup>1)</sup>	10,350	(864)
Buildings <sup>1)</sup>	2,359	(215)
Historic sites, places of scenic beauty and natural monuments <sup>2)</sup>	2,893	(161)
Historic sites <sup>2)</sup>	1,635	(60)
Places of scenic beauty <sup>2)</sup>	319	(29)
Natural monuments <sup>2)</sup>	939	(72)
Important tangible folk cultural properties	210	
Important intangible folk cultural properties	266	
Important intangible cultural properties		
Recognized individuals	81	
Performing arts	39	
Craft techniques	42	
Recognized holding groups	26	
Performing arts	12	
Craft techniques	14	
Traditional building preservation areas	86	

1) Figures in the parentheses refer to national treasures only.

2) Figures in the parentheses refer to specially designated places only.

Source: Ministry of Education, Culture, Sports, Science and Technology.

As of May 1, 2010, 12,709 items were assigned as designated important cultural properties, of which 1,079 were classified as national treasures. In addition, the government has provided support for such activities as theatrical performances, music, handicrafts and other important intangible cultural properties. It also has worked to preserve important folk-cultural properties such as annual cultural events and folk performing arts, as well as to train people to carry on such traditions.

Japan ratified the UNESCO World Heritage Convention (the Convention Concerning the Protection of the World Cultural and Natural Heritage) in 1992. In July 2005, Shiretoko in Hokkaido was registered as Japan's 13th World Heritage site. Shiretoko is the lowest latitudinal area in the world where drift ice arrives and where a variety of marine and ground animals and plants form diversified biota.

In June 2007, the Iwami Ginzan silver mine and its cultural landscape was registered as Japan's 14th World Heritage site. The site features mines, smelting and refining sites, along with mining settlements and transportation routes including the port, dating from the sixteenth to the twentieth centuries. In the seventeenth century, the output accounted for one-third of the total silver production in the world.

In 2006, the UNESCO Convention for the safeguarding of the intangible cultural heritage entered into force. Entries from Japan are: *noh* theater, *ningyo johruri bunraku* puppet theater and *kabuki* theater (the kind of *kabuki* performed by a traditional method of acting and directing).

Year	Type of heritage	World heritage	Prefecture
1993	Cultural	Buddhist monuments in the Horyu-ji area	Nara
	Cultural	Himeji-jo (castle)	Hyogo
	Natural	Shirakami-sanchi (mountains)	Aomori, Akita
	Natural	Yakushima (island)	Kagoshima
1994	Cultural	Historic monuments of ancient Kyoto	Kyoto, Shiga
1995	Cultural	Historic villages of Shirakawa-go and Gokayama	Gifu, Toyama
1996	Cultural	Hiroshima Peace Memorial (Genbaku Dome)	Hiroshima
	Cultural	Itsukushima Shinto Shrine	Hiroshima
1998	Cultural	Historic monuments of ancient Nara	Nara
1999	Cultural	Shrines and temples of Nikko	Tochigi
2000	Cultural	Gusuku sites and related properties of the Kingdom of Ryukyu	Okinawa
2004	Cultural	Sacred sites and pilgrimage routes in the Kii mountain range	Mie, Nara, Wakayama
2005	Natural	Shiretoko (peninsula)	Hokkaido
2007	Cultural	Iwami Ginzan silver mine and its cultural landscape	Shimane

# Table 16.9Heritage Sites Inscribed on the World Heritage List (As of June 28, 2007)

Source: Ministry of Education, Culture, Sports, Science and Technology.

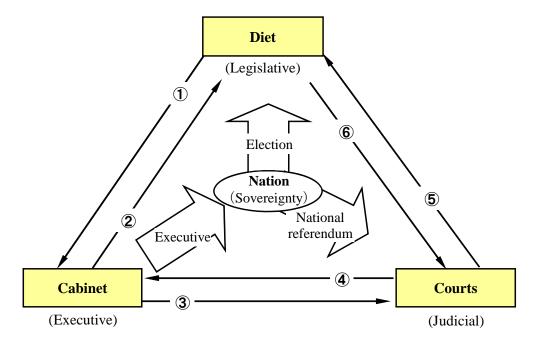
## Chapter 17

## **Government System**

## **1. Division of Powers**

The Japanese Constitution, which went into effect on May 3, 1947, is based on three core principles: sovereignty of the people, respect for fundamental human rights and pacifism. To control governmental power effectively through checks and balances, governmental power is separated into three independent branches: legislative, executive and judicial, and each contains a separate set of agencies and personnel.





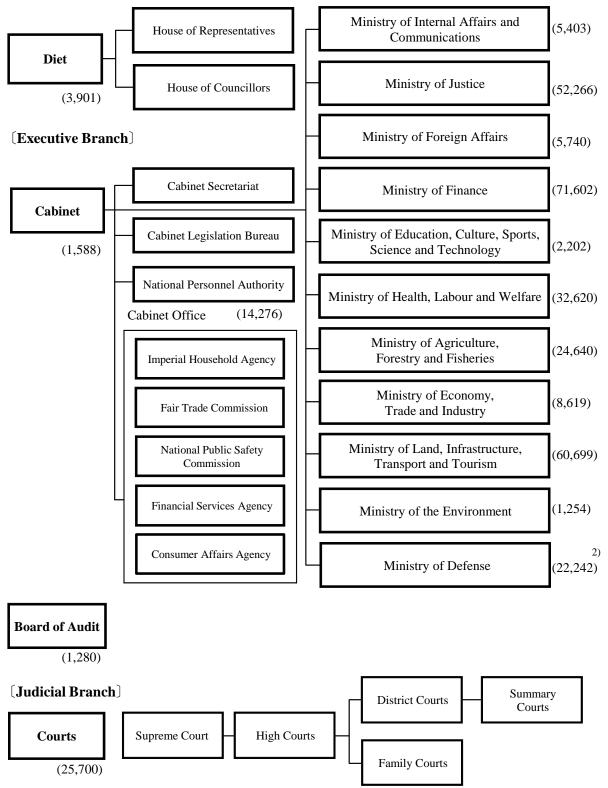
- ① Designation of the Prime Minister Vote of non-confidence to the Cabinet
- ② Convocation of the Diet Dissolution of the House of Representatives
- 3 Designation of the Chief Justice of the Supreme Court and appointment of other judges
- (4) Judgment on cabinet orders, regulations or administrative actions
- **(5)** Judgment of the constitutionality of laws
- 6 Impeachment to judges

Source: Prime Minister's Official Residence.

#### GOVERNMENT SYSTEM

#### Figure 17.2 Government Organization of Japan<sup>1)</sup> (FY2010)

[Legislative Branch]



1) Figures in parentheses refer to budgetary fixed number of national government employees.

2) Excluding the number of the personnel of the Self-Defense Forces.

Source: Ministry of Internal Affairs and Communications; Ministry of Finance.

## 2. The Legislative Branch

The Diet is the highest organ of state power, and is the sole law-making organ of the State.

The Diet consists of the House of Representatives and the House of Councillors. Both Houses consist of elected members, representative of all the people.

The most important responsibility of the Diet is to enact legislation. The Diet also has the authority to fulfill a number of additional functions, including the deliberation and passage of the budget and other matters of fiscal importance, the approval of treaties, the designation of the Prime Minister and the initiation of motions to amend the Constitution. Each House may conduct investigations relating to the government, and demand the presence and testimony of witnesses, and the production of records. For the Diet to pass a resolution, the agreement of both Houses of the Diet is necessary. However, when the two Houses differ in their resolutions regarding legislative bills, draft budgets, the approval of treaties or the designation of the Prime Minister, under the terms of the Constitution, decision of the House of Representatives overrides that of the House of Councillors.

The term of office for Diet members is set by the Constitution. Members of the House of Representatives serve a four-year term, while members of the House of Councillors, six years. Elections for the latter are held every three years, so that one half of the seats are contested in each election.

The House of Representatives has 480 members. Of these, 300 are elected under a single-representative constituency system, while 180 are elected under a proportional representation system in which the nation is divided into 11 regions. The last general election was held in August 2009. The House of Councillors has 242 members, of whom 96 are elected through proportional representation, and 146 are elected as representatives from the nation's 47 electoral districts, i.e. prefectures. The last regular election was held in July 2010.

All Japanese citizens, both men and women, aged 20 years or older, have the right to vote in elections for both Houses of the Diet. Furthermore, both men and women above the qualifying age are eligible to run in elections. The qualifying age for members of the House of Representatives is 25 years or older, while the qualifying age for members of the House of Councillors is 30 years or older.

#### **Table 17.1**

#### Members of the Diet by Political Group

House of Representatives (As of June	e 17, 20	010)	House of Councillors (As of July 26, 2010		
Name N		er <sup>1)</sup>	Name	Numb	er <sup>1)</sup>
Membership	480		Membership	242	
Incumbents	478	(52)	Incumbents	242	(44)
The Democratic Party of Japan,			The Democratic Party of Japan,		
and Club of Independents	307	(38)	and The Shin-Ryokufukai	107	(20)
Liberal Democratic Party	116	(8)	Liberal Democratic Party	83 (	(14)
New Komeito	21	(3)	New Komeito	19	(3)
Japanese Communist Party	9	(1)	Your Party	11	(0)
Social Democratic Party	7	(2)	Japanese Communist Party	6	(2)
Your Party	5	(0)	The Sunrise Party of Japan		
The People's New Party,			and New Renaissance Party	5	(1)
and New Party Nippon	4	(0)	Social Democratic Party	4	(1)
The Sunrise Party of Japan	3	(0)	The People's New Party	3	(1)
Group for upholding the interest			Independents	4	(2)
and life of the nation	2	(0)	Vacancies	0	
Independents	4	(0)			
Vacancies	2				

1) Figures in parentheses refer to women only.

Source: House of Representatives; House of Councillors.

## **3. The Executive Branch**

The Cabinet exercises its executive power on the basis of the laws and budgets adopted by the Diet. The Cabinet, composed of the Prime Minister and other Ministers of State, is collectively responsible to the Diet, regarding the exercise of the executive power. The Prime Minister is elected in the Diet from among its members. The majority of the ministers of state to be appointed by the Prime Minister must be Diet members. Thus, Japan adopts the parliamentary Cabinet system, in which the organization and existence of the Cabinet rest on the confidence in the Diet.

The Cabinet's powers include the following: (i) implementing laws; (ii) engaging in foreign diplomacy; (iii) signing treaties; (iv) overseeing the operational affairs of public officers; (v) formulating a budget and submitting it to the Diet; (vi) enacting Cabinet orders; and (vii) deciding amnesty. In addition, the Cabinet powers also include naming the Chief Justice of the Supreme Court and appointing other judges. The Cabinet

also gives advice and approval to the Emperor in matters of state, and bears the responsibility for this.

# Table 17.2Successive Prime Ministers

Date <sup>1)</sup>	Name	Date <sup>1)</sup>	Name
Jun. 8, 2010	Kan, Naoto	Jul. 30, 1998	Obuchi, Keizo
Sep. 16, 2009	Hatoyama, Yukio	Jan. 11, 1996	Hashimoto, Ryutaro
Sep. 24, 2008	Aso, Taro	Jun. 30, 1994	Murayama, Tomiichi
Sep. 26, 2007	Fukuda, Yasuo	Apr. 28, 1994	Hata, Tsutomu
Sep. 26, 2006	Abe, Shinzo	Aug. 9, 1993	Hosokawa, Morihiro
Apr. 26, 2001	Koizumi, Junichiro	Nov. 5, 1991	Miyazawa, Kiichi
Apr. 5, 2000	Mori, Yoshiro	Aug. 10, 1989	Kaifu, Toshiki

1) Date of initial cabinet formation.

Source: Prime Minister's Official Residence.

## 4. The Judicial Branch

Judicial power resides in the courts and is independent from the executive branch and the legislative branch.

The Constitution provides for the establishment of the Supreme Court as the highest court with final judgment, while the Court Organization Law provides for four lower-level courts (High Court, District Court, Family Court and Summary Court). At present, there are eight High Courts, 50 District Courts, 50 Family Courts and 438 Summary Courts throughout the nation.

To ensure fair judgments, the Japanese judicial system allows a case to be heard and ruled on up to three times in principle, should either party involved in the case so desire. The first courts in the court hierarchy are the District Courts, the second being the High Courts and the highest court being the Supreme Court. The Summary Courts and Family Courts handle simple cases, domestic relations and cases involving juveniles as first instances.

The Supreme Court has the authority to deliver the final judgment on the legitimacy of any law, ordinance, regulation, or disposition. It is chaired by the Chief Justice and 14 judges.

A new *saiban-in* (lay judge) system began in May 2009. This is a system under which citizens participate in criminal trials as judges to determine,

together with professional judges, whether the defendant is guilty or not and, if found guilty, what sentence should apply. What is hoped for is that the public's participation in criminal trials will make citizens feel more involved in the justice process and make the trials easier to understand, thus leading to the public's greater trust in the justice system. As of the end of December 2009, a total of 142 *saiban-in* trials have been held.

Judicial	Judicial Cases Newly Accepted, Settled and Pending (All courts)										
						(Thousands)					
Year	Civil and	administrativ	ve cases	Cr	iminal cases	1)					
I Cal	Accepted	Settled	Pending	Accepted	Settled	Pending					
1995	2,411	2,390	697	1,555	1,555	31					
2000	3,052	3,062	780	1,638	1,636	43					
2005	2,713	2,827	576	1,568	1,572	47					
2007	2,256	2,299	514	1,342	1,344	39					
2008	2,252	2,219	547	1,239	1,240	38					
Year	De	omestic cases	5	Juvenile cases <sup>1)</sup>							
I Cal	Accepted	Settled	Pending	Accepted	Settled	Pending					
1995	412	414	66	296	299	49					
2000	561	555	78	286	288	49					
2005	718	713	99	237	238	32					
2007	751	749	101	198	201	26					
2008	766	764	104	176	176	26					

Judicial Cases Newly Accepted, Settled and Pending (All courts)

1) Persons involved.

Table 17 3

Source: Supreme Court.

## 5. Local Governments

The affairs of local governments are conducted on two levels in Japan: by the prefectures and by the municipalities within each prefecture. As of April 1, 2010, Japan has 47 prefectures, within which there are 1,727 municipalities, plus the 23 wards (ku) in metropolitan Tokyo. In order to strengthen the administrative and fiscal foundation of the municipalities, municipal mergers were promoted by law. As a result, the number of municipalities was reduced to 1,727 in April 2010, from 3,232 at the end of March 1999.

Municipalities that satisfy certain population criteria (i.e., 500,000 people or more) are eligible for designation as "Cabinet-Order designated cities." This designation gives them administrative and fiscal authority equivalent to those of prefectures. With the addition of four cities (Niigata-*shi*,

Hamamatsu-*shi* both in April 2007, Okayama-*shi* in April 2009, and Sagamihara-*shi* in April 2010), there are presently 19 cities that have earned this designation. (See the map on the inside back cover.)

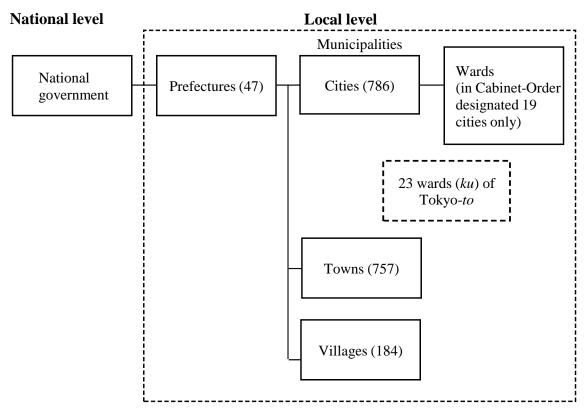
#### **Table 17.4**

# **Local Government Employees by Type of Administrative Services** (As of April 1, 2009)

Type of Services	Number
Total	2,855,106
Education	1,076,358
General administrative services	571,902
Social welfare and public hygiene	382,873
Police	280,898
Fire service	157,405
Public enterprise account sector	385,670
Hospitals	211,016
Water and sewerage	82,359
Transportation	28,168

Source: Ministry of Internal Affairs and Communications.

#### **Figure 17.3 Government System by Level**<sup>1)</sup> (As of April 1, 2010)



1) Figures in parentheses indicate number.

Source: Ministry of Internal Affairs and Communications.

	Prefectural	Population (1,000)		Surface a	rea (km <sup>2</sup> )	Population density (per km <sup>2</sup> )		
Prefectures		i opulatio	m (1,000)		Total area Inhabitable		Inhabitable	
	capital cities –	2005 1)	2009 <sup>2)</sup>	2009	2008	2008	2008	
Japan		127,768	127,510	377,947	121,413	342	1,052	
		5,628	5,507	83,457	21,902	71	253	
Aomori-ken		1,437	1,379	9,644	3,204	145	434	
Iwate-ken		1,385	1,340	15,279	3,710	89	364	
Miyagi-ken		2,360	2,336	7,286	3,130	321	748	
Akita-ken		1,146	1,096	11,636	3,155	95	351	
Yamagata-ken		1,216	1,179	9,323	2,850	127	417	
Fukushima-ken	•	2,091	2,040	13,783	4,218	149	487	
Ibaraki-ken		2,975	2,960	6,096	3,976	486	746	
Tochigi-ken			2,006	6,408	2,946	314	683	
Gumma-ken		2,024	2,007	6,363	2,295	316	877	
Saitama-ken		7,054	7,130	3,797	2,566	1,873	2,772	
Chiba-ken		6,056	6,139	5,157	3,488	1,187	1,755	
Tokyo-to			12,868	2,188	1,396	5,869	9,194	
Kanagawa-ken	•	8,792	8,943	2,416	1,460	3,691	6,108	
Niigata-ken		2,431	2,378	12,584	4,482	190	533	
Toyama-ken	-	1,112	1,095	4,248	1,851	259	595	
Ishikawa-ken		1,174	1,165	4,186	1,383	279	844	
Fukui-ken		822	808	4,190	1,067	194	762	
Yamanashi-ken .		885	867	4,465	950	195	916	
Nagano-ken		2,196	2,159	13,562	3,329	160	652	
Gifu-ken		2,107	2,092	10,621	2,149	198	977	
Shizuoka-ken		3,792	3,792	7,780	2,732	488	1,391	
Aichi-ken		7,255	7,418	5,165	2,960	1,434	2,501	
Mie-ken		1,867	1,870	5,777	2,023	325	927	
Shiga-ken		1,380	1,405	4,017	1,289	349	1,088	
Kyoto-fu		2,648	2,622	4,613	1,155	570	2,276	
Osaka-fu	•	8,817	8,801	1,898	1,319	4,640	6,677	
Hyogo-ken		5,591	5,583	8,396	2,759	665	2,024	
Nara-ken		1,421	1,399	3,691	851	380	1,650	
Wakayama-ken .		1,036	1,004	4,726	1,098	214	921	
Tottori-ken		607	591	3,507	912	170	653	
Shimane-ken		742	718	6,708	1,257	108	577	
Okayama-ken		1,957	1,942	7,113	2,212	274	881	
Hiroshima-ken	•	2,877	2,863	8,479	2,257	338	1,271	
Yamaguchi-ken .		1,493	1,455	6,114	1,752	239	835	
Tokushima-ken .	•	810	789	4,147	1,023	192	776	
Kagawa-ken		1,012	999	1,877	992	534	1,011	
Ehime-ken			1,436	5,678	1,671	254	864	
Kochi-ken	-	796	766	7,105	1,169	109	662	
Fukuoka-ken		5,050	5,053	4,977	2,743	1,016	1,843	
Saga-ken		866	852	2,440	1,340	351	639	
Nagasaki-ken	•	1,479	1,430	4,105	1,629	351	884	
Kumamoto-ken	-	1,842	1,430	7,406	2,748	246	663	
Oita-ken		1,042	1,195	6,340	1,771	189	678	
Miyazaki-ken		1,153	1,132	7,735	1,835	147	619	
Kagoshima-ken	-	1,753	1,708	9,189	3,244	187	529	
Okinawa-ken	-	1,362	1,708	2,276	1,164	605	1,183	
	. I Juliu DIW	1,502	1,002	2,210	1,107	005	1,105	

#### Appendix 1 Population, Surface Area and Population Density by Prefecture

1) Population census. 2) Population estimates.

Source: Statistics Bureau, MIC; Ministry of Land, Infrastructure, Transport and Tourism.

Item	Year	Japan	Argentina	Australia	Brazil	Canada
Population (millions)	2007	127.77	39.49	20.85	190.12	32.95
_	2008	127.69	39.88	21.07	191.97	33.26
	2009	127.51	40.28	21.29	193.73	33.57
Projection (medium variant)	2050	95.15	50.94	28.72	218.51	44.41
Employed persons (1,000)	2008	63,850	a 10,279	10,741	b 90,786	17,126
Unemployed persons (1,000)	2008	2,650	a 898	471	b 8,060	1,119
Unemployment rates (%)	2008	4.0		4.2	b 8.2	6.1
Hours of work per week (manufacturing)	2008	42.4	ac 45.3	37.7	b 43.6	37.2
Industrial production	2008	103.8		102.9	112.1	106.2
index (2005=100)	2009	81.7		98.2	104.0	102.9
Gross domestic product	2007	4,383	262	947	1,334	1,430
(US\$ billion)	2008	4,900	333	1,017	1,595	1,502
Wholesale price index	2008	108.7	d 142.1	e 119.6	121.0	f 108.5
(2005=100)	2009	103.0	d 149.0	e 113.1	120.7	f 104.8
Consumer price index	2008	101.7	131.1	110.6	114.1	106.7
(2005=100)	2009	100.3	# 139.3	112.6	119.7	107.0
Broad money						
Percent changes from	End of 2008	0.7	8.1	14.2	18.0	15.1
the previous year (%)	End of 2009	2.1	17.0	0.5	15.8	
Imports, CIF (US\$ billion)	2009	550.6	39.1	165.5	133.6	329.9
Exports, FOB (US\$ billion)	2009	580.8	56.1	153.9	153.0	
Gold and foreign	End of 2008	1,010,691	44,950	30,829	192,902	43,784
exchange reserves (US\$ million)	End of 2009	1,023,586	46,189	39,090	237,424	54,244
Foreign exchange rates (national currency per U.S. dollar)		Yen	Pesos	Australian dollars	Reais	Canadian dollars
Average	2009	93.54	3.7101	1.2822	1.9994	1.1431
End of year	2009	92.13	3.7800	1.1150	1.7404	1.0466

#### Appendix 2 Main Economic Indicators of Selected Countries

a) Urban agglomerations. b) 2007. c) 2005. d) Producer prices. e) Manufacturing output. f) Industry selling.

				nucu)	
Item	Year	China <sup>1)</sup>	Euro Area	France	Germany
Population (millions)	2007	1,329.1	325.20	61.71	82.34
	2008	1,337.4	327.12	62.04	82.26
	2009	1,345.8	328.65	62.34	82.17
Projection (medium variant)	2050	1,417.0		67.67	70.50
Employed persons (1,000)	2008	774,800		25,913	38,734
Unemployed persons (1,000)	2008	a 8,860		2,070	3,141
Unemployment rates (%)	2008	a 4.2		7.4	7.5
Hours of work per week (manufacturing)	2008	a 47.9		36.7	38.4
Industrial production	2008		106.1	99.9	113.9
index (2005=100)	2009		90.3	87.9	93.6
Gross domestic product	2007	3,460		2,593	3,316
(US\$ billion)	2008	4,327		2,857	3,649
Wholesale price index	2008		b 115.0	b 110.3	b 112.7
(2005=100)	2009		b 109.1	b 104.1	b 108.0
Consumer price index	2008		c 107.8	106.1	106.6
(2005=100)	2009		c 108.1	106.2	107.0
Broad money					
Percent changes from	End of 2008	17.8			
the previous year (%)	End of 2009	27.6			
Imports, CIF (US\$ billion)	2009	1,004.2	1,755.9	554.4	939.0
Exports, FOB (US\$ billion)	2009	1,201.8	1,804.1	474.0	1,127.6
Gold and foreign	End of 2008	1,950,299	d 237,591	37,937	49,051
exchange reserves (US\$ million)	End of 2009	2,417,903	d 302,106	50,930	65,935
Foreign exchange rates (national currency per U.S. dollar)		Yuan	Euros	Euros	Euros
Average	2009	6.8314	0.7198	0.7198	0.7198
End of year	2009	6.8282	0.6942	0.6942	0.6942

#### Appendix 2 Main Economic Indicators of Selected Countries (Continued)

1) Excluding Hong Kong SAR, Macao SAR and Taiwan. a) Urban areas. b) Producer prices.

c) Harmonized CPI. d) Including European Central Bank.

India	Indonesia	Italy	Korea, Rep. of	Mexico	Russia	Saudi Arabia
1,164.7	224.67	59.31	47.96	107.49	141.94	24.68
1,181.4	227.35	59.60	48.15	108.56	141.39	
1,198.0	229.97	59.87		109.61	140.87	
1,613.8	288.11	57.07	44.08	128.96	116.10	43.66
a 368,966	102,553	23,405	23,577	43,867	70,965	7,957
a 11,634	9,395	1,692	769	1,593	4,791	418
a 4.3	8.4	6.7	3.2	3.5	6.3	5.0
b 46.9	43.8	35.9	43.7	46.4	c 6.8	56
126.8		101.7	119.8	107		
120.8	•••	83.1	119.8	99	•••	
155.1		05.1	110.7	))		•••
1,142	433	2,114	1,049	1,019	1,294	384
1,254	511	2,303	929	1,082	1,677	468
119.8	164.6	d 114.5	d 111.1	117.7		116.5
122.4	161.2	d 109.2	d 110.9	124.7		113.0
121.9	132.4	107.4	109.7	113.3	136.4	117.0
135.2	138.5	108.3	112.8	119.3	152.3	122.9
20.5	14.0		15.0		14.6	10.0
20.5	14.9		15.9	8.9	14.6	
17.7	13.0		12.2	11.5	16.4	10.8
249.5	91.9	410.2	322.8	e 325.2	211.0	89.5
160.4	119.0	404.6	361.6	229.7	303.4	e 313.4
248,039	49,723	41,338	201,170	95,136	412,651	442,598
266,166	63,692	50,096	269,958	99,605	417,774	409,694
Rupees	Rupiah	Euros	Won	Pesos	Rubles	Riyals
48.405	10,389.9	0.7198	1,276.9	13.513	31.7404	3.7500
46.680	9,400.0	0.6942	1,164.5	13.059	30.2442	3.7500

a) 2000. b) 2006. c) Per day. d) Producer prices. e) 2008.

I2008 200949.67 50.1173.91 74.82 $61.23$ $61.57$ $314.6$ $314.6$ Projection (medium variant)2008 2050 $50.11$ 56.80 $74.82$ $97.39$ $61.23$ $72.37$ $314.6$ $403.9$ Employed persons (1,000) Unemployed persons (1,000) Unemployment rates (%) Hours of work per week (manufacturing)2008 $2008$ $13,713$ $22.9$ $21,194$ $29,475$ $29,475$ $145,36$ $403.9$ Industrial production index (2005=100)2008 $2008$ $c 110.6$ $c 96.8$ $114.2$ $03.2$ $97.5$ $101$ Gross domestic product (20082007 $2008$ $284$ $276$ $657$ $741$ $2,666$ $14,09$ Wholesale price index (2005=100)2008 $2009$ $d 136.6$ $d 132.6$ $e 112.5$ $d 132.9$ $d 120$ $d 136.6$ Wholesale price index (2005=100)2008 $2008$ $215.0$ $132.7$ $111.9$ $110.9$ $110.9$	Main Economic mulcau				1404)	
2008 $49.67$ $73.91$ $61.23$ $311.6$ $2009$ $50.11$ $74.82$ $61.57$ $314.6$ $2009$ $2050$ $56.80$ $97.39$ $72.37$ $403.9$ Employed persons $(1,000)$ $2008$ $13,713$ $21,194$ $29,475$ $145,36$ Unemployed persons $(1,000)$ $2008$ $4,075$ $2,611$ $1,643$ $8,92$ Unemployment rates $(%)$ $2008$ $22.9$ $11.0$ $5.3$ $55$ Hours of work per week $2008$ $a 175.3$ $52.8$ $b 40.9$ $400$ (manufacturing) $2008$ $c 110.6$ $114.2$ $97.5$ $101$ Industrial production $2008$ $c 96.8$ $103.2$ $87.0$ $91$ Gross domestic product $2007$ $284$ $657$ $2,802$ $13,74$ (US\$ billion) $2008$ $d 136.6$ $d 131.0$ $e 112.5$ $d 120$ Wholesale price index $2008$ $d 136.6$ $d 132.6$ $e 113.9$ $d 109$ Consumer price index $2008$ $125.0$ $132.7$ $111.9$ $110$	Item	Year	South Africa	Turkey	U.K.	U.S.A.
Projection (medium variant) $2009$ $2050$ $50.11$ $56.80$ $74.82$ $97.39$ $61.57$ $72.37$ $314.0$ $403.95$ Employed persons (1,000) Unemployed persons (1,000) Unemployment rates (%) Hours of work per week (manufacturing) $2008$ $2008$ $13,713$ $21,194$ $29,475$ $2,611$ $1,643$ $8,92$ $2008$ $145,30$ $4,075$ $2,611$ $1,643$ $8,92$ $2008$ Industrial production index (2005=100) $2008$ $2008$ $c 110.6$ $c 96.8$ $114.2$ $03.2$ $97.5$ $87.0$ Gross domestic product (US\$ billion) $2007$ $2008$ $284$ $276$ $657$ $741$ $2,666$ $14,09$ $140,09$ Wholesale price index (2005=100) $2008$ $2009$ $d 136.6$ $d 132.6$ $d 132.6$ $e 113.9$ $d 109$ $d 109$ Consumer price index $2008$ $2008$ $125.0$ $132.7$ $111.9$ $110.9$ $110$	Population (millions)	2007	49.17	73.00	60.90	308.67
Projection (medium variant)       2050       56.80       97.39       72.37       403.9         Employed persons (1,000)       2008       13,713       21,194       29,475       145,36         Unemployed persons (1,000)       2008       4,075       2,611       1,643       8,97         Unemployment rates (%)       2008       22.9       11.0       5.3       55         Hours of work per week       2008       a 175.3       52.8       b 40.9       400         (manufacturing)       2008       c 110.6       114.2       97.5       101         Industrial production       2008       c 96.8       103.2       87.0       91         Gross domestic product       2007       284       657       2,802       13,74         (US\$\$ billion)       2008       d 136.6       d 131.0       e 112.5       d 120         Wholesale price index       2009       d 136.6       d 132.6       e 113.9       d 109         Consumer price index       2008       125.0       132.7       111.9       110	_	2008	49.67	73.91	61.23	311.67
Employed persons (1,000)       2008       13,713       21,194       29,475       145,36         Unemployed persons (1,000)       2008       4,075       2,611       1,643       8,92         Unemployment rates (%)       2008       22.9       11.0       5.3       55         Hours of work per week       2008       2110.6       52.8       b 40.9       40         Industrial production       2008       c 110.6       114.2       97.5       101         index (2005=100)       2007       284       657       2,802       13,74         Gross domestic product       2007       284       657       2,802       13,74         (US\$ billion)       2008       d 136.6       d 131.0       e 112.5       d 120         Wholesale price index       2009       2009       d 136.6       e 113.9       d 109         Consumer price index       2008       125.0       132.7       111.9       110		2009	50.11	74.82	61.57	314.66
Unemployed persons (1,000)       2008       4,075       2,611       1,643       8,92         Unemployment rates (%)       2008       22.9       11.0       5.3       5         Hours of work per week       2008       a 175.3       52.8       b 40.9       40         (manufacturing)       2008       c 110.6       114.2       97.5       101         Industrial production       2009       c 96.8       103.2       87.0       91         Gross domestic product       2007       284       657       2,802       13,74         (US\$ billion)       2008       d 136.6       d 131.0       e 112.5       d 120         Wholesale price index       2009       2009       d 136.6       d 132.6       e 113.9       d 109         Consumer price index       2008       125.0       132.7       111.9       110	Projection (medium variant)	2050	56.80	97.39	72.37	403.93
Unemployment rates (%) Hours of work per week (manufacturing)2008 200822.9 a 175.311.0 5.35.3 5 5 40.9Industrial production index (2005=100)2008 2009c 110.6 c 96.8114.2 103.297.5 87.0101 91Gross domestic product (US\$ billion)2007 2008284 276657 7412,802 2,66613,74 14,09Wholesale price index (2005=100)2008 2009d 136.6 d 132.6d 131.0 e 112.5e 112.5 d 120 d 109Wholesale price index (2005=100)2008 20082125.0 132.7132.7 111.9110	Employed persons (1,000)	2008	13,713	21,194	29,475	145,362
Hours of work per week (manufacturing)2008a 175.352.8b 40.940Industrial production index (2005=100)2008c 110.6114.297.5101Gross domestic product (US\$ billion)20072846572,80213,74Wholesale price index (2005=100)2008d 136.6d 131.0e 112.5d 120Wholesale price index (2005=100)20092008d 136.6d 132.6e 113.9d 109Consumer price index (20082008125.0132.7111.9110	Unemployed persons (1,000)	2008	4,075	2,611	1,643	8,924
(manufacturing)Industrial production index (2005=100) $2008$ $2009$ $c 110.6$ $c 96.8$ $114.2$ $103.2$ $97.5$ $910$ Gross domestic product (US\$ billion) $2007$ $2008$ $284$ $276$ $657$ $741$ $2,802$ $2,666$ $13,74$ $2,666$ Wholesale price index (2005=100) $2008$ $2009$ $d 136.6$ $d 136.6$ $d 131.0$ $d 132.6$ $e 112.5$ $d 1200d 136.6Wholesale price index(2005=100)20082008d 136.6d 132.6e 113.9d 1090$	Unemployment rates (%)	2008	22.9	11.0	5.3	5.8
index (2005=100)2009c 96.8103.287.091Gross domestic product20072846572,80213,74(US\$ billion)20082767412,66614,09Wholesale price index2008d 136.6d 131.0e 112.5d 120(2005=100)2009d 136.6d 132.6e 113.9d 109Consumer price index2008125.0132.7111.9110	_	2008	a 175.3	52.8	b 40.9	40.8
Gross domestic product (US\$ billion)2007 2008284 276657 7412,802 2,66613,74 14,09Wholesale price index (2005=100)2008 2009d 136.6 d 136.6d 131.0 d 132.6e 112.5 e 113.9d 120 d 109 d 109Consumer price index2008 2008125.0 132.7131.7 111.9110	Industrial production	2008	c 110.6	114.2	97.5	101.5
(US\$ billion)20082767412,66614,09Wholesale price index2008d 136.6d 131.0e 112.5d 120(2005=100)2009d 136.6d 132.6e 113.9d 109Consumer price index2008125.0132.7111.9110	index (2005=100)	2009	c 96.8	103.2	87.0	91.6
Wholesale price index2008d 136.6d 131.0e 112.5d 120(2005=100)2009d 136.6d 132.6e 113.9d 109Consumer price index2008125.0132.7111.9110	Gross domestic product	2007	284	657	2,802	13,742
(2005=100)2009d 136.6d 132.6e 113.9d 109Consumer price index2008125.0132.7111.9110	(US\$ billion)	2008	276	741	2,666	14,097
Consumer price index         2008         125.0         132.7         111.9         110	Wholesale price index	2008	d 136.6	d 131.0	e 112.5	d 120.5
1	(2005=100)	2009	d 136.6	d 132.6	e 113.9	d 109.9
(2005=100) 2009 133.9 141.0 111.3 109	Consumer price index	2008	125.0	132.7	111.9	110.2
	(2005=100)	2009	133.9	141.0	111.3	109.9
Broad money	Broad money					
Percent changes from         End of 2008         14.7         24.9         16.6         8	Percent changes from	End of 2008	14.7	24.9	16.6	8.0
the previous year (%) End of 2009 1.8 12.70	the previous year (%)	End of 2009	1.8	12.7	-	-0.7
Imports, CIF (US\$ billion) 2009 73.2 140.7 484.1 1,603	Imports, CIF (US\$ billion)	2009	73.2	140.7	484.1	1,603.8
Exports, FOB (US\$ billion)200962.6102.2356.31,056	Exports, FOB (US\$ billion)	2009	62.6	102.2	356.3	1,056.7
Gold and foreign         End of 2008         30,799         70,629         44,887         80,70	Gold and foreign	End of 2008	30,799	70,629	44,887	80,704
exchange reserves End of 2009 35,458 71,079 56,250 134,00 (US\$ million)	0	End of 2009	35,458	71,079	56,250	134,067
Foreign exchange rates (national currency per U.S. dollar) Rand Liras Pounds U.S. dollars	(national currency		Rand	Liras	Pounds	
	-	2009	8.4737	1.5500	0.6392	1.0000
End of year20097.38001.49090.61751.000	End of year	2009	7.3800	1.4909	0.6175	1.0000

#### Appendix 2 Main Economic Indicators of Selected Countries (Continued)

a) Per month. 2002. b) 2007. c) Manufacturing production. d) Producer prices. e) Manufacturing output.

Source: Statistics Bureau, MIC; Cabinet Office; Ministry of Health, Labour and Welfare; Bank of Japan; United Nations; International Labour Organization; International Monetary Fund; EUROSTAT.

	Inves	
	(Yen against	U.S. dollar)
Year	Average	End of year
1993	111.18	111.89
1994	102.23	99.83
1995	94.06	102.91
1996	108.79	115.98
1997	121.00	129.92
1998	130.90	115.20
1999	113.91	102.08
2000	107.77	114.90
2001	121.53	131.47
2002	125.31	119.37
2003	115.93	106.97
2004	108.18	103.78
2005	110.16	117.48
2006	116.31	118.92
2007	117.76	113.12
2008	103.37	90.28
2009	93.54	92.13

## Appendix 3 Foreign Exchange Rates <sup>1)</sup>

 Midpoint rate in the interbank foreign exchange market in Tokyo.
 Source: Bank of Japan.

#### Appendix 4 Conversion Factors

Metric units

British Imperial and U.S. equivalents

Length:	1 centimeter (cm)	
	1 meter (m)	3.280840 feet
	1 kilometer (km)	0.6213712 miles
Area:	1 square meter $(m^2)$	10.763910 square feet 1.195990 square yards
	1 square kilometer (km <sup>2</sup> )	0.3861022 square miles
	1 hectare (ha)	2.471054 acres
	10,000 square meters $(m^2)$	2.4/1034 acres
Volume:	1 cubic meter $(m^3)$	35.31467 cubic feet 1.307951 cubic yards
volume.		
Weight:	1 kilogram (kg)	35.27396 ounces
weight.	(	2.204623 pounds
	1 ton (t)	0.9842065 long tons 1.1023113 short tons
Canacity:	1 liter $(\ell)$	0.8798766 imp. quarts 1.056688 U.S. liq. quarts
Capacity.		1.056688 U.S. liq. quarts
Temperature	: centigrade (°C)	5/9 (Fahrenheit-32)