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JAPAN

2009

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JAPAN

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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 2009

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, 2009.
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
 - 0 } Less than half of unit employed
 - 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 Province.
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:
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Chapter 1

Land and Climate

1. Land

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 geographical 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.

Table 1.1
Surface Area of Japan (2008)
(Square kilometers)

District	Area
Japan	377,944
Honshu	a) 231,112
Hokkaido	83,457
Kyushu	42,190
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.

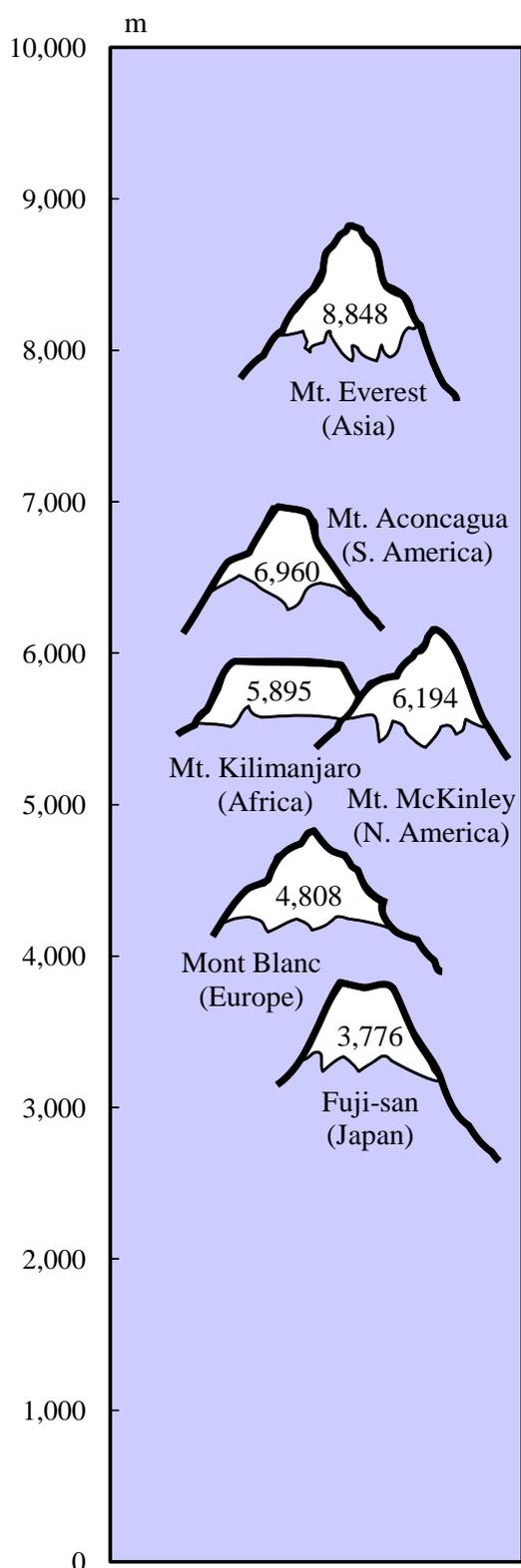
Table 1.2
Top 10 Countries According to Surface Area (2006) ¹⁾
(1,000 square kilometers)

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 1.3
Mountains (2008)

Name	Height (Meters)
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, Infrastructure, Transport and Tourism.

Table 1.4
Rivers (2008)

Name	Length (Kilometers)
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 (2008)

Name	Area (Square kilometers)
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 66.4 percent of the nation's surface area) of forests, followed by approximately 50,000 square kilometers of farmland (12.6 percent). Together, forests and farmland thus cover approximately 80 percent of the nation. There are approximately 20,000 square kilometers of building land (4.9 percent).

Table 1.6
Surface Area by Use

(1,000 square kilometers)							
Year	Total	Forests	Farmland	Inland water	Roads ¹⁾	Building land ²⁾	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)

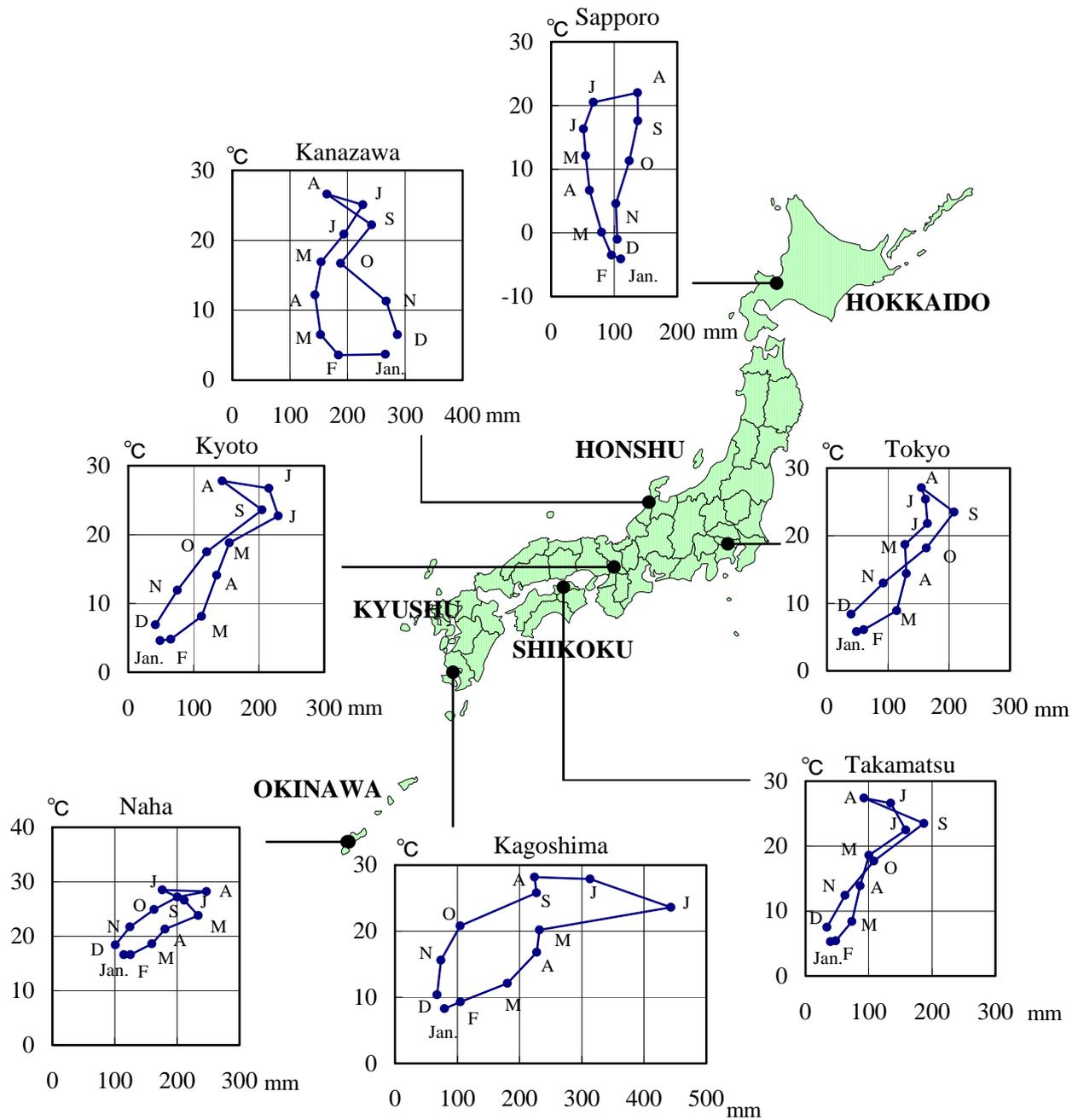
1) Including farm roads and forest roads, etc. 2) Including industrial land and other land for buildings.

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.

Table 1.7

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

Observing station		Temperature (°C)											Precipitation (mm)		
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Annual ¹⁾	
Sapporo	Temp.	High	-0.9	-0.3	3.5	11.1	17.0	21.1	25.0	26.1	22.0	15.8	8.1	2.1	12.5
		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	
Tokyo	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
		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	
Kanazawa	Temp.	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
		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	
Kyoto	Temp.	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
		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	
Takamatsu	Temp.	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
		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	
Kagoshima	Temp.	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
		Low	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	
Naha	Temp.	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
		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	

1) Annual average for temperature and annual total for precipitation.

Source: Japan Meteorological Agency.

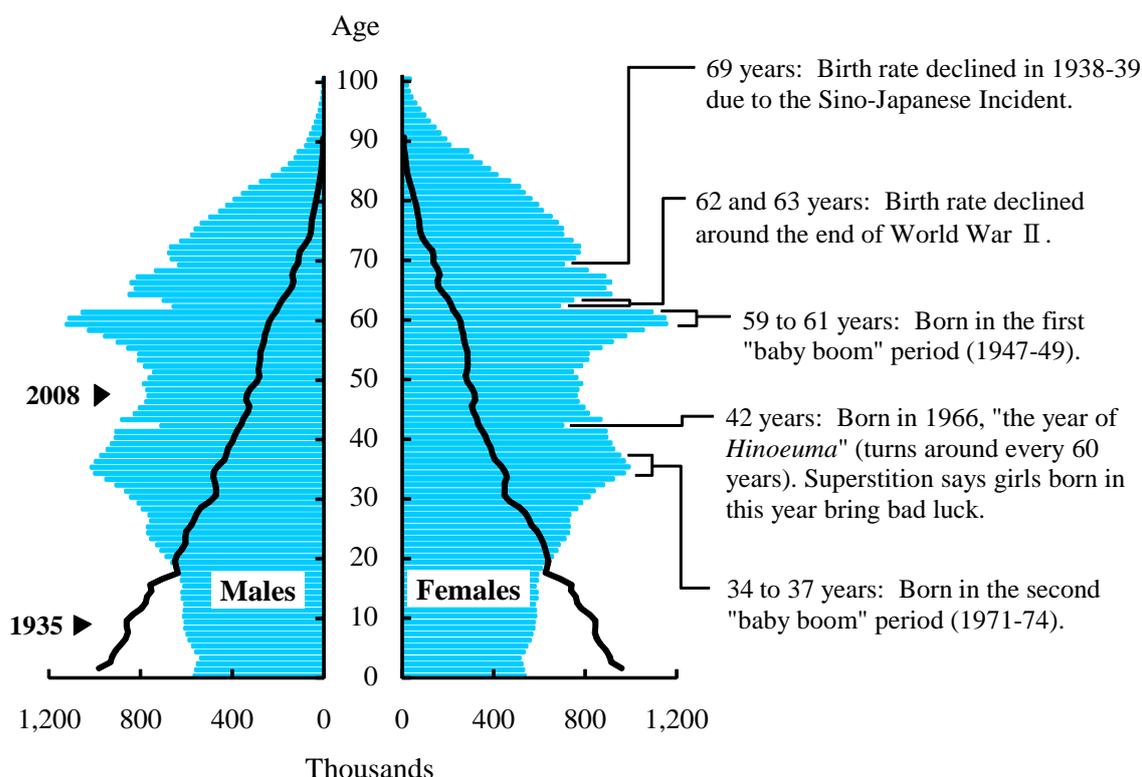
Chapter 2

Population

1. Total Population

Japan's 2008 total population was 127.69 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



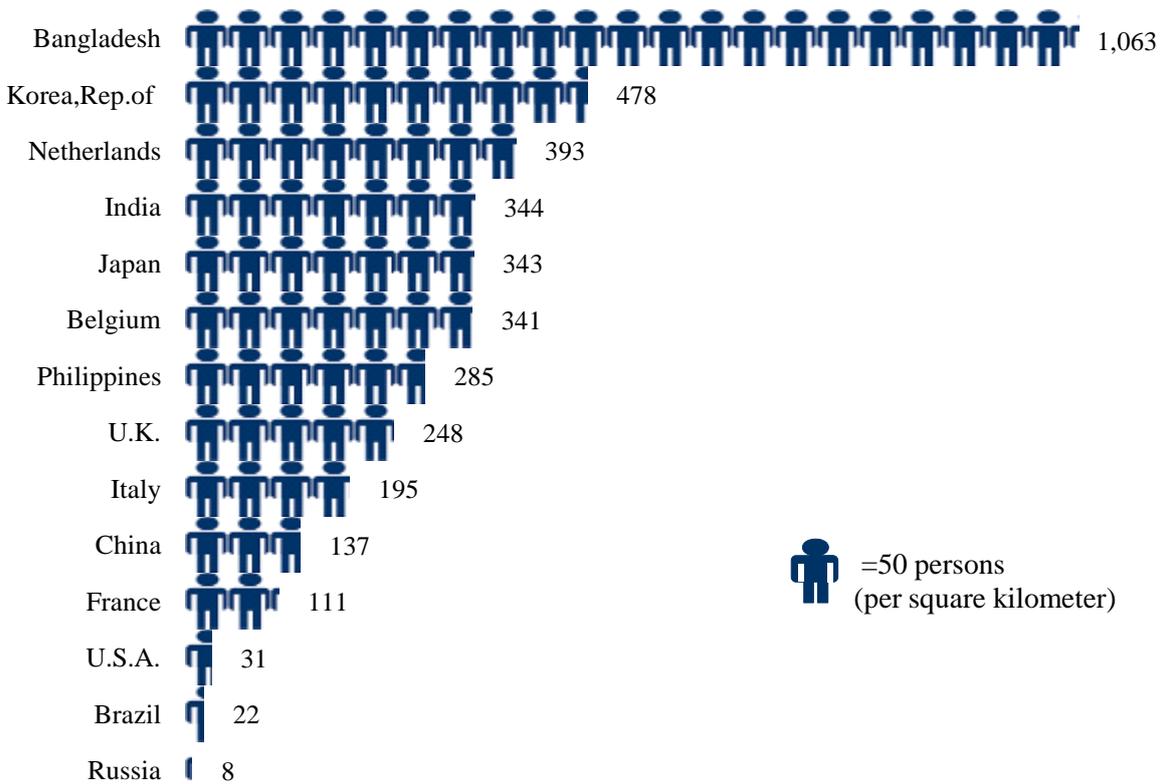
Source: Statistics Bureau, MIC.

Table 2.1
Countries with a Large Population (2008)

		(Millions)	
Country	Population	Country	Population
World	6,750		
China	1,337	Pakistan	177
India	1,181	Bangladesh	160
U.S.A.	312	Nigeria	151
Indonesia	227	Russia	141
Brazil	192	Japan	128

Source: Statistics Bureau, MIC; United Nations.

Figure 2.2
Population Density by Country (2005)



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 2008 population estimate was 127.69 million, down by 79,000 from the year before.

POPULATION

Table 2.2
Trends in Population

Year	Population (1,000)		Age composition (%)			Average annual rate of increase (%)	Population density (per km ²)
		Males	0 - 14 years	15 - 64	65 and over		
As of Oct. 1 of each year ¹⁾							
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
Projection as of Dec. 2006							
2010	127,176	61,868	13.0	63.9	23.1	-0.20	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

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

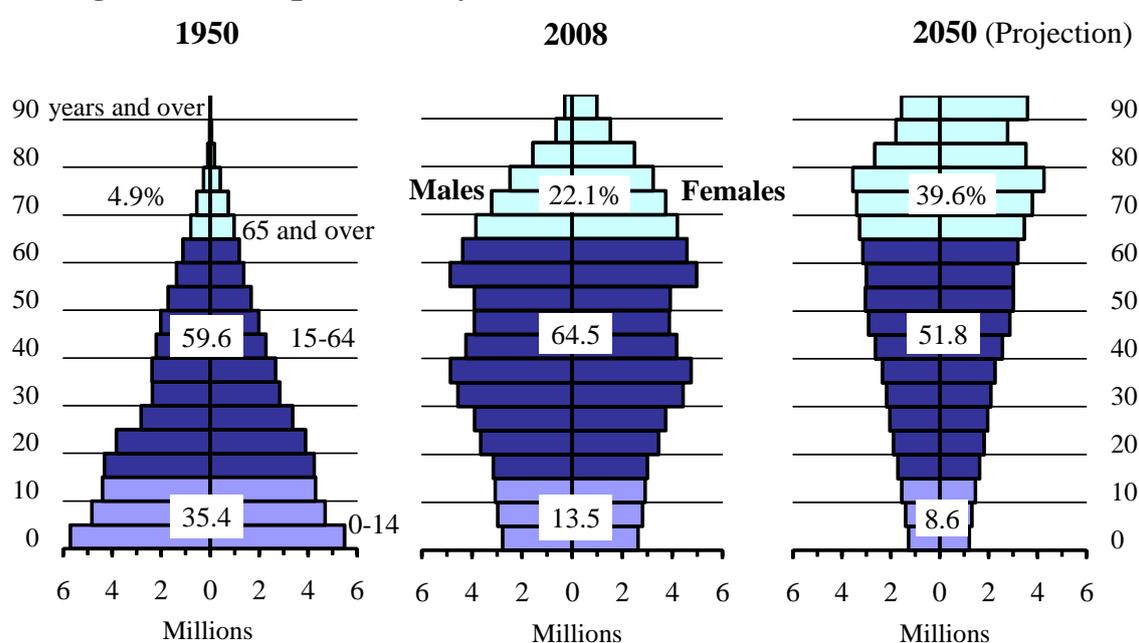
Source: Statistics Bureau, MIC; Ministry of Health, Labour and Welfare.

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 2008, the population of elderly citizens (65 years and over) was 28.22 million, constituting 22.1 percent of the total population and marking

record highs both in terms of number and percentage. 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.

Figure 2.3
Changes in the Population Pyramid



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

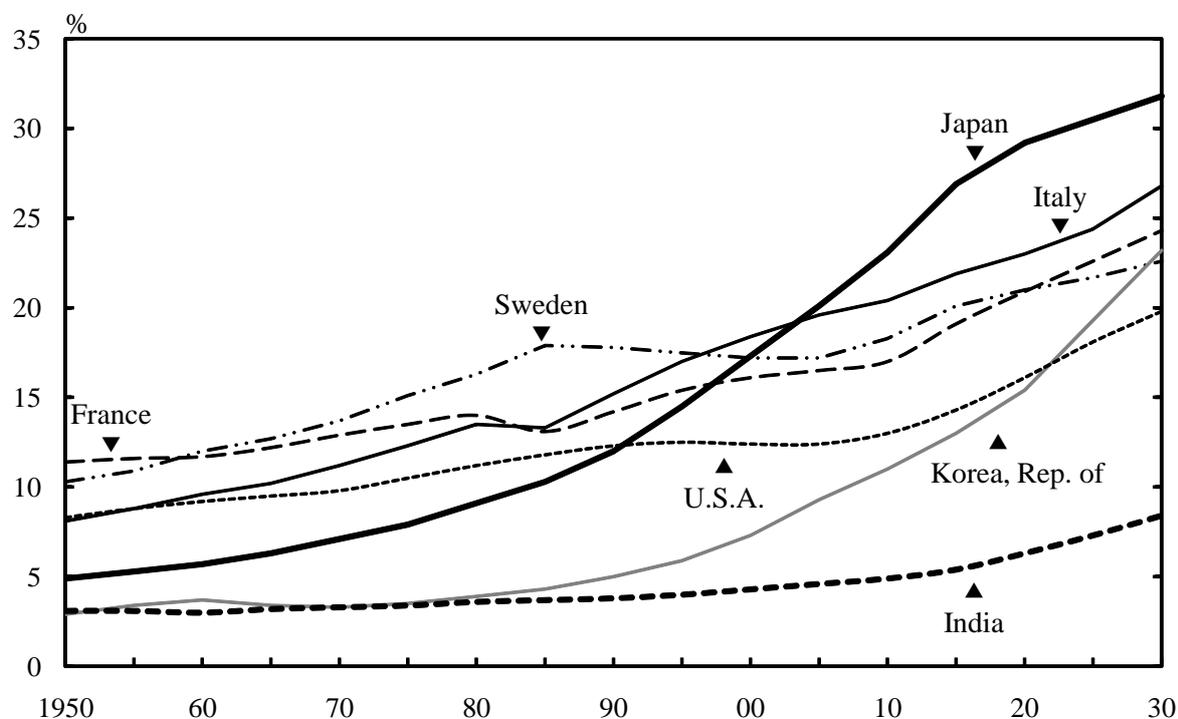
On the other hand, the percentage of the younger age population in Japan (0-14 years) has been shrinking since 1982. In 2008, the younger age population amounted to 17.18 million, accounting for 13.5 percent of the total population, the lowest level on record since the Population Estimates began. The working-age population (15-64 years) totaled 82.30 million, continuing its decline since 1996. In share terms, it accounted for 64.5 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 the working-age population) was 55.2 percent. In terms of their proportion of the total population, the elderly have surpassed the younger age group since 1997.

Table 2.3
Age Structure of Population by Country

Country	2005			2030 (projection)		
	0-14 years	15-64	65 and over	0-14 years	15-64	65 and 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
Switzerland	16.1	67.9	16.0	15.1	60.9	24.1
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
Australia	19.7	67.3	12.9	17.5	61.7	20.7
U.S.A.	20.8	66.8	12.4	18.0	62.3	19.8
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

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 increase rate (per 1,000 population) turned negative for the first time since 1899; the figure was -0.4 in 2008.

During the second baby boom between 1971 and 1973, the birth rate was at a level of 19 (per 1,000 population). 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 8.7 in 2008, an increase from 8.6 marked in the previous year.

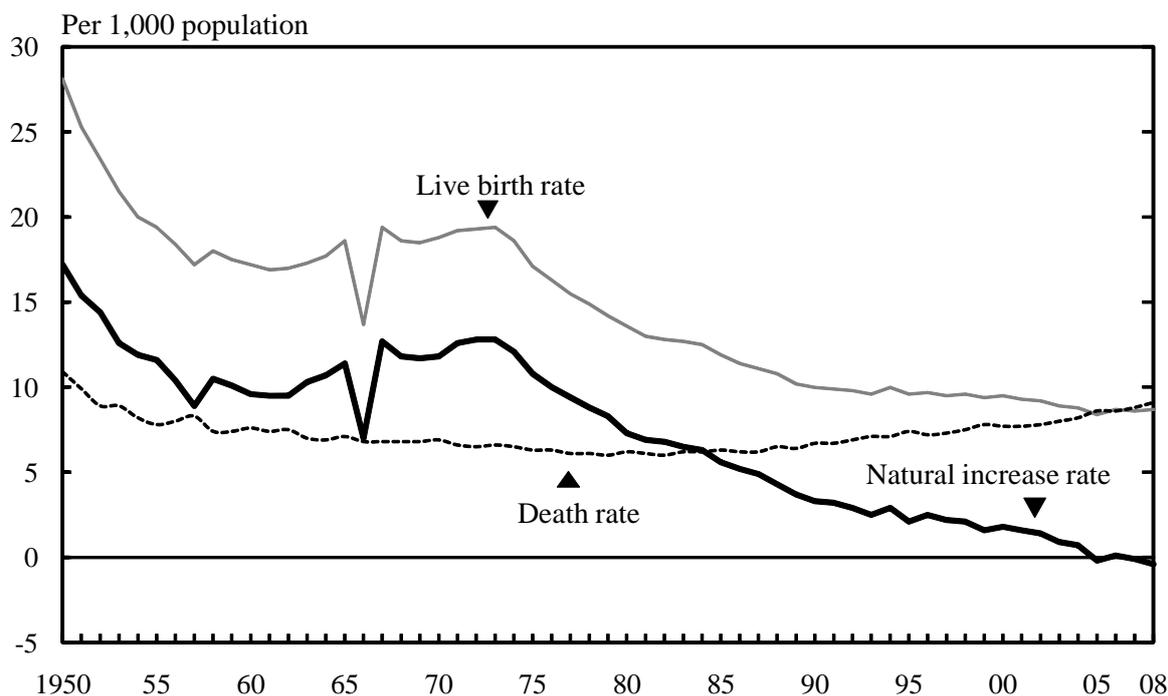
Table 2.4
Vital Statistics

Year	Rates per 1,000 population ¹⁾				Total fertility rate ²⁾	Life expectancy at birth (years)	
	Live births	Deaths	Infant mortality	Natural increase		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
2006	8.7	8.6	2.6	0.1	1.32	79.00	85.81
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

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 Increase of Population



Source: Ministry of Health, Labour and Welfare.

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 29.5 in 2008. The total fertility rate was on the downward trend after dipping below 2.00 in 1975. However, it rose in 2006 for the first time in six years and continued to go up to 1.37 in 2008, marking a rise for three consecutive years.

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 2008.

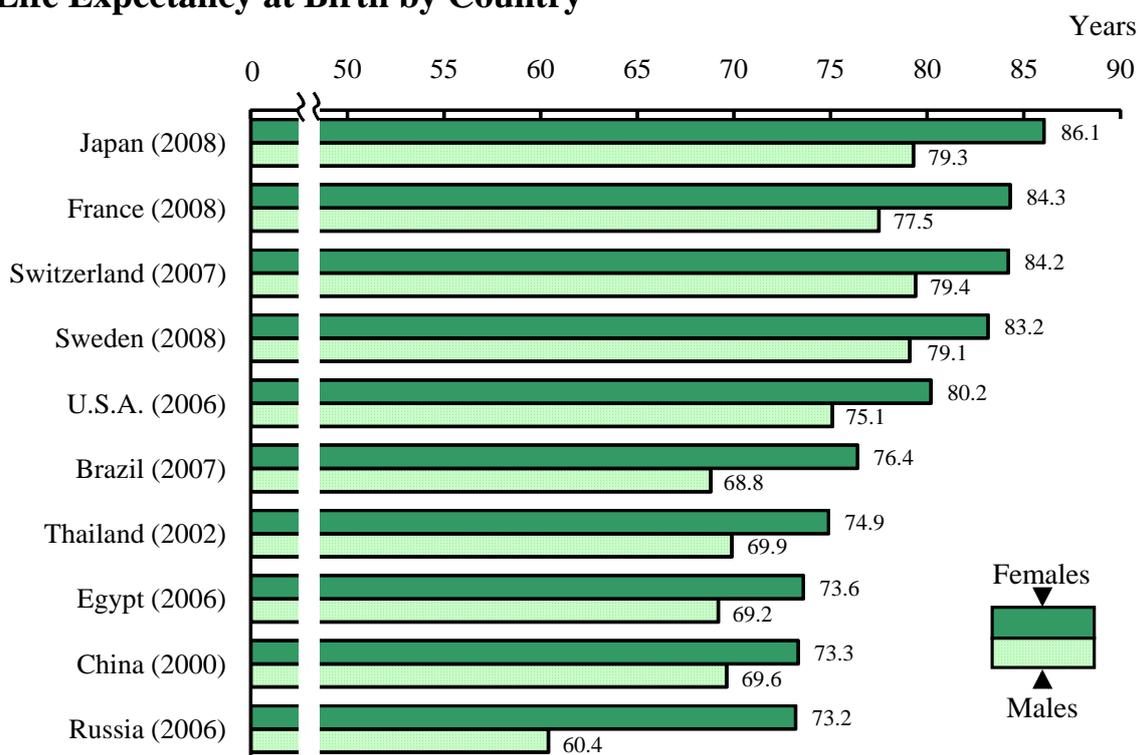
Average life expectancy in Japan climbed sharply after World War II, and is today at the highest level in the world. In 2008, life expectancy at birth was 86.05 years for women and 79.29 years for men.

Table 2.5
Changes of Mothers' Age at Childbirth

Year	Number of babies (1,000)	Distribution of mothers' age (%)						Mean age bearing first child
		-19	20-24	25-29	30-34	35-39	40 and over	
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
2006	1,093	1.5	11.9	30.7	38.2	15.6	2.0	29.2
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

Source: Ministry of Health, Labour and Welfare.

Figure 2.6
Life Expectancy at Birth by Country



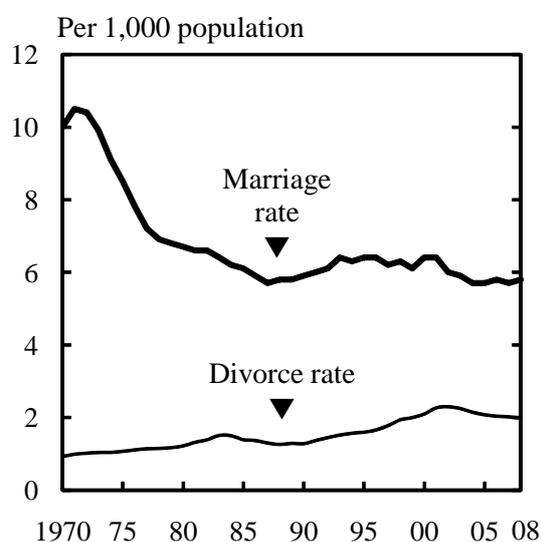
Source: Ministry of Health, Labour and Welfare.

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 2008, 726,000 couples married and the marriage rate (per 1,000 population) was 5.8.

The mean age of first marriage was 30.2 for men and 28.5 for women in 2008, a rise by 1.7 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.

Figure 2.7
Changes in Marriage Rate and Divorce Rate



Source: Ministry of Health, Labour and Welfare.

Table 2.6
Mean 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

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. Since then, both the number of divorces and the divorce rate have declined for six years straight. In 2008, the number of divorces totaled 251,000, and the divorce rate was 1.99 (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, reflecting the progressive decline in the birth rate through the 1960s, 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, principally due to the increase of one-person households and the conversion of households into nuclear families. 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.

Table 2.7
Households and Household Members

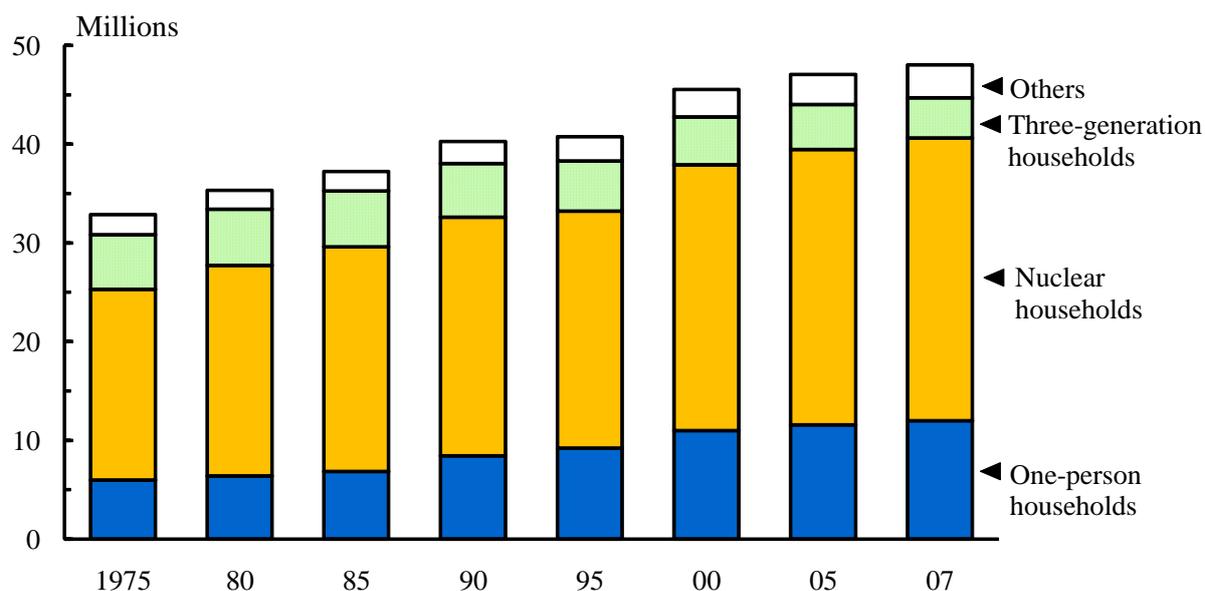
Year	Households (1,000)	Average annual rate of increase (%)	Household members (1,000)	Members per household	Population (1,000)	Average annual rate of increase (%)
1970	30,297	a) 3.00	103,351	3.41	104,665	1.08
1975	33,596	2.09	110,338	3.28	111,940	1.35
1980	35,824	1.29	115,451	3.22	117,060	0.90
1985	37,980	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

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



Source: Ministry of Health, Labour and Welfare.

(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 9.01 million elderly households in 2007, accounting for a sharply increased share of 18.8 percent. The number of one-person elderly households increased 7.1 times between 1975 and 2007: from 611,000 to 4.33 million. In 2007, 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 4.39 million in 2007, about a tenfold increase over the figure in 1975.

Table 2.8
Trends in Elderly Households

(Thousands)									
Type of households	1975	1980	1985	1990	1995 ¹⁾	2000	2005	2006	2007
All households	32,877	35,338	37,226	40,273	40,770	45,545	47,043	47,531	48,023
Elderly households	1,089	1,684	2,192	3,113	4,390	6,261	8,349	8,462	9,009
(percentage)	3.3	4.8	5.9	7.7	10.8	13.7	17.7	17.8	18.8
One-person households	611	910	1,131	1,613	2,199	3,079	4,069	4,102	4,326
Males	138	192	218	295	449	682	1,010	1,034	1,174
Females	473	718	913	1,318	1,751	2,398	3,059	3,068	3,153
Elderly couples	443	722	996	1,400	2,050	2,982	4,071	4,114	4,390
Other elderly households	36	52	65	100	141	199	209	245	292

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

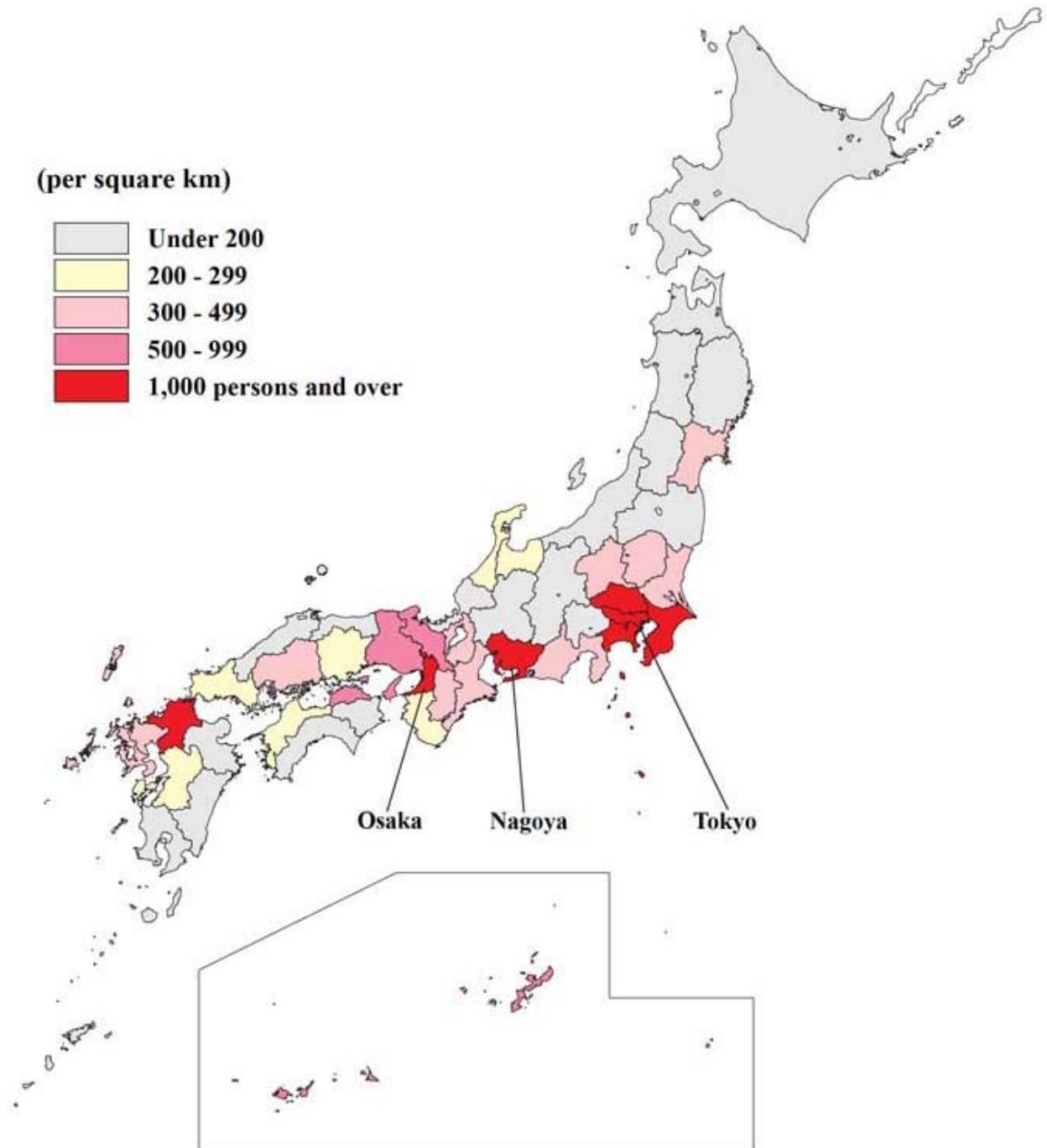
(1) Population Density

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).

Figure 2.9
Population Density by Prefecture (2005)



Source: Statistics Bureau, MIC.

Table 2.9
Population of Major Cities

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

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 ¹⁾

(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.

Source: Statistics Bureau, MIC.

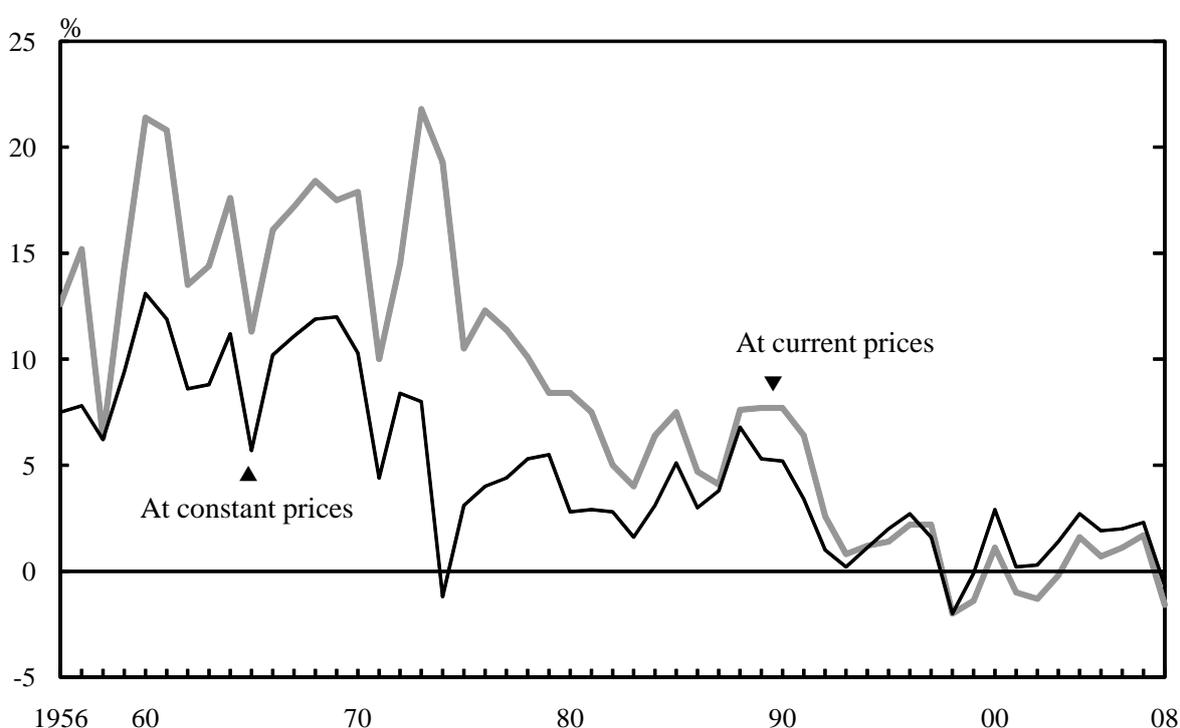
Chapter 3

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.

Figure 3.1
Economic Growth Rates ¹⁾



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 1993, and the chain-linked method from 1994 to the present date.

Source: Cabinet Office.

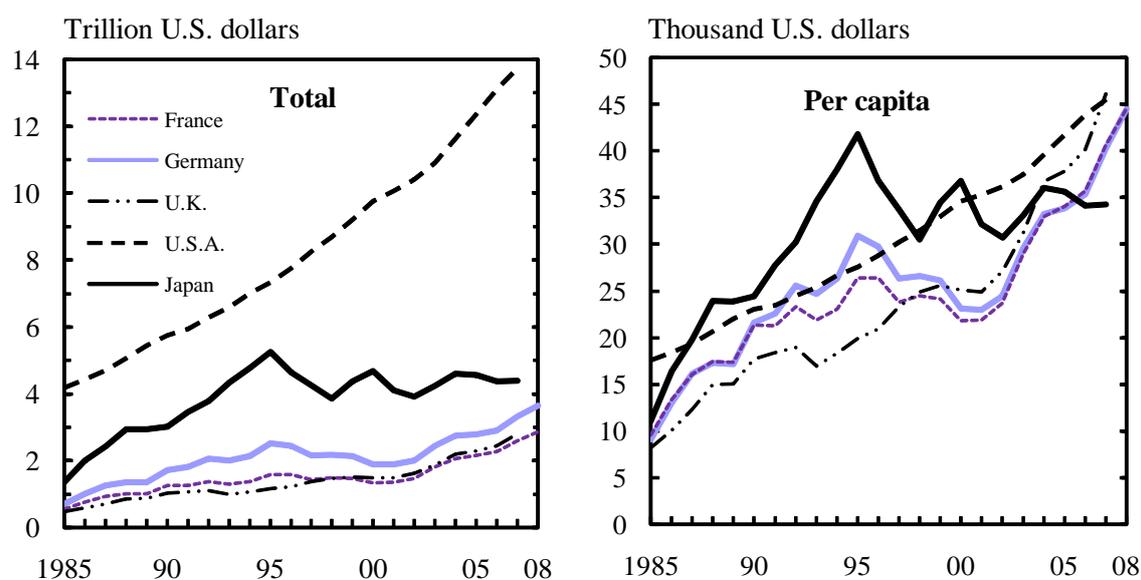
During the 1960s, Japan's economy grew at a rapid pace of over 10 percent per annum. This rapid economic growth was supported by: (i) expansion of private investments in plant and equipment, backed by a high rate of personal savings; (ii) a large shift in the working population from primary to secondary 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)

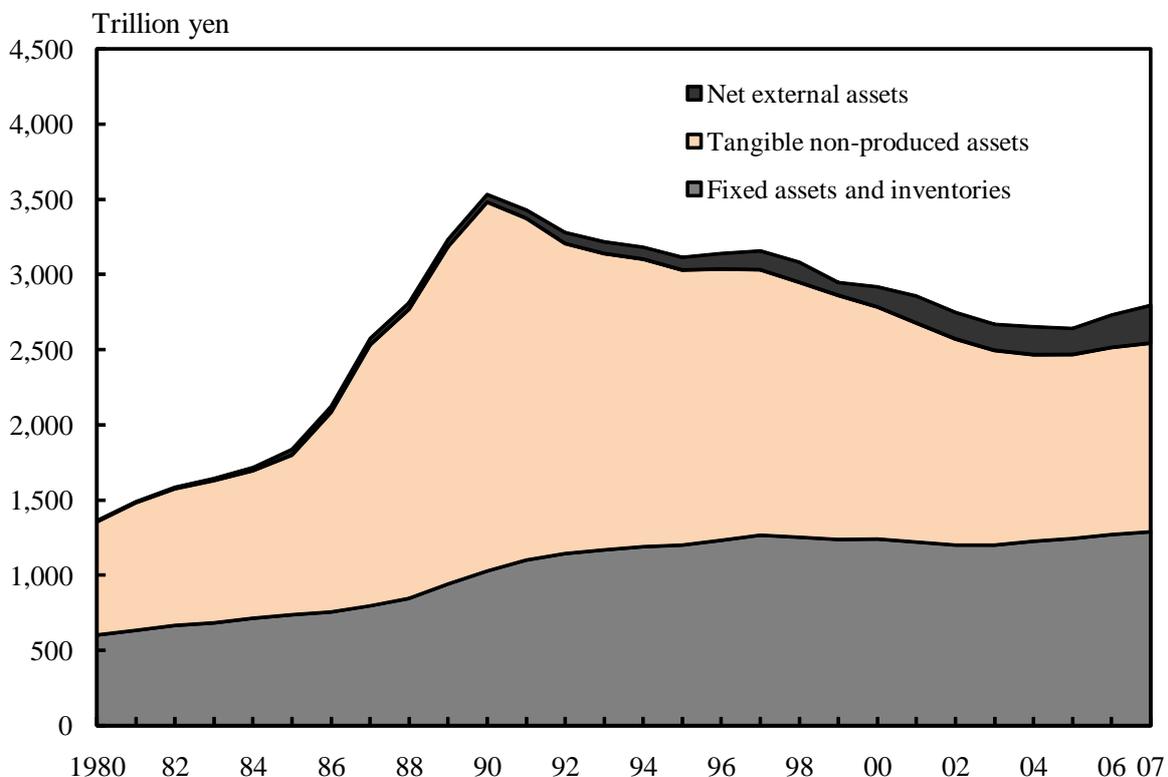


Source: OECD.

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).

Figure 3.3
National Wealth



Source: Cabinet Office.

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 1,360 trillion yen, 5.6 times GDP. It then increased, reaching 3,533 trillion yen, 8.0 times GDP, at the end of 1990, due to increasing land and stock prices. With the collapse of the bubble economy, Japan's national wealth has since shifted into decline, dropping to 2,794 trillion yen at the end of 2007.

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.

Due to reluctance on the part of financial institutions to grant loans under efforts to improve their capital-to-asset ratio, the number of corporate bankruptcies in fiscal 2001 rose to the second highest level posted in the post-war period, following the record high registered in fiscal 1984. Furthermore, troubled by cash flow problems and lack of demand, companies were forced to cut employment and investments in plant and equipment.

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.

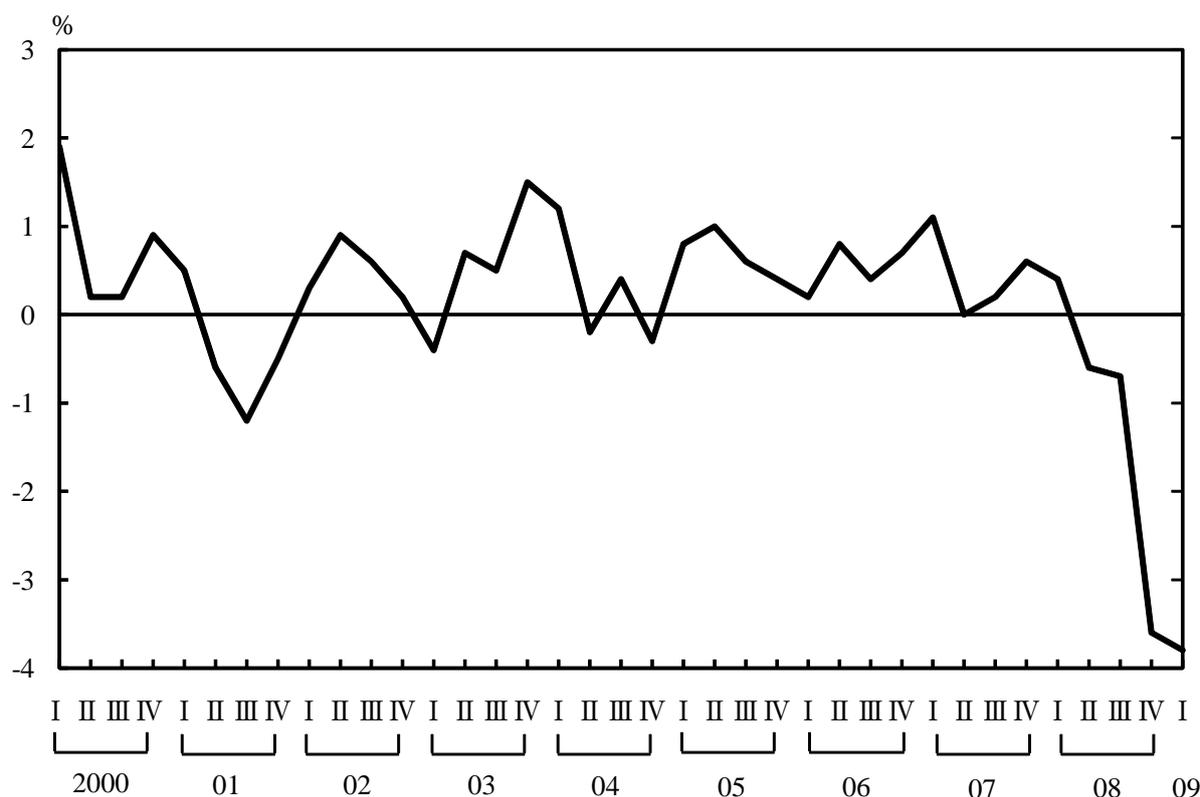
Following the simultaneous terrorist attacks in the U.S.A. in September 2001, further slowdown of the world economy became a matter of serious concern, resulting in greater uncertainty over the outlook for the Japanese economy. There were several reasons for the long-running stagnation of

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.

Figure 3.4
Economic Growth Rates (Quarterly changes) ¹⁾



1) Data based on the 1993 SNA, calculated using the chain-linking 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) ¹⁾

	(Billion yen)			
Item	2005	2006	2007	2008
Gross domestic product (GDP)	536,762.2	547,709.3	560,517.5	556,501.6
Domestic demand	520,972.2	527,314.3	533,748.4	528,971.5
Private demand	402,636.0	410,085.0	416,384.8	412,294.2
Private final consumption expenditure	300,390.3	304,965.6	307,023.7	308,738.0
Private Residential Investment	18,354.6	18,454.1	16,672.2	15,397.0
Private plant and equipment	83,087.2	85,013.3	89,838.3	86,249.9
Changes in inventories of private sector	1,191.8	2,091.5	3,530.6	2,660.9
Public demand	118,403.0	117,337.3	117,493.9	116,799.3
Government final consumption expenditure ..	94,843.4	95,203.4	97,051.6	97,845.2
Gross capital formation by public sector	23,203.6	21,880.5	20,273.5	18,878.9
Changes in inventories of public sector	311.5	252.0	252.2	250.2
Net exports of goods and services	15,721.1	20,392.4	26,281.5	27,263.1
Exports of goods and services	73,584.3	80,699.5	87,490.9	89,047.6
(less) Imports of goods and services	57,863.2	60,307.1	61,209.4	61,784.6
(Reference)				
Trading gains/losses	-9,024.8	-14,706.6	-18,858.0	-26,704.2
Gross domestic income	527,737.4	533,002.8	541,659.5	529,797.4
Net income from the rest of the world	12,501.9	15,221.5	18,189.0	17,545.6
Incomes from the rest of the world	18,562.1	22,923.8	27,766.5	25,911.0
(less) Incomes to the rest of the world	6,060.2	7,702.3	9,577.5	8,365.5
Gross national income (GNI)	540,239.3	548,224.3	559,848.5	547,343.0

1) Constant prices in 2000; by chain-linking 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.

The Consumer prices showed a downward trend again, with the overall index (with 2005 as the base year = 100) shifting below the previous year's level since February 2009. Employment conditions are also increasingly harsh, as seen in an example of the unemployment rate (a seasonally adjusted figure) which rose to the 5 percent range, up over 1 percentage point in four months from January to May 2009. The economy is still in trouble overall, though it appears to have overcome some weaknesses.

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 1.4 percent, 26.4 percent, and 72.2 percent, respectively.

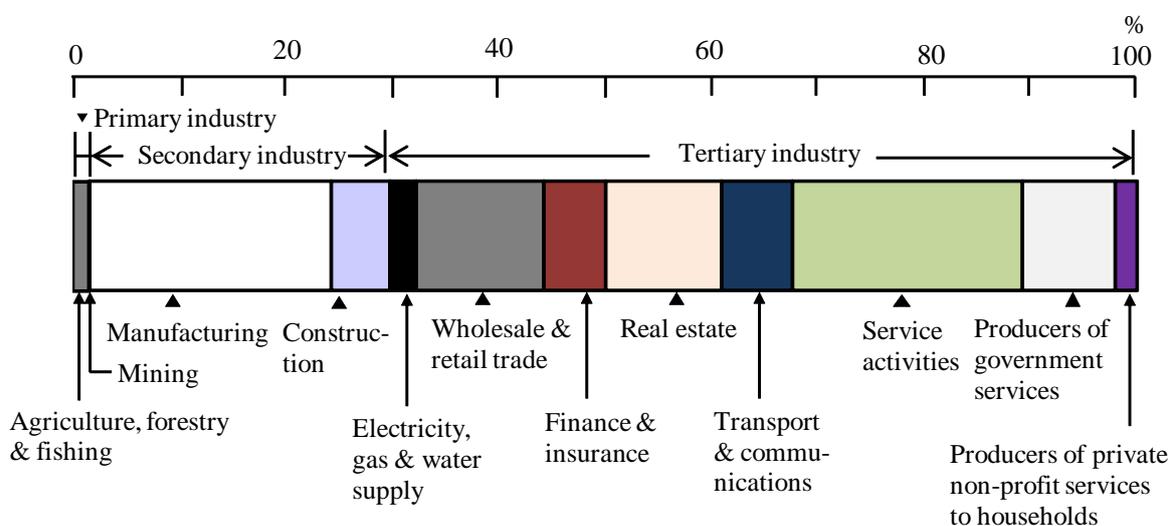
Table 3.2
Changes in Industrial Structure

Year	Employed persons ¹⁾			Gross domestic product (GDP) ²⁾		
	Primary industry	Secondary industry	Tertiary industry	Primary industry	Secondary industry	Tertiary 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	# 36.5	# 60.0
1985	9.3	33.1	57.3	3.1	35.1	61.8
1990	7.1	33.3	59.0	2.4	35.7	61.8
1995	6.0	31.6	61.8	1.8	30.3	67.9
2000	# 5.1	# 29.2	# 64.5	1.7	28.5	69.8
2005	4.8	26.1	67.2	1.4	26.4	72.2

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 (2007)
(Constant prices in 2000)

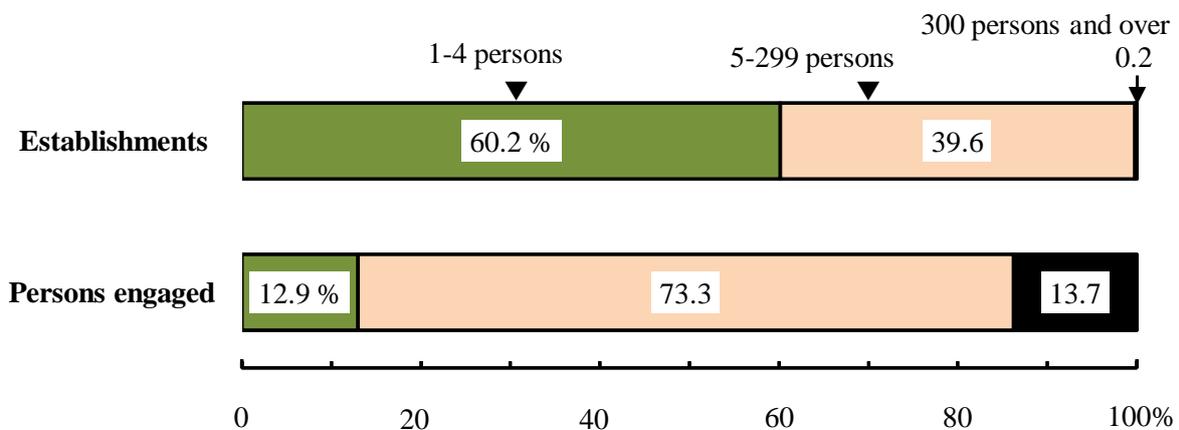


Source: Cabinet Office.

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.

Table 3.3
Number of Establishments and Persons Engaged

	Number of establishments (1,000)		Persons engaged (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	3,132	2,735	9,006	7,559
Corporations	2,972	2,955	45,761	46,495
Companies	2,665	2,605	40,620	39,963
Unincorporated organizations	35	32	145	130
National and local governments	212	188	5,245	4,450
By number of persons engaged				
1 - 4 persons	3,867	3,538	8,422	7,588
5 - 9 persons	1,214	1,124	7,896	7,327
10 - 29 persons	911	883	14,642	14,256
30 - 99 persons	274	273	13,434	13,421
100 - 299 persons	50	50	7,974	7,994
300 and over	12	12	7,789	8,050
Dispatched or subcontracted employees only	21	30	...	...

Source: Statistics Bureau, MIC.

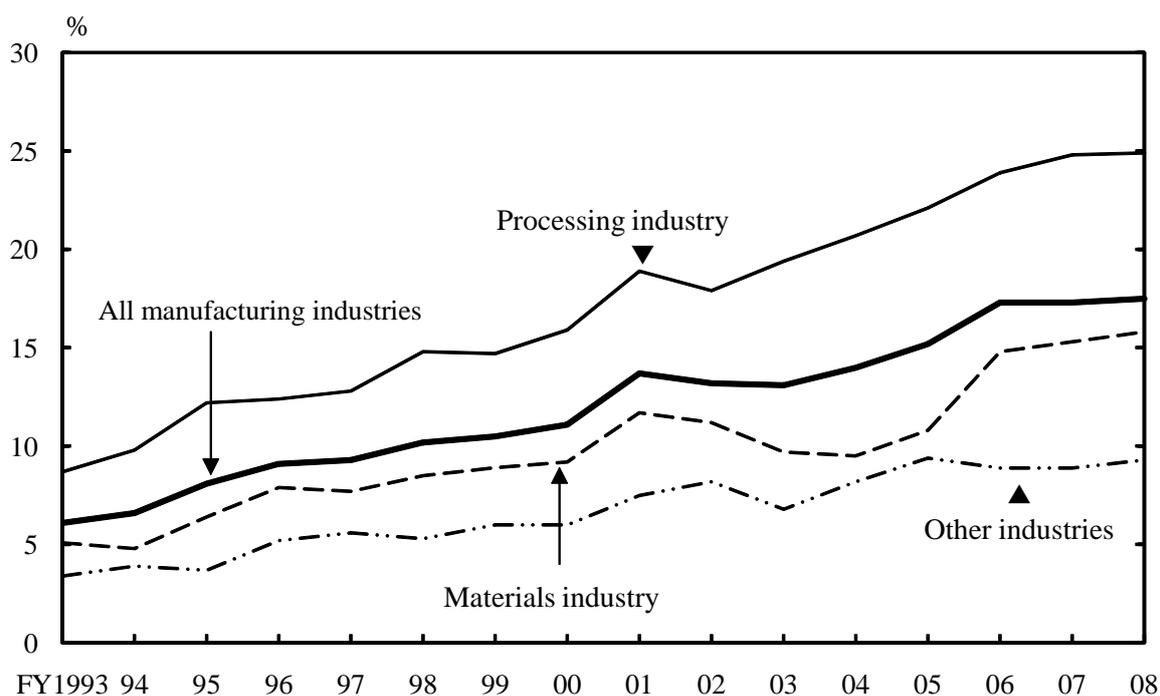
One of the main reasons for the accelerated shift to a service-oriented economy was the advancement of information technology, alongside which supporting industries that deliver software and information have grown. Another reason was changes in consumer demand. From the late 1970s in particular, incomes 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 ratio of companies in the manufacturing sector which have overseas production sites has been on an uptrend since the 1990s. It was 67.3 percent in fiscal 2007 but is expected to somewhat decline in and after fiscal 2008. In terms of output, overseas production accounted for 17.3 percent in fiscal 2007 and is expected to somewhat rise in the future. A category-by-category comparison showed that the ratio was high in the manufacture of textiles, electrical machinery, transportation equipment, etc. Of total overseas production output in the manufacturing sector, exports bound for Japan constituted around 25 percent.

As for the reasons that Japanese companies in the manufacturing sector set up production bases overseas, the one most frequently stated in the materials industry (textiles, pulp and paper, chemicals, iron and steel, etc.) was to cater to local product demand. Meanwhile, those in the processing industry (machinery, electrical equipment, transport equipment, etc.) often refer to the advantage of being able to secure good and cheap labor. In particular, increasing importance is attached to China as an export market, production base location and market competitor. Other areas increasingly drawing the attention of Japanese manufacturing companies as potential operation locations are Thailand (as the established hub in Southeast Asia), as well as India, Vietnam and Russia.

Figure 3.7
Ratio of Overseas Production in the Manufacturing Sector ¹⁾
 (Monetary basis)



1) Figures for FY2008 are estimates.
 Source: Cabinet Office.

Chapter 4

Finance

1. National and Local Government Finance

(1) National and Local 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 2009, a total of 21 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 2010. Government-affiliated agencies are entities established by special laws and are entirely funded by the government. They were subject to a major consolidation in October 2008. As of 2009, the Japan Finance Corporation, the Okinawa Development Finance Corporation, and the Japan International Cooperation Agency (Loan Aid Function) are operated as government-affiliated agencies.

With regard to local government finance, Japan has approximately 1,850 local governments, including prefectural governments and municipalities (see Figure 17.3), which all have their own fiscal operations. Since revenue sources differ among local governments, the national government distributes "local allocation tax grants" to offset and balance the disparity between local governments. Under this scheme, the government allocates part of its national tax revenue to local governments by shifting certain

percentages of income tax, corporation tax, liquor tax, consumption tax, and tobacco tax revenue from the national account to local accounts. The scheme ensures that the local governments retain their independence to plan and manage their local administrations.

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 2008, the gross total of national government expenditure was 453 trillion yen. However, after eliminating duplications, the net total was 214 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 (28 trillion yen), the net total of both national and local government expenditures combined was 270 trillion yen.

Table 4.1
Expenditures of National and Local Governments (Initial budget)

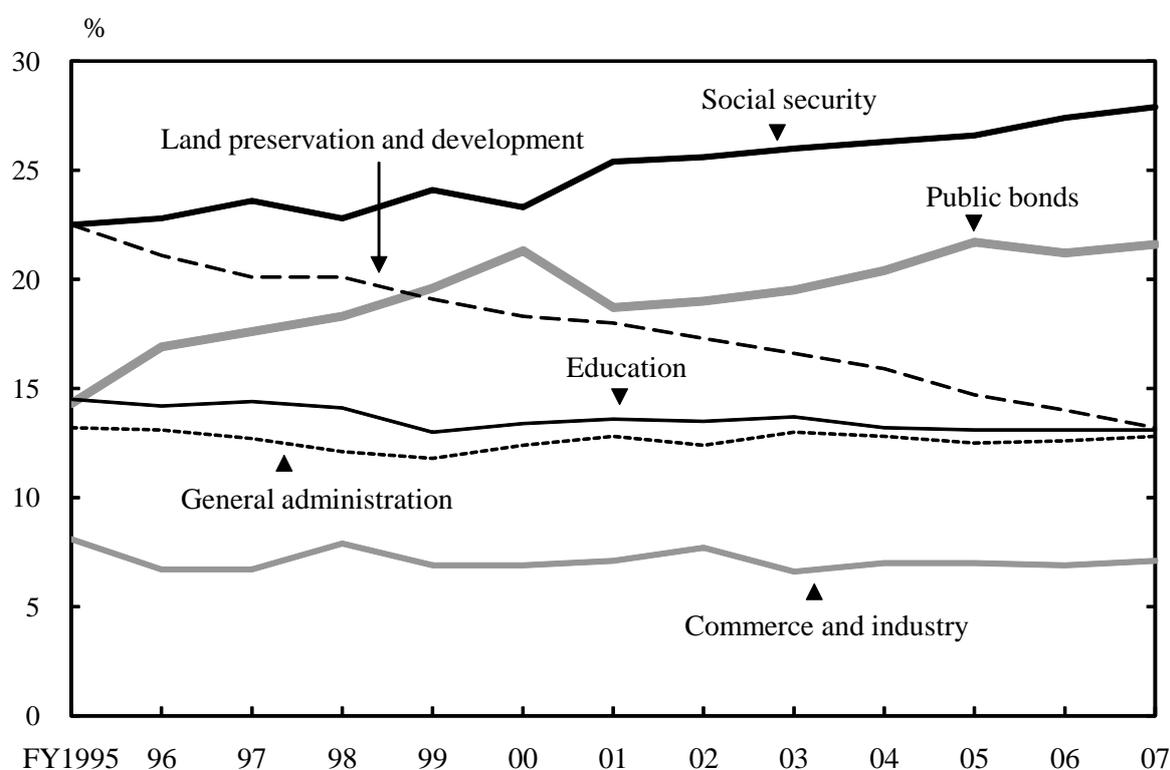
Item	Expenditures					
	FY1995	FY2000	FY2005	FY2006	FY2007	FY2008
General account	70,987	84,987	82,183	79,686	82,909	83,061
Special accounts	241,718	318,689	411,944	460,386	361,880	368,448
Government-affiliated agencies	8,086	7,661	4,678	4,284	2,343	1,955
Gross total (national)	320,792	411,337	498,805	544,356	447,132	453,465
Duplications	160,054	200,435	257,490	283,908	236,386	239,366
Net total (national)	160,738	210,902	241,316	260,449	210,746	214,099
Local public finance program	82,509	88,930	83,769	83,151	83,126	83,401
Gross total (national + local)	243,247	299,832	325,084	343,599	293,872	297,500
Duplications	32,035	37,216	32,689	31,882	27,631	27,871
Net total (national + local)	211,213	262,616	292,395	311,718	266,242	269,629

Source: Ministry of Finance.

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 everyday 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; education expenses; expenses covering judicial, police and fire fighting services; and welfare expenses, which cover the development and management of welfare facilities for children, the elderly and the mentally and physically challenged.

Of the 266.2 trillion yen, which was the net total of national and local government expenditures in fiscal 2007, approximately half was for expenditures "directly relate to the people's everyday lives." The national government disbursed 41 percent of this amount, while the local governments disbursed 59 percent.

Figure 4.1
Trends in Ratio of Net Total National and Local Expenditures
by Function



Source: Ministry of Internal Affairs and Communications.

With regard to the breakdown of the net total expenditure by function, social security expenditure accounted for the largest portion (27.9 percent), followed by public bonds (21.6 percent), land preservation and development (13.2 percent), and then education (13.1 percent). The high proportion of expenditure related to public bonds resulted from the increased issue of public bond instruments by national and local governments, done mainly to fund programs for stimulating economic recovery and to make up for shrinking tax revenue, both since fiscal 1992.

(2) National Government Finance

This section will review the general account expenditure of the national government budget, which covers core national expenditures such as social security and education, etc.

Table 4.2
Revenue and Expenditure of National Government Finance

(Billion yen)				
Fiscal year	General account	Special accounts	Net total ¹⁾	Government-affiliated agencies
Revenue				
1995	80,557	267,814	193,858	7,657
2000	93,361	341,146	234,670	7,019
2004	88,898	419,300	279,170	5,066
2005	89,000	452,141	283,202	4,710
2006	84,413	501,536	303,181	4,503
2007 ²⁾	85,975	404,358	254,735	a) 2,702
2008 ³⁾	83,061	394,324	236,645	2,102
2009 ³⁾	88,548	370,910	...	1,831
Expenditure				
1995	75,939	232,466	155,325	7,536
2000	89,321	305,776	199,466	6,988
2004	84,897	376,033	233,321	4,563
2005	85,520	401,184	230,183	4,103
2006	81,445	450,580	250,923	3,793
2007 ²⁾	85,931	363,022	214,988	a) 2,343
2008 ³⁾	83,061	368,448	212,576	1,955
2009 ³⁾	88,548	354,915	...	2,126

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

2) Final estimates as of the end of December 2007. 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 2009 was 88.55 trillion yen, an increase of 5.49 trillion yen (6.6 percent) from the initial budget of fiscal 2008. This is equivalent to 17.4 percent of the fiscal 2009 GDP, forecasted by the government at 510.2 trillion yen.

Table 4.3
Expenditure of General Account

(Billion yen)

Fiscal year	Total (A)+(B)+(C)	General expenditures (A)	Social security	Education and science	Pensions	National defense	Public works
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
2004	84,897	49,720	20,286	6,149	1,136	4,898	8,236
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 ¹⁾	83,804	48,405	21,353	5,501	949	4,841	7,396
2008 ²⁾	83,061	47,285	21,783	5,312	852	4,780	6,735
2009 ²⁾	88,548	51,731	24,834	5,310	787	4,774	7,070

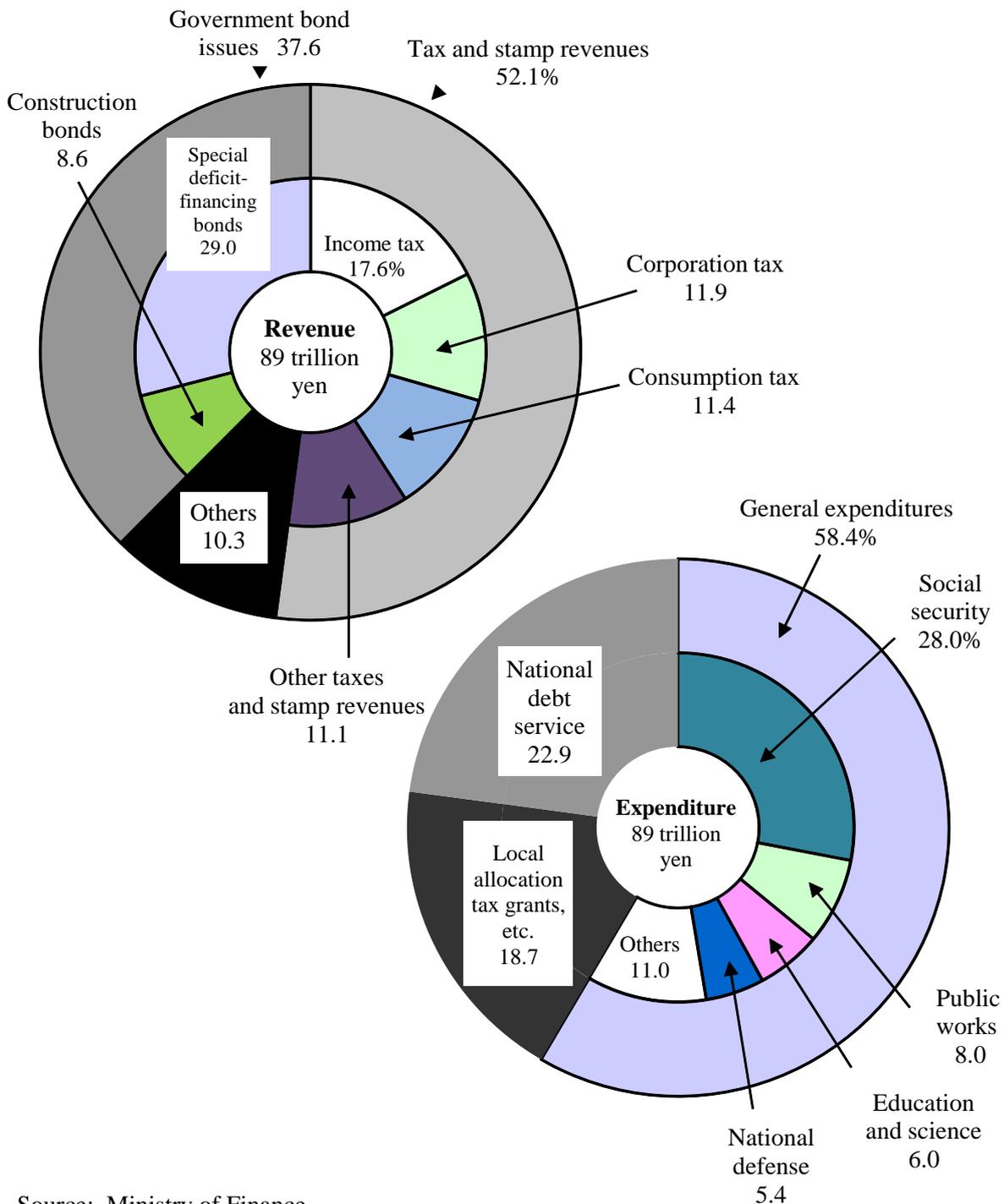
Fiscal year	Economic cooperation	Small and medium-sized business measures	Energy measures	Major foodstuff measures	Others	National debt service (B)	Local allocation tax grants, etc. (C)
1995	1,034	623	708	269	7,751	12,820	12,302
2000	1,012	933	677	247	6,434	21,446	15,829
2004	880	288	504	652	6,691	17,515	17,662
2005	784	237	493	657	6,536	18,736	17,441
2006	784	240	471	610	5,200	18,037	16,701
2007 ¹⁾	795	431	866	690	5,584	20,468	14,932
2008 ²⁾	666	176	866	858	5,257	20,163	15,614
2009 ²⁾	630	189	856	866	6,414	20,244	16,573

1) Revised budget. 2) Initial budget.

Source: Ministry of Finance.

In fiscal 2009, major expenditures from the initial general account budget include social security (28.0 percent), national debt service (22.9 percent), local allocation tax grants, etc. (18.7 percent), public works (8.0 percent), and education and science (6.0 percent).

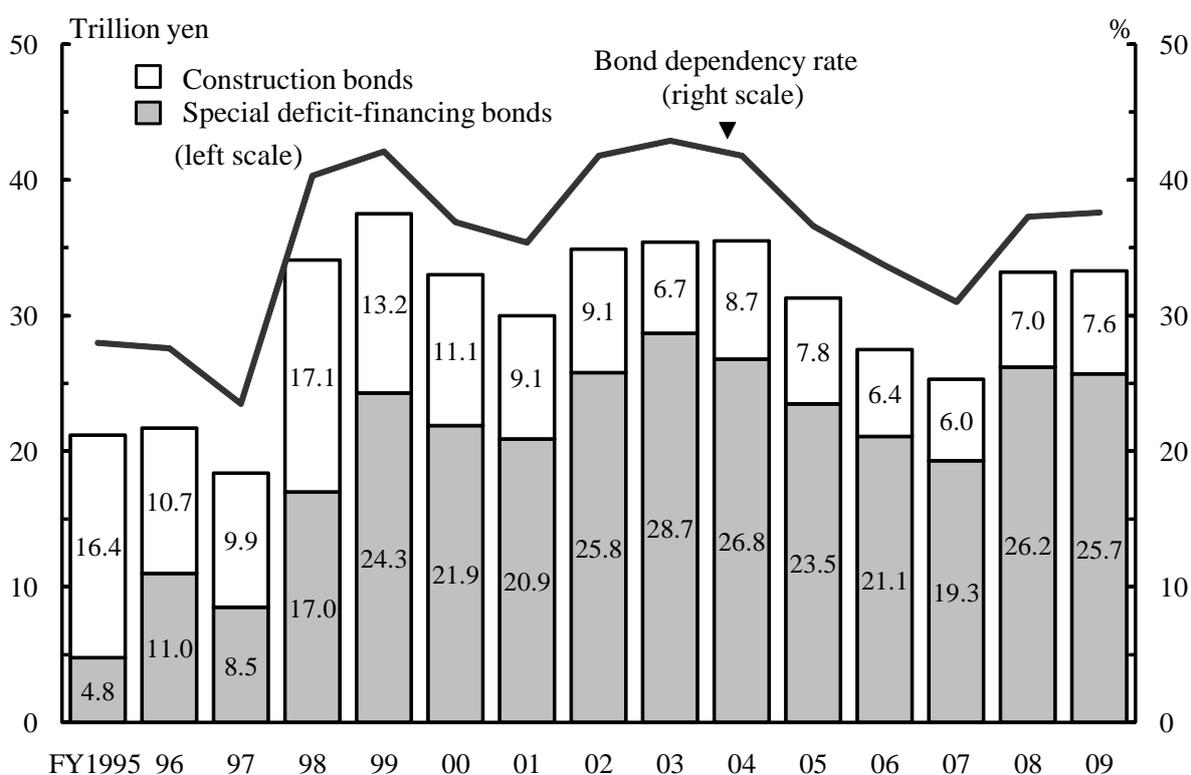
Figure 4.2
Composition of Revenue and Expenditure of General Account Budget
 (Initial budget, FY2009)



Source: Ministry of Finance.

With regard to revenue sources for the fiscal 2009 initial general account budget, income tax, corporation tax and consumption tax account for 40.9 percent. Even with the addition of other taxes and stamp revenues, these revenue sources only amount to 52.1 percent of the total revenue. In order to cover the deficit, the government issues construction bonds and special deficit-financing bonds.

Figure 4.3
Trends in National Government Bond Issue ¹⁾

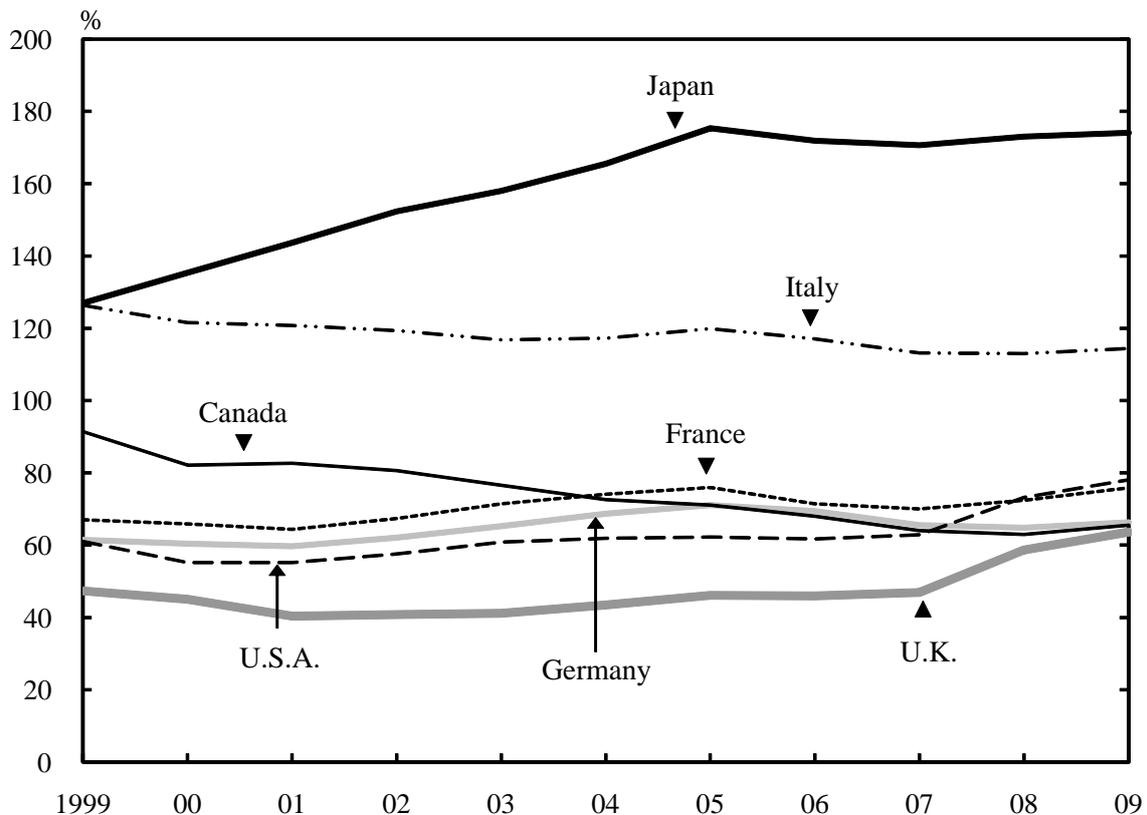


1) Settlement basis. FY2008 figures based on the revised budget. FY2009 figures based on the initial budget.

Source: Ministry of Finance.

The ratio of outstanding general government debt to GDP is a financial measure of the stock accounts. This ratio is stable or declining in other major industrialized countries as a result of steady efforts to improve their financial soundness. In Japan, however, it is increasing sharply due to yearly issuance of government bonds, and has climbed to a point higher than in any other major industrialized country.

Figure 4.4
Ratio of General Government Gross Debt to GDP



Source: Ministry of Finance.

(3) 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.

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 2006 (net) revenues came from local taxes, accounting for 39.9 percent of the total. The second-largest source, 17.5 percent, was local allocation tax grants, which are transfers from the national government to guarantee a funding source to provide standard administrative services and basic social infrastructure 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.

Table 4.4
Local Government Finance¹⁾ (Ordinary account)

Item	(Billion yen)				
	FY2002	FY2003	FY2004	FY2005	FY2006
Revenue	97,170	94,887	93,442	92,936	91,528
Local taxes	33,379	32,666	33,539	34,804	36,506
Local allocation tax grants	19,545	18,069	17,020	16,959	15,995
Treasury disbursements	13,069	13,030	12,350	11,778	10,416
Local government bonds	13,319	13,789	12,375	10,376	9,622
Expenditure	94,839	92,582	91,248	90,697	89,211
General administration	8,556	9,039	8,941	8,737	8,618
Welfare	14,303	14,540	15,132	15,693	16,259
Labor	487	374	359	317	296
Sanitation	6,455	5,896	5,785	5,707	5,510
Public works	17,672	16,439	15,235	14,417	13,853
Education	17,654	17,201	16,910	16,578	16,472

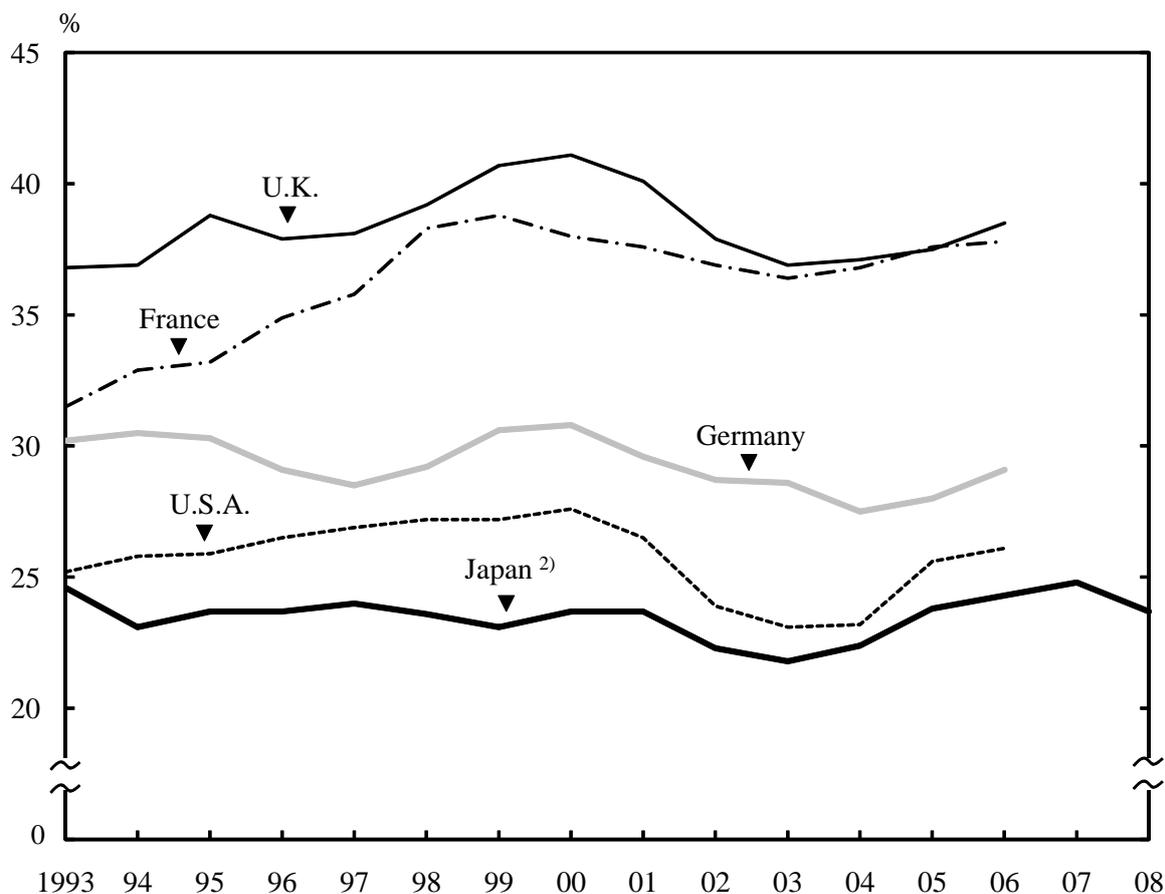
1) Settled figures of the net total of prefectural and municipal government accounts after deducting duplications.

Source: Ministry of Internal Affairs and Communications.

(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 27.6 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 2009, it was 23.0 percent in terms of national and local taxes combined (13.0 percent for national tax and 10.0 percent for local tax). Japan's ratio is lower in comparison with other major industrial countries. Nevertheless, it has become heavier due to an increase in welfare and pension-related spending owing to the rapidly aging society.

Figure 4.5
Ratio of Taxation Burden to National Income by Country ¹⁾



1) Actual basis. 2) Fiscal year. FY2008 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 2008, currency in circulation totaled 86.07 trillion yen (81.48 trillion yen in Bank of Japan notes and 4.59 trillion yen in coins), up 0.2 percent from the year before.

Table 4.5
Currency in Circulation (Outstanding at year-end)

				(Billion yen)
Year	Bank of Japan notes	Coins	Total	
2001	69,004	4,294	73,298	
2002	75,472	4,366	79,838	
2003	76,910	4,423	81,332	
2004	77,956	4,492	82,448	
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	

Source: Bank of Japan.

Table 4.6
Money Stock^{1) 2)}

							(Billion yen)
Year	M2	M3				Broadly-defined liquidity	
			M1	Quasi-money	CDs		
2004	696,062	1,028,684	460,215	546,728	21,742	1,315,361	
2005	708,990	1,032,146	483,808	526,369	21,969	1,349,783	
2006	713,797	1,026,274	484,241	519,143	22,890	1,395,610	
2007	728,541	1,033,130	486,783	523,924	22,423	1,433,204	
2008	741,710	1,040,625	481,756	536,259	22,610	1,425,600	

1) 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.

The Bank of Japan reviewed the Money Stock Statistics in June 2008. Major statistical indices that are now shown are: (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 bonds. The average outstanding money stock as of December 2008 was 482 trillion yen in M1 and 742 trillion yen in M2.

The basic discount rate and basic loan rate (previously referred to as "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 recent economic recovery, the rate was raised in stages, up to 0.4 percent in July 2006, and 0.75 percent in February 2007. However, the rate was cut in stages to address the rapidly deteriorating economy, down to 0.50 percent in October 2008 and to 0.30 percent in December of the same year.

Table 4.7
Financial Markets (Interest rates, etc.)

End of year						(% per annum)
	Basic discount rate and basic loan rate	Call rates ¹⁾	Prime lending rates ²⁾	Loan contract rates ³⁾	10 years' Govt. bonds yield to subscribers	
1999	0.50	0.05	1.375	1.773	1.836	
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	

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 24,180 offices. This was followed by domestically licensed banks, including city banks and regional banks, with a combined total of 13,480 offices and branches. Securities companies operated at 2,296 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.

Table 4.8
Number of Financial Institutions

Institutions	Reference date	Total	Head offices	Branches	Overseas offices
Domestically licensed banks					
City banks	Sep. 2008	2,485	6	2,363	116
Regional banks	Sep. 2008	7,453	64	7,375	14
Regional banks II	Sep. 2008	3,250	45	3,205	-
Trust banks	Sep. 2008	292	7	276	9
Financial institutions for small business					
Credit depositories	Feb. 2009	7,681	279	7,402	-
Credit cooperatives	Feb. 2009	1,785	162	1,623	-
Securities companies ¹⁾	Feb. 2009	2,296	296	2,000	-
Agricultural cooperatives	Mar. 2006	10,768	-	-	-
Post offices	Apr. 2009	24,180	-	-	-

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

Source: Community Bank Shinyo Kumiai; Japanese Bankers Association; Japan Post Net Work Co., Ltd; Japan Securities Dealers Association; Shinkin Central Bank Research Institute; The Norinchukin Bank.

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. Furthermore, it decreased to 1.4 percent in March 2008, and thus the bad debts problem has been settled.

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 5,409 trillion yen according to preliminary figures at the end of March 2009. Of these assets, those of the domestic nonfinancial sector were 2,709 trillion yen. The household sector (including the business funds of sole proprietorships) had assets of 1,410 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.

Table 4.9
Financial Assets and Liabilities of Japan

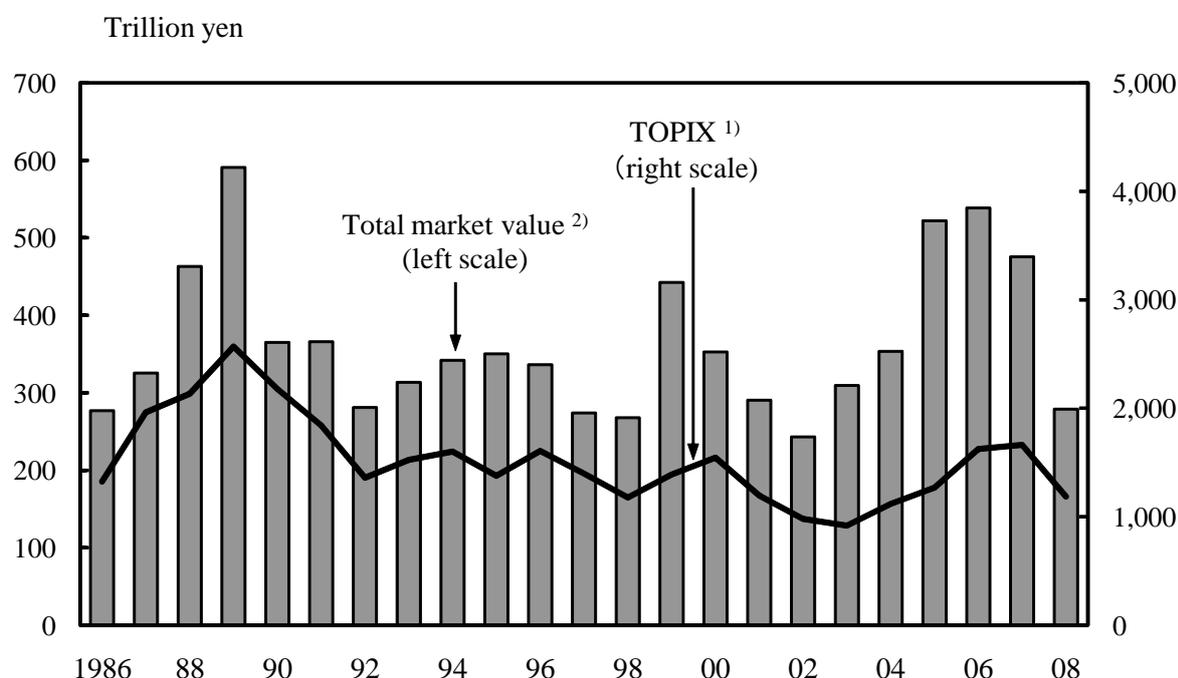
Sectors	(Trillion yen)		
	March 2008	March 2009 *	Annual growth (%)
Financial assets			
Domestic sectors	5,761	5,409	-6.1
Financial institutions	2,844	2,700	-5.0
Domestic nonfinancial sector	2,918	2,709	-7.2
Nonfinancial corporations	902	774	-14.2
General government	500	471	-5.8
Households (incl. sole proprietorships)	1,465	1,410	-3.7
Private nonprofit institutions serving households	51	53	3.5
Overseas	341	301	-11.8
Financial liabilities			
Domestic sectors	5,516	5,157	-6.5
Financial institutions	2,839	2,729	-3.9
Domestic nonfinancial sector	2,677	2,428	-9.3
Nonfinancial corporations	1,315	1,070	-18.6
General government	960	961	0.1
Households (incl. sole proprietorships)	384	380	-1.0
Private nonprofit institutions serving households	19	17	-8.6
Overseas	584	550	-5.8

Source: Bank of Japan.

5. Stock Market

Stock prices in Japan rose sharply in the latter half of the 1980s, spearheading the bubble economy. The stock market, however, 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 turn-around 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. However, in August 2007, stock price drops in the U.S.A. and Europe mainly from concerns over subprime housing loan problems caused stock prices in Japan to fall as well. As a result, the equivalent total market value was 279 trillion yen at the end of 2008.

Figure 4.6
Trends in Stock Price Index and Total Market Value
 (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 2009, 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 42.2 million. In value terms, the ratio of stocks they possessed was 20.1 percent. As of the end of March 2009, the ratio of Japanese stocks held by foreign investors (total of corporations and individuals) marked 23.6 percent in value terms. This was the second consecutive yearly decrease representing a drop of 4.0 percentage points, the greatest since the count began in 1970.

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 321 securities firms by the Japan Securities Dealers Association (JSDA) showed that 17.8 percent of those companies offered Internet trading at the end of March 2009. Internet trading thus accounted for 24.7 percent of the total value of stock brokerage transactions from the period of October 2008 to March 2009.

Table 4.10
Stock Prices (Tokyo Stock Exchange, first section)

Year	Number of listed companies ¹⁾	Total market value ¹⁾ (billion yen)	Total trading value (billion yen)	TOPIX ²⁾ Tokyo stock price index, average	Nikkei stock average (225 issues) ¹⁾ (yen)
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 Jan.	1,715	258,003	26,841	819.66	7,994.05
Feb.	1,714	246,694	26,143	762.16	7,568.42
Mar.	1,705	251,673	31,524	756.52	8,109.53
Apr.	1,705	271,907	34,416	832.63	8,828.26

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.

Table 5.1
Agricultural, Forestry and Fishery Output

(Billion yen)

Item	2003	2004	2005	2006	2007*
Total	10,896	10,752	10,529	10,371	# 10,288
Agriculture	8,857	8,714	8,512	8,332	# 8,193
Crops	6,460	6,183	5,940	5,818	# 5,654
Cereal grains and potatoes ¹⁾ ...	2,807	2,438	2,388	2,246	# 2,123
Rice	2,342	1,991	1,947	1,815	1,790
Vegetables	2,097	2,143	2,033	2,051	2,049
Fruits and nuts	714	763	727	773	751
Flowers	426	416	404	399	397
Livestock and its products	2,329	2,458	2,506	2,453	2,477
Forestry	448	435	417	432	441
Fishery	1,591	1,604	1,601	1,607	1,654

1) Including legumes.

Source: Ministry of Agriculture, Forestry and Fisheries.

2. Agriculture

(1) Agricultural Production

Japan's total agricultural output in 2007 amounted to 8.19 trillion yen, of which 2.05 trillion yen, or 25.0 percent, came from vegetables. Rice earned 1.79 trillion yen, 21.9 percent of the total.

Table 5.2
Agricultural Production

	(Thousand tons)				
Products	1995	2000	2005	2006	2007
Cereal grains					
Rice	10,748	9,490	9,074	8,556	8,714
Wheat	444	688	875	837	910
Vegetables and legume					
Potatoes	3,365	2,898	2,752	2,635	2,873
Sweet potatoes	1,181	1,073	1,053	989	968
Soybeans, dried	119	235	225	229	227
Cucumbers	827	767	675	629	641
Tomatoes	753	806	759	728	749
Cabbages	1,544	1,449	1,364	1,372	1,359
Chinese cabbages	1,163	1,036	924	942	918
Onions	1,278	1,247	1,087	1,161	1,265
Lettuces	537	537	552	545	544
Japanese radishes	2,148	1,876	1,627	1,650	1,626
Carrots	725	682	615	624	666
Fruits					
Mandarin oranges	1,378	1,143	1,132	842	1,066
Apples	963	800	819	832	840
Grapes	250	238	220	211	209
Japanese pears	383	393	362	291	297
Industrial crops					
Crude tea	a) 80	a) 85	100	92	94
Sugar beets ¹⁾	3,813	3,673	4,201	3,923	4,297

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

Source: Ministry of Agriculture, Forestry and Fisheries.

Table 5.3
Production Volumes of Meat, Milk and Eggs

	(Tons)				
Products	1995	2000	2005	2006	2007
Pork	1,322,065	1,270,685	1,244,963	1,246,525	1,250,511
Beef	600,099	529,674	498,428	496,229	502,969
Veal	806	629	1,042	763	933
Horse meat	8,433	7,215	7,129	6,549	6,087
Mutton and lamb ...	208	112	126	91	105
Goat meat	153	155	73	52	49
Broilers	1,631,060	1,551,101	1,702,001	1,750,297	1,754,396
Cow milk	8,382,162	8,497,278	8,285,215	8,137,512	8,007,417
Eggs	2,550,586	2,540,075	2,481,000	2,487,696	2,583,292

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 2007, the total income per commercial farm household was 4.84 million yen, down 3.2 percent from the previous year. Of that amount, 1.20 million yen was from farming income, 1.94 million yen from non-farming income, and 1.70 million yen from pension benefits and other sources.

Table 5.4
Commercial Farm Households and Commercial Farmers

Year	Commercial farm households					Commercial farmers	Aged 65 years and over (%)
	Total	Full-time	Part-time				
			Mainly farming	Mainly other job			
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	

Source: Ministry of Agriculture, Forestry and Fisheries.

Japan's cultivated acreage shrank year after year from 6.09 million hectares in 1961 to 4.63 million hectares in 2008. In the one-year period of 2008, there were 2,010 hectares of new cultivation but also a 23,900-hectare decrease. The most common cause for the decrease was land-use conversion for residential lands or factory sites, accounting for approximately 45 percent of all cases, followed by cultivation abandonment, making up approximately 41 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.

Table 5.5
Forest Land Area and Forest Resources (2007)

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

Source: Ministry of Agriculture, Forestry and Fisheries.

Domestic roundwood production totaled 18.6 million cubic meters in 2007, which is equivalent to only 35 percent of the peak in 1967 (52.7 million cubic meters). In 2007, Japan's self-sufficiency rate for lumber was 22.6 percent. Currently, Japan depends mostly on imported lumber for pulp, woodchip and plywood material.

The slowdown in domestic lumber production 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.

Table 5.6
Supply of Industrial Roundwood

(Thousand cubic meters)

Year	Total	Domestic logs					Imported logs ¹⁾
		Total	By use				
			Saw-logs	Plywood	Pulp and chips	Others	
2000	99,263	18,022	12,798	138	4,749	337	81,241
2004	89,799	16,555	11,469	546	4,249	291	73,245
2005	85,857	17,176	11,571	863	4,426	316	68,681
2006	86,791	17,617	11,645	1,144	4,496	332	69,174
2007	82,370	18,635	11,981	1,632	4,681	340	63,735

1) Including wood products converted into roundwood equivalents.

Source: Ministry of Agriculture, Forestry and Fisheries.

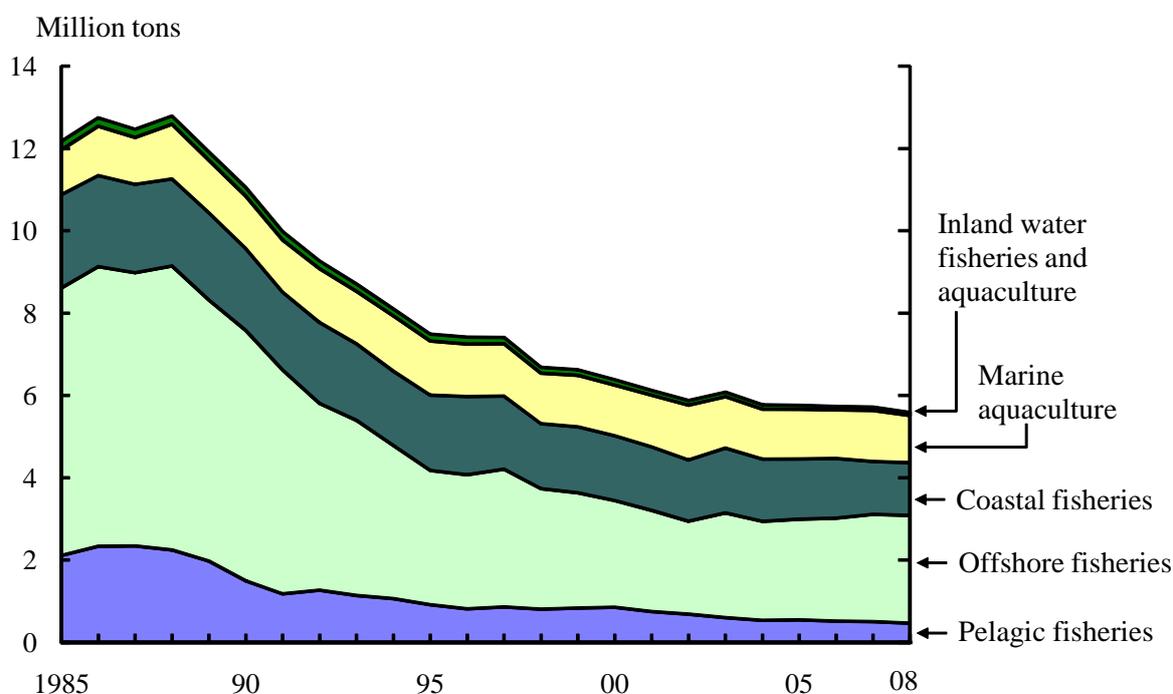
4. Fisheries

(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 trend of "a 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 2008 fishery production totaled 5.59 million tons, down 2.3 percent from the previous year. Of this, marine fishing and aquaculture production amounted to 5.52 million tons.

Figure 5.1
Production by Type of Fishery



Source: Ministry of Agriculture, Forestry and Fisheries.

Table 5.7
Production by Fishery Type and Species

Fishery type and species	(Thousand tons)				
	1995	2000	2005	2007	2008*
Total	7,489	6,384	5,765	5,720	5,588
Marine fisheries	6,007	5,022	4,457	4,396	4,368
Tunas	332	286	239	257	217
Bonito	309	341	370	330	304
Sardine	661	150	28	79	38
Mackerels	470	346	620	457	514
Alaska pollack	339	300	194	217	212
Crabs	57	42	34	35	34
Squids	547	624	330	326	291
Marine aquaculture	1,315	1,231	1,212	1,242	1,148
Yellowtails	170	137	160	160	158
Oysters	227	221	219	205	190
Laver	407	392	387	396	338
Wakame (Sea weed)	100	67	63	54	55
Pearl (tons)	63	30	29	27	25
Inland water fisheries	92	71	# 54	# 39	33
Salmons and trouts	22	17	# 19	# 15	10
Sweetfish	14	11	# 7	# 3	3
Shellfishes	28	20	# 14	# 12	11
Inland water aquaculture	75	61	# 42	42	40
Eel	29	24	20	23	21
Trouts	18	15	12	11	10
Common carp	13	11	4	3	3

Source: Ministry of Agriculture, Forestry and Fisheries.

(2) Fishery Workers

The number of workers in the marine fishery industry (the workers who are marine fishery or marine aquaculture household members and engage in work at sea for 30 days or more yearly) has been decreasing constantly. In 2007, there was a 3.8 percent decrease from the previous year, bringing the count to 204,000 workers. By type of fishery, coastal fishery workers (including marine aquaculture workers) numbered 178,000 and offshore and pelagic fishery workers 26,000. Among male workers, the ratio of those aged 65 years and over was 37.4 percent, showing the progressive trend of an aging workforce.

Table 5.8
Number of Households and Workers Engaged in the Marine Fishery
Industry ¹⁾

(Thousands)

Year	Households			Workers		
	Total	Self-employed	Hired	Total	Self-employed	Hired
1995	215	154	61	301	223	78
2000	190	138	53	260	194	66
2004	171	124	47	231	172	59
2005	164	119	45	222	166	56
2006	158	116	42	212	160	53
2007	151	111	40	204	155	49

1) Including marine aquaculture.

Source: Ministry of Agriculture, Forestry and Fisheries.

5. Self-Sufficiency of Food

Japan's food self-sufficiency rate, in terms of calories, dropped from 73 percent in fiscal 1965 to 40 percent in fiscal 2007. 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.

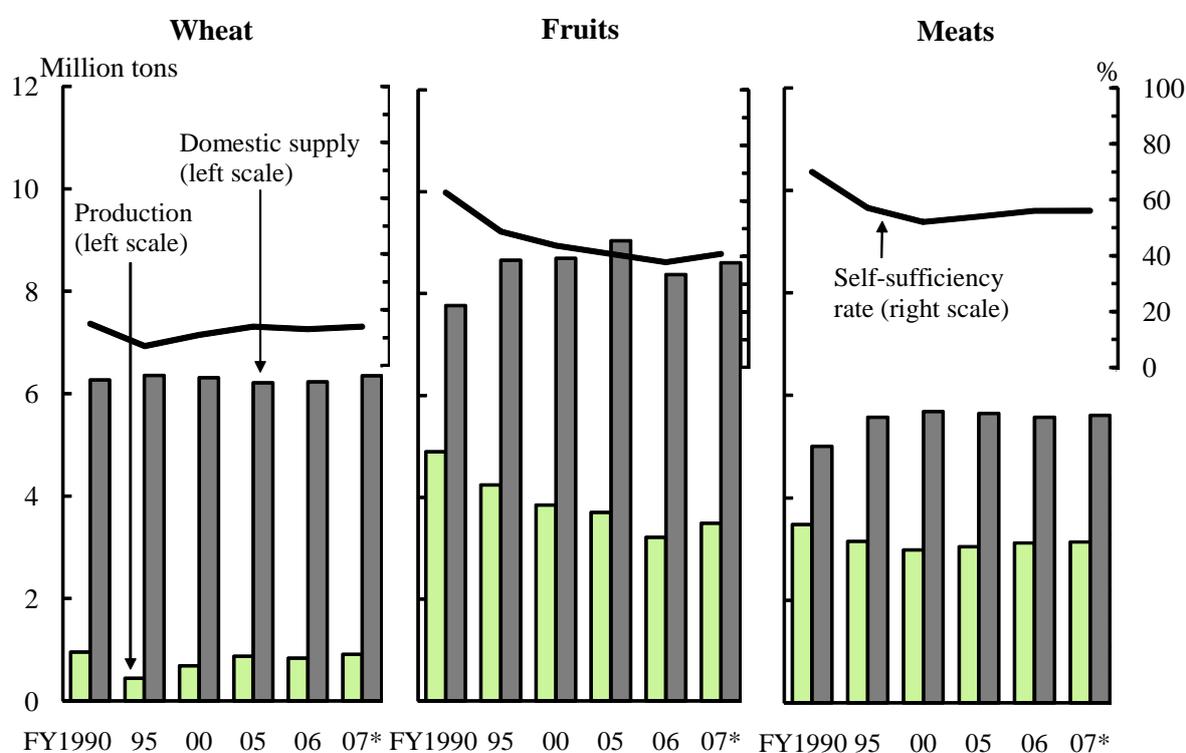
In fiscal 2007, the self-sufficiency rate (on an item-specific weight basis) was 100 percent in rice, 14 percent in wheat, 7 percent in beans, 81 percent in vegetables, 41 percent in fruits, 56 percent in meat and 62 percent in seafood. Although completely self-sufficient in rice, the staple food of its people, Japan relied almost entirely on imports for wheat and bean supply.

Table 5.9
Supply of Cereal Grains

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
2006	1,688	8,556	5.07	799	9,186
2007*	1,673	8,714	5.21	856	9,257
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
2006	218	837	3.83	5,464	6,228
2007*	210	910	4.34	5,386	6,348

Source: Ministry of Agriculture, Forestry and Fisheries.

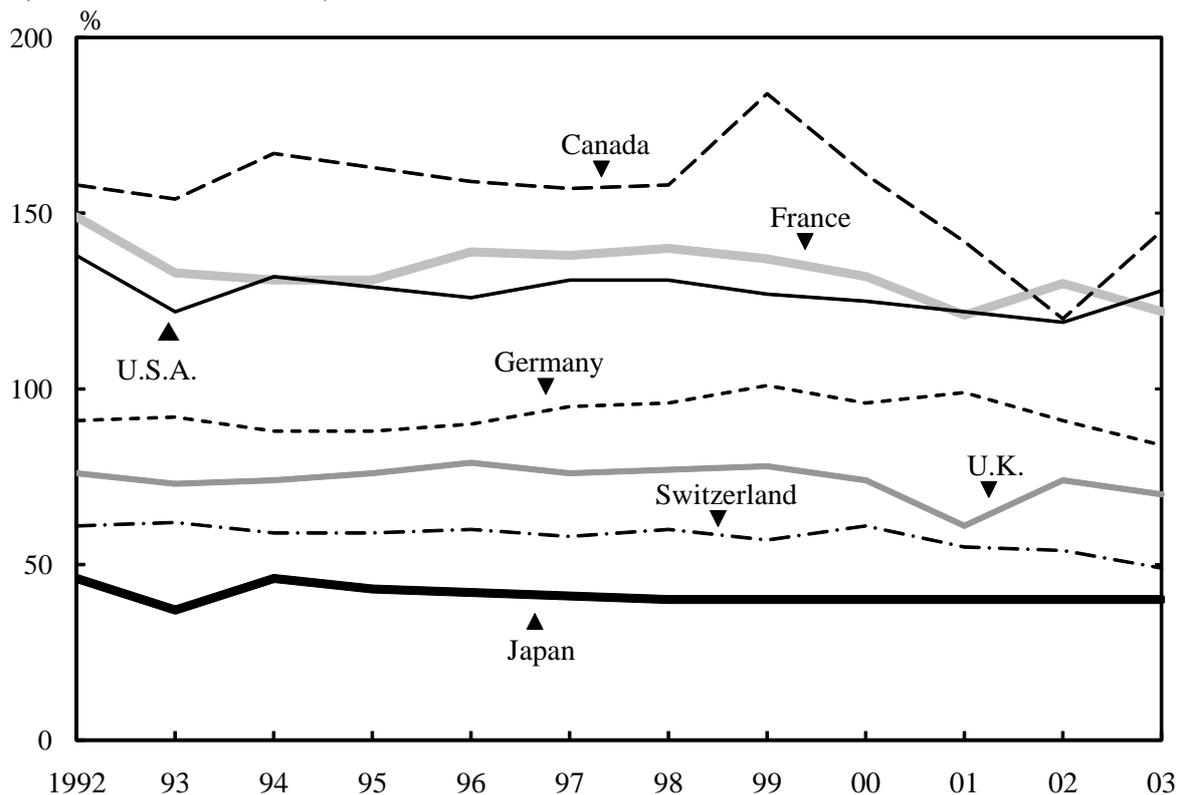
Figure 5.2
Self-Sufficiency Rates for Selected Categories of Agricultural Produce



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 food importing country.

Figure 5.3
Trends in Food Self-Sufficiency Rates of Major Countries
 (In terms of calories)



Source: Ministry of Agriculture, Forestry and Fisheries.

Chapter 6

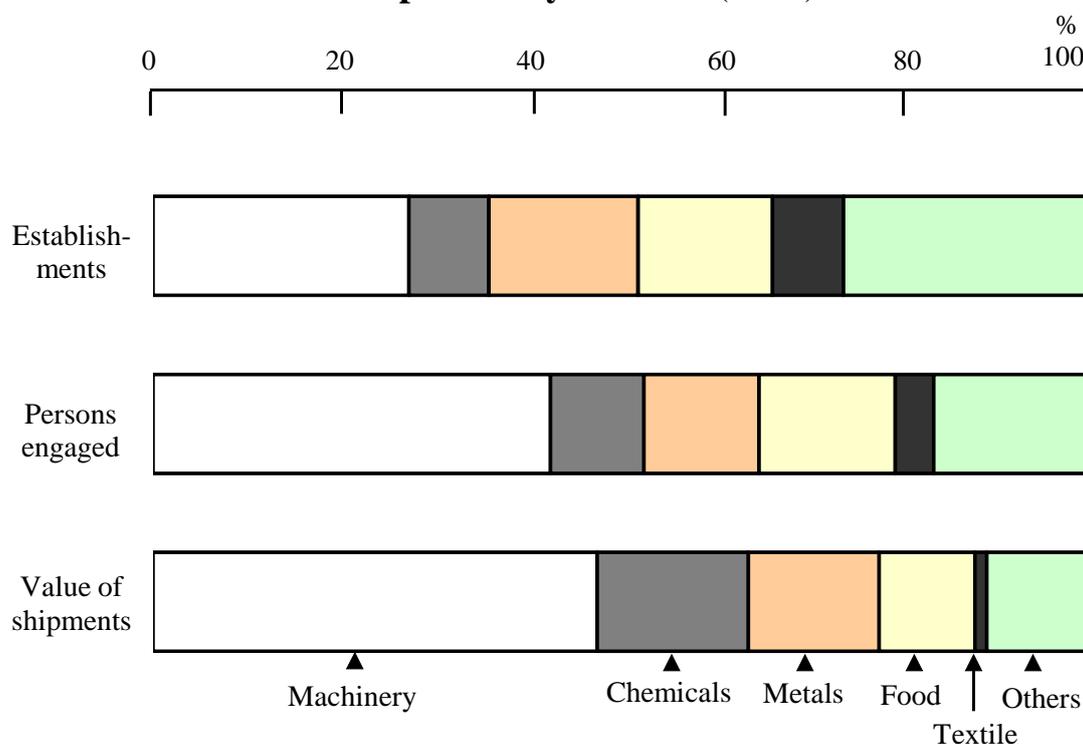
Manufacturing and Construction

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.

Having maintained a long-lasting recovery since 2002, the manufacturing sector in Japan is now situated in an extremely unstable environment under the influence of economic downturns triggered by the financial crisis in the U.S.A. In 2008, production and exports both declined considerably and corporate earnings also marked a major drop. A significant characteristic of the current recession can be found in its speed, which is much faster than that of past recession periods, as well as its widespread expansion.

Figure 6.1
Number of Establishments, Persons Engaged and Value of
Manufactured Goods Shipments by Sector ¹⁾ (2007)



1) Establishments with four or more persons engaged.
 Source: Ministry of Economy, Trade and Industry.

Table 6.1
Number of Establishments, Persons Engaged and Value of Manufactured Goods Shipments of the Manufacturing Industry¹⁾ (2007)

Industries	Number of establishments	Number of persons engaged (persons)	Value of manufactured goods shipments (billion yen)
Manufacturing	258,232	8,518,545	336,757
Food	32,508	1,135,051	24,196
Beverages, tobacco and feed	4,542	105,164	10,244
Textile mill products ²⁾	6,785	125,321	2,217
Apparel and other finished products made from fabrics and similar materials	12,748	224,278	2,076
Lumber and wood products ³⁾	8,146	118,702	2,710
Furniture and fixtures	8,215	124,447	2,270
Pulp, paper and paper products	7,414	209,882	7,660
Printing and allied industries	16,320	334,796	6,982
Chemical and allied products	5,034	356,738	28,294
Petroleum and coal products	986	24,834	13,701
Plastic products ⁴⁾	16,021	471,035	12,399
Rubber products	3,221	132,466	3,535
Leather tanning, leather products and fur skins	2,105	29,904	499
Ceramic, stone and clay products	12,897	293,815	8,492
Iron and steel	4,696	228,860	21,192
Non-ferrous metals and products	3,168	154,921	10,771
Fabricated metal products	33,355	664,082	15,189
General machinery	33,955	1,063,957	36,273
Electrical machinery, equipment and supplies .	11,932	581,924	21,066
Information and communication electronics equipment	2,293	231,485	13,325
Electronic parts and devices	5,767	528,095	20,936
Transport equipment	12,426	1,050,334	63,910
Precision instruments and machinery	4,254	160,473	4,274
Miscellaneous manufacturing industries	9,444	167,981	4,546

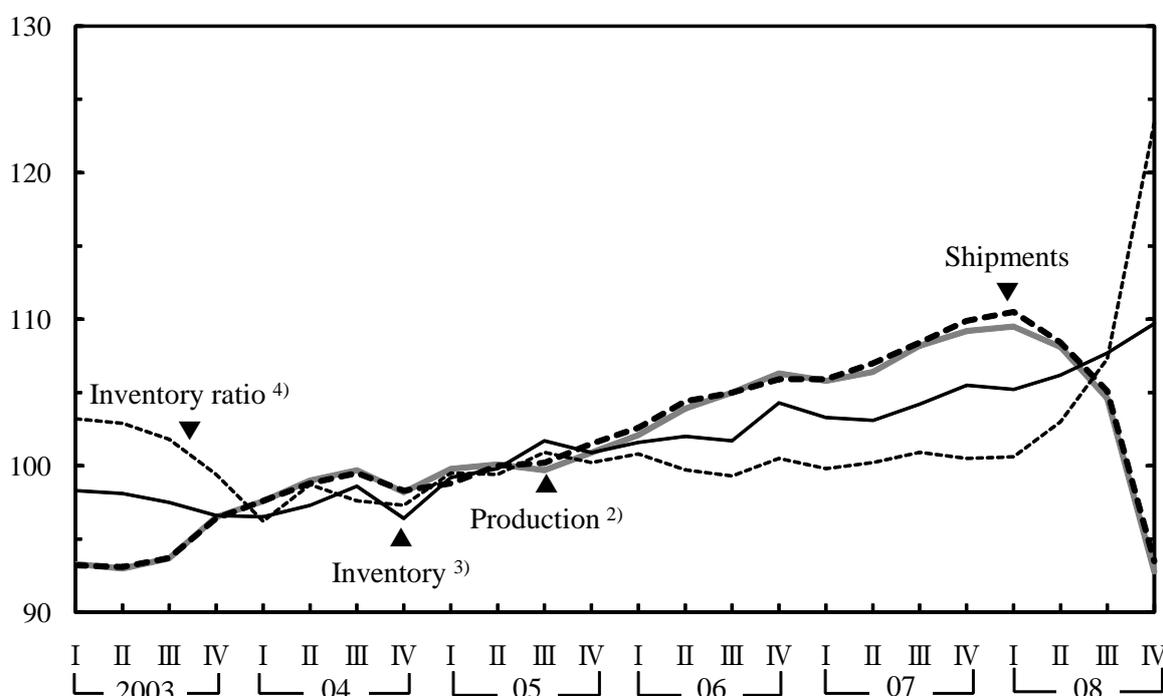
1) Establishments with four or more persons engaged. 2) Excluding apparel and other finished products made from fabrics and similar materials. 3) Excluding furniture. 4) Excluding plastic furniture, plastic plates, etc., which are included in other industrial classification.

Source: Ministry of Economy, Trade and Industry.

In 2007, there were 258,232 establishments (with four or more persons engaged) and a total of 8.52 million persons engaged in the manufacturing sector. These establishments shipped 336.8 trillion yen worth of manufactured products, with added value amounting to 108.7 trillion yen.

Based on the Indices on Mining and Manufacturing (2005 average = 100), the production index for 2008 was 103.8, down 3.4 percent from the previous year, while shipments stood at 104.3, a decrease of 3.2 percent from the year before.

Figure 6.2
Trends in Indices on Mining and Manufacturing ¹⁾ (2005 average = 100)



1) Seasonal adjustment indices. 2) Value added weights. 3) End of the quarter.

4) Inventory ratio = Inventory quantity / Shipments quantity.

Source: Ministry of Economy, Trade and Industry.

Table 6.2
Indices of Industrial Production ¹⁾

(2005 average = 100)

Industries	2004	2006	2007	2008	Annual growth (%)
Mining and manufacturing	98.7	104.5	107.4	103.8	-3.4
Manufacturing	98.7	104.5	107.4	103.8	-3.4
Food and tobacco	101.8	98.0	99.8	100.5	0.7
Textile	108.1	95.8	90.6	82.5	-8.9
Pulp, paper and paper products	99.3	100.6	101.0	99.6	-1.4
Chemicals	100.8	102.8	103.9	100.1	-3.7
Chemicals (excl. Drugs)	99.2	99.7	101.6	94.9	-6.6
Petroleum and coal products	98.2	98.0	97.6	96.0	-1.6
Plastic products	100.6	101.2	101.4	97.5	-3.8
Ceramic, stone and clay products	100.3	101.2	102.0	97.2	-4.7
Iron and steel	100.8	102.6	105.9	103.7	-2.1
Non-ferrous metals	99.4	104.3	104.4	99.0	-5.2
Fabricated metals	101.1	98.7	96.8	94.8	-2.1
General machinery	94.8	106.4	109.2	100.4	-8.1
Electrical machinery	99.1	104.5	103.2	100.4	-2.7
Information and communication					
electronics equipment	99.7	106.4	108.4	103.2	-4.8
Electronic parts and devices	98.1	117.8	131.0	126.3	-3.6
Transport equipment	95.4	105.8	111.9	110.5	-1.3
Precision instruments	90.7	108.1	114.9	117.6	2.3
Other manufacturing	99.0	104.2	106.5	103.0	-3.3
Mining	97.0	102.6	106.6	103.1	-3.3
(Reference)					
Electricity and gas	97.2	102.0	103.9	104.7	0.8

1) Value added weights.

Source: Ministry of Economy, Trade and Industry.

Table 6.3
Indices on Mining and Manufacturing
 (Production, shipments, inventory) (2008)

Industries	(2005 average = 100)							
	Production ¹⁾		Shipments		Inventory ²⁾		Inventory Ratio ³⁾	
	Annual growth (%)	Annual growth (%)	Annual growth (%)	Annual growth (%)	Annual growth (%)	Annual growth (%)	Annual growth (%)	
Mining and manufacturing ..	103.8	-3.4	104.3	-3.2	109.0	4.8	108.6	8.3
Manufacturing	103.8	-3.4	104.3	-3.2	109.0	4.8	108.6	8.3
Food and tobacco	100.5	0.7	99.5	0.1	83.0	-0.7	95.8	-1.4
Textile	82.5	-8.9	86.2	-8.8	97.7	3.2	110.1	11.2
Pulp, paper and paper products	99.6	-1.4	99.2	-2.4	103.3	11.1	101.0	5.5
Chemicals	100.1	-3.7	98.5	-4.9	109.5	10.5	111.0	12.9
Chemicals (excl. Drugs)	94.9	-6.6	94.6	-7.3	109.5	10.5	111.0	12.9
Petroleum and coal products	96.0	-1.6	94.9	-2.0	105.0	2.5	113.9	10.0
Plastic products	97.5	-3.8	98.3	-4.2	99.1	-0.2	106.4	4.7
Ceramic, stone and clay products	97.2	-4.7	95.9	-4.8	109.0	6.0	117.1	11.0
Iron and steel	103.7	-2.1	104.9	-1.0	102.0	-3.0	96.8	0.9
Non-ferrous metals	99.0	-5.2	98.4	-5.3	104.4	1.5	102.7	5.7
Fabricated metals	94.8	-2.1	93.9	-3.1	86.8	2.1	101.6	6.6
General machinery	100.4	-8.1	100.1	-8.9	118.8	5.7	112.3	11.2
Electrical machinery	100.4	-2.7	102.5	-1.6	93.0	13.1	99.7	1.7
Information and communication electronics equipment	103.2	-4.8	109.6	-0.5	129.3	35.0	116.1	27.0
Electronic parts and devices	126.3	-3.6	122.6	-5.6	213.6	46.3	152.9	30.9
Transport equipment	110.5	-1.3	113.6	-0.5	110.8	-17.3	101.3	-2.3
Precision instruments	117.6	2.3	117.6	6.1	119.7	-13.5	100.8	-10.0
Other manufacturing	103.0	-3.3	99.5	-5.6	101.7	-1.9	111.8	6.8
Mining	103.1	-3.3	109.3	-0.4	121.0	-4.6	110.4	4.1
(Reference)								
Electricity and gas	104.7	0.8	104.9	0.9	-	-	-	-

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 (with four or more 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 2007, 12,426 establishments employed 1,050,334 persons, and shipped 63.9 trillion yen worth of products.

(b) In 2008, production and shipments decreased year-on-year by 1.3 percent and 0.5 percent respectively. As a result, both production and shipments recorded their first decrease in seven years. This was due to the decline in the production and shipments of motor vehicle parts, motorcycles, etc.

(B) General Machinery Industry

(a) In 2007, 33,955 establishments employed 1,063,957 persons, and shipped 36.3 trillion yen worth of products.

(b) In 2008, production and shipments decreased year-on-year by 8.1 percent and 8.9 percent respectively. As a result, both production and shipments recorded their first decrease in six years. This was attributable to the decline in the production and shipments of semiconductor and flat-panel display manufacturing equipment, engineering and construction machinery, etc.

Table 6.4
Machinery Production ¹⁾

Machinery	2007		2008	
	(10 ³ units)	(billion yen)	(10 ³ units)	(billion yen)
General machinery				
Shovel type excavators	180	1,326	149	1,262
Bearings	3,189,126	727	3,200,985	751
Internal combustion engines for industry	8,037	688	7,860	678
Split type air conditioners (outdoor unit)	5,520	538	5,327	561
Stamping dies and plastic molds ²⁾	203	374	198	345
Numerically controlled lathes ³⁾	27	306	26	303
Numerically controlled robots	23	234	20	196
Playback robots	61	160	60	163
Beverage vending machines	332	100	340	102
Electrical machinery				
Cells and batteries	5,732,703	772	5,379,603	846
Small capacity motors	363,365	356	255,475	308
Electric refrigerators	2,433	219	1,924	207
Electric washing machines	2,397	125	2,294	121
Semiconductor characteristic measuring	10.0	237	7.6	103
Electronic parts and devices				
Monolithic integrated circuits ⁴⁾	36,697,448	3,517	37,283,288	3,068
Active matrix LCDs	559,775	1,628	634,793	1,766
Electronic circuit boards (10 ³ m ²)	25,346	1,002	23,357	896
Information and communication electronics equipment				
Cellular telephones	45,891	1,588	35,326	1,240
Liquid crystal televisions	7,308	818	8,440	875
Personal computers	8,179	955	7,481	842
Digital still cameras	31,991	657	36,273	706
Car navigation systems	5,747	503	5,666	518
Video cameras (excl. for broadcast)	10,228	328	7,928	246
DVD-videos	1,486	85	2,366	142
Transport equipment				
Passenger cars	9,945	17,600	9,916	17,486
Trucks	1,521	2,979	1,488	2,886
Motorcycles	1,676	780	1,227	626
Buses	114	394	139	450
Rolling stock (fiscal year) ⁵⁾	2.7	207	* 2.3	* 213
Steel vessels (10 ³ gross tonnage) ⁶⁾	17,240	1,799	18,306	2,133

1) Establishments with 50 or more persons regularly engaged. 2) Establishments with 20 or more persons regularly engaged. 3) Including turning centers. 4) Linear ICs, Metal oxide semiconductor ICs (Micro computers, Logic, Memory and CCD), etc. 5) Establishments with 10 or more persons regularly engaged. 6) Factories with facilities for manufacturing steel vessels of 20 tons or greater in gross tonnage or 15 meters or longer in length.

Source: Ministry of Economy, Trade and Industry; Ministry of Land, Infrastructure, Transport and Tourism.

(C) Electrical Machinery, Equipment and Supplies Industry

(a) In 2007, 11,932 establishments employed 581,924 persons, and shipped 21.1 trillion yen worth of products.

(b) In 2008, production and shipments decreased by 2.7 percent and 1.6 percent compared to the previous year. As a result, both production and shipments recorded their second consecutive year of decrease. This was attributable to the decline in the production and shipments of electrical measuring instruments, etc.

(D) Electronic Parts and Devices Industry

(a) In 2007, 5,767 establishments employed 528,095 persons, and shipped 20.9 trillion yen worth of products.

(b) In 2008, production and shipments decreased by 3.6 percent and 5.6 percent respectively, from the previous year. As a result, both production and shipments recorded their first decrease in seven years.

(E) Information and Communication Electronics Equipment Industry

(a) In 2007, 2,293 establishments employed 231,485 persons, and shipped 13.3 trillion yen worth of products.

(b) In 2008, production decreased for the first time in four years, down 4.8 percent from the previous year. Shipments also decreased by 0.5 percent, their first decrease in six years. This was attributable to the decline in the production and shipments of communication equipment, electronic computers, etc.

(2) Chemical Industry

(a) In 2007, 5,034 establishments employed 356,738 persons, and shipped 28.3 trillion yen worth of products.

(b) In 2008, production in the chemical industry (excluding pharmaceutical and medical products) decreased for the first time in two years, down 6.6 percent from the previous year. Shipments also decreased by 7.3 percent, their first decrease in seven years. This was due to the decline in the production and shipments of plastic, industrial organic chemicals, etc.

Table 6.5
Trends in Chemical Industry Output

Products	(Thousand tons)				
	2004	2005	2006	2007	2008
Ammonia (NH ₃) ¹⁾	1,340	1,318	1,328	1,355	1,244
Ammonium sulfate ²⁾	1,526	1,458	1,439	1,463	1,412
Compound fertilizers	1,338	1,313	1,257	1,252	1,229
Sodium hydroxide	4,493	4,552	4,453	4,482	4,373
Carbon black	804	805	827	835	821
Sulfuric acid (H ₂ SO ₄) ¹⁾	6,444	6,546	6,843	7,098	7,227
Oxygen (million m ³)	11,278	11,371	11,766	12,407	11,945
Benzene, pure ³⁾	4,758	4,980	4,874	5,245	4,581
Creosote oil	873	905	927	908	848
Phenol	966	938	860	961	772
Synthetic dyes	35	32	32	32	30
Ethylene dichloride	3,594	3,689	3,514	3,603	3,212
Polyethylene	3,238	3,240	3,166	3,232	3,089
Polyvinyl chloride	2,153	2,151	2,146	2,162	1,797
Synthetic rubber ⁴⁾	1,616	1,627	1,607	1,655	1,651
Photographic films (million m ²)	273	277	285	296	263
Soap ⁵⁾	115	109	105	114	110
Paints ⁵⁾	1,834	1,902	1,951	1,940	1,839

1) Convert to 100 percent. 2) Including by-products. 3) Including non-petroleum base.

4) Including synthetic latex. 5) Establishments with 10 or more persons regularly engaged.

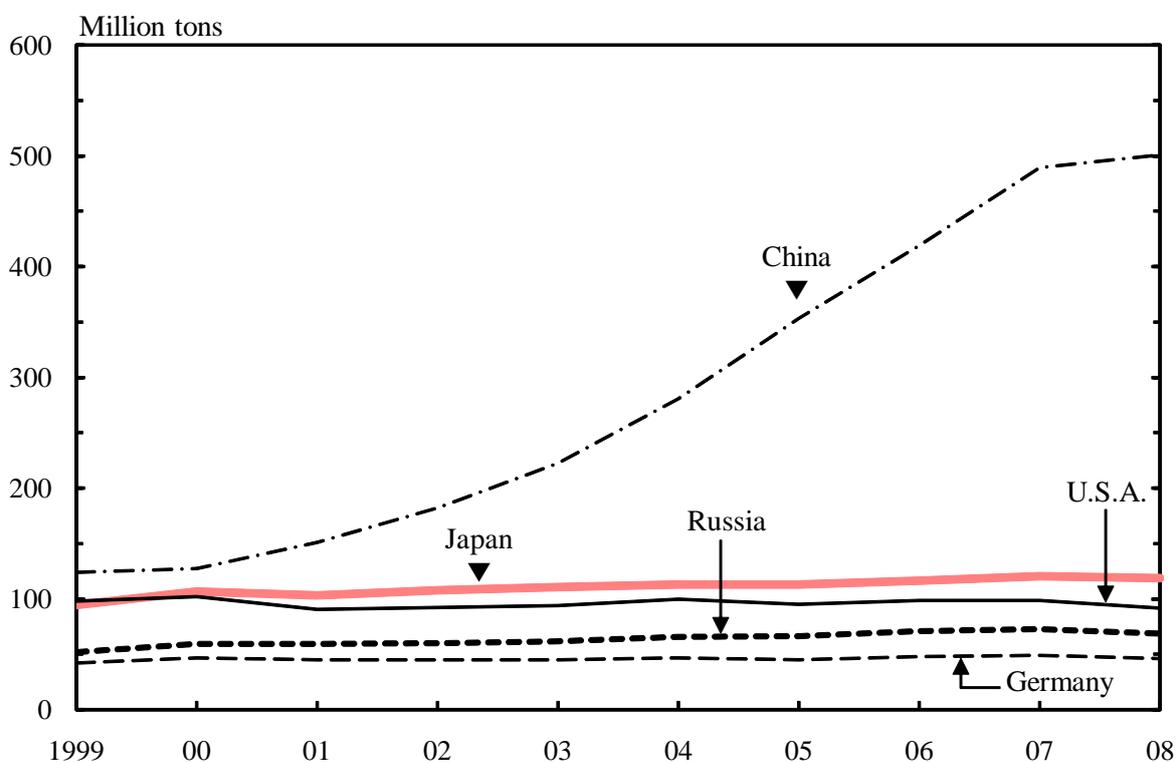
Source: Ministry of Economy, Trade and Industry.

(3) Iron and Steel Industry

(a) In 2007, 4,696 establishments employed 228,860 persons, and shipped 21.2 trillion yen worth of products.

(b) In 2008, production and shipments decreased by 2.1 and by 1.0 percent compared to the previous year. As a result, both production and shipments recorded their first decrease in three years. This was attributable to the decline in the production and shipment of hot rolled steels, etc.

Figure 6.3
Crude Steel Production in Selected Countries



Source: International Iron and Steel Institute; The Japan Iron and Steel Federation.

Table 6.6
Steel Production

Products	(Thousand tons)				
	2004	2005	2006	2007	2008
Pig iron	82,974	83,058	84,270	86,771	86,171
Ferroalloys	911	963	834	858	828
Crude steel	112,718	112,471	116,226	120,203	118,739
Finished steel	101,022	98,797	101,379	105,431	103,297
Ordinary steel products	81,847	79,229	81,314	85,027	82,703
Special steel products	19,175	19,568	20,065	20,404	20,594

Source: Ministry of Economy, Trade and Industry.

(4) Fabricated Metal Products Industry

(a) In 2007, 33,355 establishments employed 664,082 persons, and shipped 15.2 trillion yen worth of products.

(b) In 2008, production decreased by 2.1 percent and shipments by 3.1 percent compared to the previous year, continuing the downward trend of recent years. This was attributable to the decline in the production and shipments of construction metal products, heating and kitchen equipment, etc.

3. Construction

The construction industry, accounting for about 10 percent of both GDP and all employed persons, is one of the most important industries in Japan. However, it is faced with challenges such as rapidly decreasing construction investment and fiercer price wars, as well as surging prices of materials including steel and fuel oil. The management environment surrounding the industry is now also harsher than ever, as it is hard hit by, for instance, the increasingly sluggish real estate business of late. In fiscal 2008, the industry employed 5.32 million persons, and investment in construction stood at approximately 47.2 trillion yen.

Table 6.7
Construction Investment (Current prices)

	(Billion yen)			
	FY2005	FY2006	FY2007 *	FY2008 *
Total	51,568	51,328	47,900	47,230
Building construction	29,714	30,584	27,720	27,460
Dwellings	18,968	19,348	17,150	16,450
Public sector	542	598	550	520
Private sector	18,426	18,750	16,600	15,930
Non-dwellings	10,747	11,236	10,570	11,010
Public sector	1,511	1,447	1,400	1,440
Private sector	9,236	9,789	9,170	9,570
Mining and manufacturing	1,993	2,352	...	...
Others	7,243	7,437	...	...
Civil engineering works	21,853	20,745	20,180	19,770
Public sector	16,921	15,752	15,200	15,430
Public works	15,085	13,973	13,480	13,660
Others	1,836	1,779	1,720	1,770
Private sector	4,932	4,993	4,980	4,340
Total				
Public investment	18,974	17,797	17,150	17,390
Private investment	32,594	33,532	30,750	29,840
Building construction				
Public investment	2,053	2,045	1,950	1,960
Private investment	27,662	28,539	25,770	25,500
Civil engineering works				
Public investment	16,921	15,752	15,200	15,430
Private investment	4,932	4,993	4,980	4,340

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

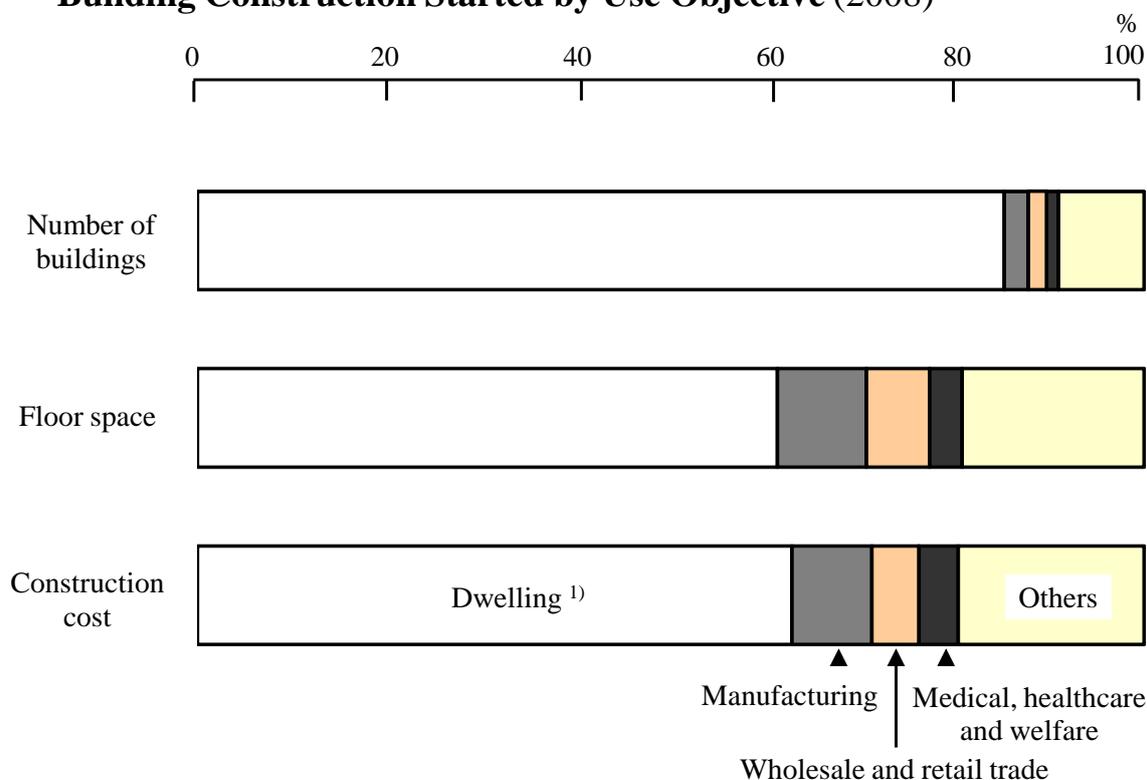
Investment in construction in fiscal 2008 showed a year-on-year decrease of 1.4 percent at current prices and a year-on-year decrease of 3.8 percent at constant prices, for the reference year 2000. Construction investment in fiscal 2008 was down 43.8 percent compared to fiscal 1992, when it hit a peak of approximately 84.0 trillion yen.

A breakdown of construction investment shows that building construction totaled 27.5 trillion yen (down 0.9 percent from the previous fiscal year), while civil engineering works amounted to 19.8 trillion yen (down 2.0 percent).

In terms of public and private construction investment in fiscal 2008, public investment amounted to 17.4 trillion yen (up 1.4 percent from the previous fiscal year), while private investment totaled 29.8 trillion yen (down 3.0 percent). Public investment accounted for 36.8 percent of total construction investment, while private investment accounted for 63.2 percent.

The 2008 total floor space of building starts was 157.4 million square meters, down 2.2 percent from the previous year. In particular, the floor space of buildings for wholesale and retail trade use dropped by 28.3 percent, compared to the previous year, to 10.5 million square meters. Meanwhile, the number of housing construction starts (counting the number of component apartments for apartment buildings) rose in owned houses, rental units and built-for-sale units alike, totaling 1.09 million housing units. This was a 3.1-percent rise from the previous year and was the first increase in two years.

Figure 6.4
Building Construction Started by Use Objective (2008)



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 83.7 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 47.0 percent in fiscal 2007. 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 2007, the total primary energy supply in Japan was 23,861 petajoules, up 0.4 percent from the previous fiscal year. Its breakdown was: 47.0 percent in petroleum, 21.3 percent in coal, 16.3 percent in natural gas, 9.7 percent in nuclear power, and 2.7 percent in hydro power. Other sources were also used, though only in small quantities, including energy from waste, geothermal, and natural energy (solar thermal, wind power, 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 CO₂, including nuclear power and new energy sources (solar power and wind power).

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: 10¹⁵ 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:

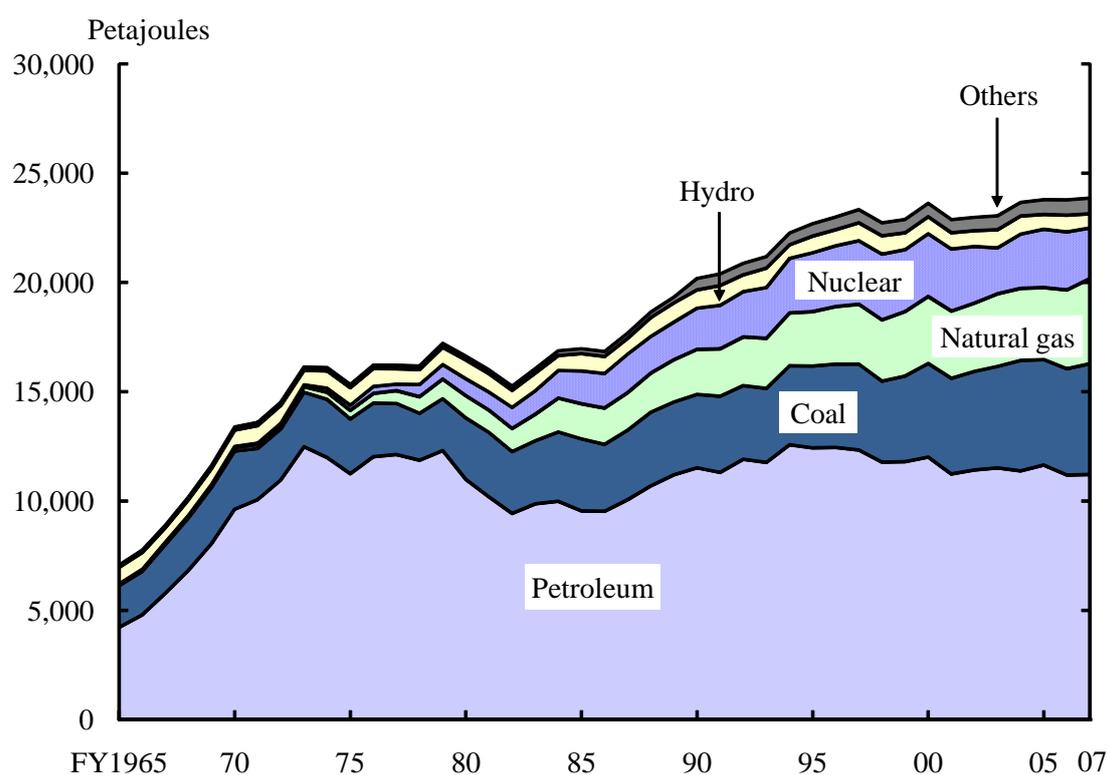
$$1 \text{ kiloliter of petroleum} = 3.87 \times 10^{10} \text{ joules}$$

$$1 \text{ petajoule} = 10^{15} \text{ joules}$$

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

Japan's final energy consumption has increased almost consistently since the mid-1980s. While energy consumption by the industrial sector has remained mostly level, growth in energy consumption by the commercial and residential sector and transport sector has risen sharply. 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 ¹⁾



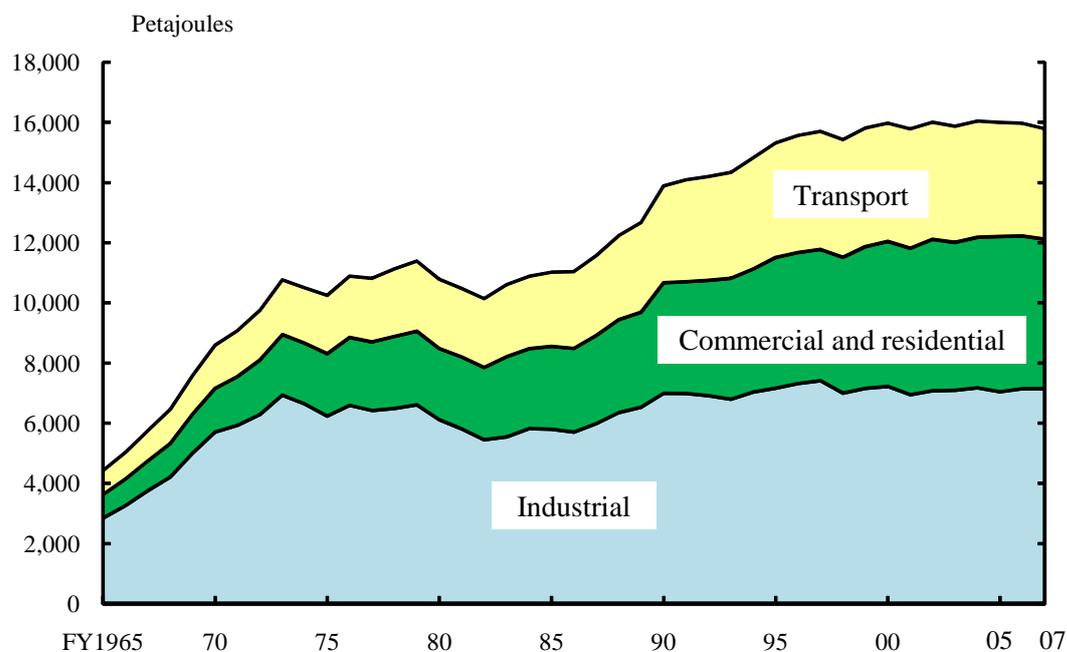
1) A different statistical method was used for figures of fiscal 1989 and prior.
Source: Ministry of Economy, Trade and Industry.

Table 7.1
Trends in Total Primary Energy Supply and Percentage
by Energy Source

	(Petajoules)				
Item	FY1995	FY2000	FY2005	FY2006	FY2007
Total primary energy supply	22,685	23,622	23,787	23,777	23,861
Energy self-sufficiency (%)	19.0	18.9	17.6	18.1	16.3
Petroleum	12,430	12,008	11,644	11,186	11,211
Coal	3,750	4,286	4,829	4,865	5,074
Natural gas	2,479	3,061	3,288	3,601	3,892
Nuclear	2,700	2,873	2,677	2,661	2,317
Hydro	761	778	672	767	650
Others	564	616	676	697	715
Percentage					
Petroleum	54.8	50.8	49.0	47.1	47.0
Coal	16.5	18.1	20.3	20.5	21.3
Natural gas	10.9	13.0	13.8	15.1	16.3
Nuclear	11.9	12.2	11.3	11.2	9.7
Hydro	3.4	3.3	2.8	3.2	2.7
Others	2.5	2.6	2.8	2.9	3.0

Source: Ministry of Economy, Trade and Industry.

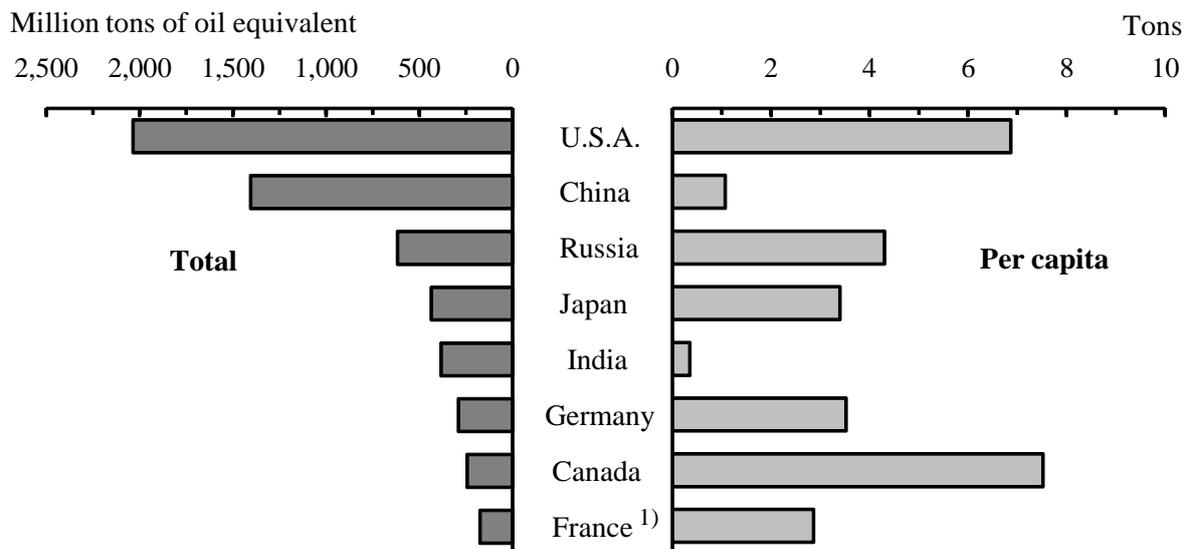
Figure 7.2
Trends in Final Energy Consumption by Sector ¹⁾



1) A different statistical method was used for figures of fiscal 1989 and prior.

Source: Ministry of Economy, Trade and Industry.

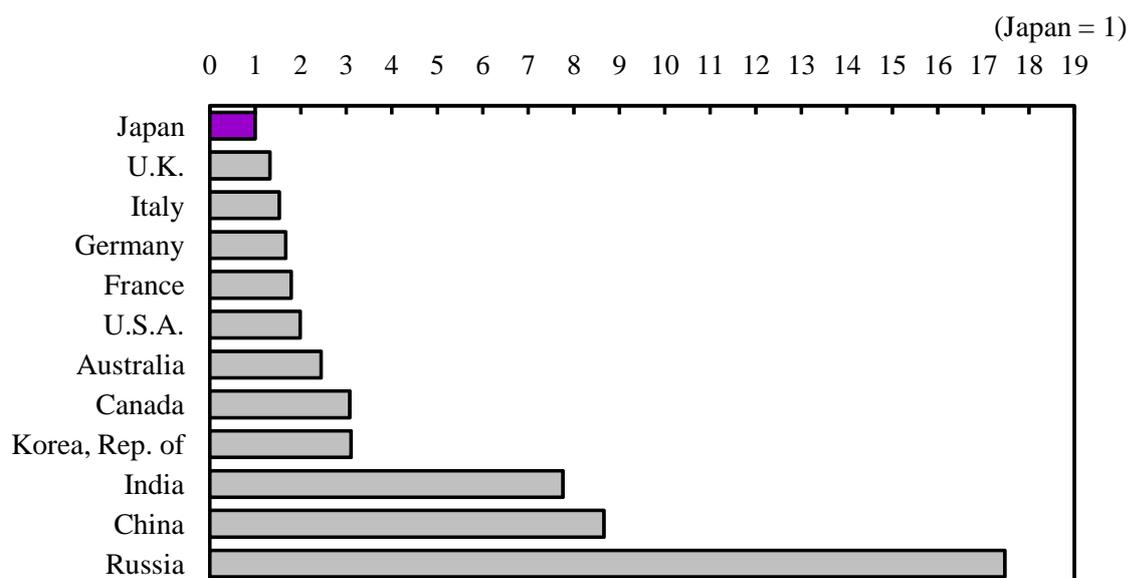
Figure 7.3
Consumption of Commercial Energy by Country (2005)



1) Including Monaco.
 Source: United Nations.

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.

Figure 7.4
International Comparison of Energy/GDP Ratio¹ (2006)



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 private power generation) in Japan totaled 1,193 billion kWh in fiscal 2007, up 2.7 percent from the previous fiscal year. Of this total, thermal power accounted for 70.3 percent; nuclear power, 22.1 percent; hydro power, 7.1 percent; and other sources, 0.5 percent. In the field of thermal power generation, huge replacement has been made from petroleum to natural gas.

Table 7.2

Trends in Electricity Output and Power Consumption ¹⁾

(Million kWh)

Item	FY1995	FY2000	FY2005	FY2006	FY2007
Electricity Output					
Total	989,880	1,091,500	1,157,926	1,161,110	1,192,771
Thermal	604,206	669,177	761,841	755,084	839,029
Nuclear	291,254	322,050	304,755	303,426	263,832
Hydro	91,216	96,817	86,350	97,340	84,234
Others	3,204	3,456	4,980	5,260	5,676
Percentage					
Total	100.0	100.0	100.0	100.0	100.0
Thermal	61.0	61.3	65.8	65.0	70.3
Nuclear	29.4	29.5	26.3	26.1	22.1
Hydro	9.2	8.9	7.5	8.4	7.1
Others	0.3	0.3	0.4	0.5	0.5
Electric Power Consumption					
Total	881,559	982,066	1,043,800	1,048,308	1,075,605
Generated by electric power suppliers ..	776,511	858,078	918,265	927,141	959,661
Power generated and consumed by own power facilities	105,048	123,988	125,535	121,167	115,944

1) Including private power generation.

Source: Ministry of Economy, Trade and Industry.

3. Gas

Gas production was 1,324 petajoules in fiscal 2007, up 4.5 percent from the previous fiscal year. Of this total, natural gas plus liquefied natural gas (LNG) accounted for 96.8 percent; and the remaining 3.2 percent were petroleum gases, such as volatile oil, liquefied petroleum gas, etc.

Gas sales for fiscal 2007 totaled 1,503 petajoules, or year-on-year growth of 6.3 percent. Of this total, 50.6 percent was sold to industry, 27.5 percent to residential use, 13.8 percent to the commercial sector, and 8.2 percent to other sources of demand.

Table 7.3
Trends in Production and Purchases, and Sales of Gas ¹⁾

Item	(Petajoules)							
	FY2000		FY2005		FY2006		FY2007	
Production and purchases	1,061	-	1,394	-	1,460	-	1,551	-
Production	952	(100.0)	1,235	(100.0)	1,267	(100.0)	1,324	(100.0)
Coal gases	2	(0.2)	-	(-)	-	(-)	-	(-)
Petroleum gases	111	(11.7)	67	(5.4)	43	(3.4)	42	(3.2)
Natural gas and LNG	839	(88.2)	1,168	(94.6)	1,224	(96.6)	1,282	(96.8)
Others	-	(-)	-	(-)	-	(-)	-	(-)
Purchases	109	(100.0)	159	(100.0)	193	(100.0)	227	(100.0)
Coal gases	8	(7.2)	2	(1.3)	1	(0.7)	1	(0.3)
Petroleum gases	15	(13.9)	10	(6.4)	9	(4.7)	9	(3.8)
Natural gas and LNG	86	(78.8)	147	(92.3)	183	(94.5)	218	(95.9)
Others	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Sales	1,047	(100.0)	1,359	(100.0)	1,413	(100.0)	1,503	(100.0)
Residential	397	(37.9)	416	(30.6)	409	(28.9)	413	(27.5)
Commercial	170	(16.2)	205	(15.1)	200	(14.2)	207	(13.8)
Industrial	391	(37.4)	619	(45.5)	689	(48.7)	760	(50.6)
Others	89	(8.5)	120	(8.8)	116	(8.2)	123	(8.2)

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 2008 totaled 827,000. The total research and development (R&D) expenditure in fiscal 2007 was the highest ever, amounting to 18.9 trillion yen, or 3.67 percent of Japan's GDP.

Table 8.1
Trends in Research and Development

Year	Researchers ¹⁾ (1,000)	Females (%)	Fiscal year	R&D expenditure (billion yen)	GDP ²⁾ (billion yen)	Ratio of R&D expenditures to GDP (%)
1999	757	10.1	1998	16,140	503,304	3.21
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	510,925	3.61
2008	827	13.0	2007	18,944	515,858	3.67

1) 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. 2) Chained 2000.

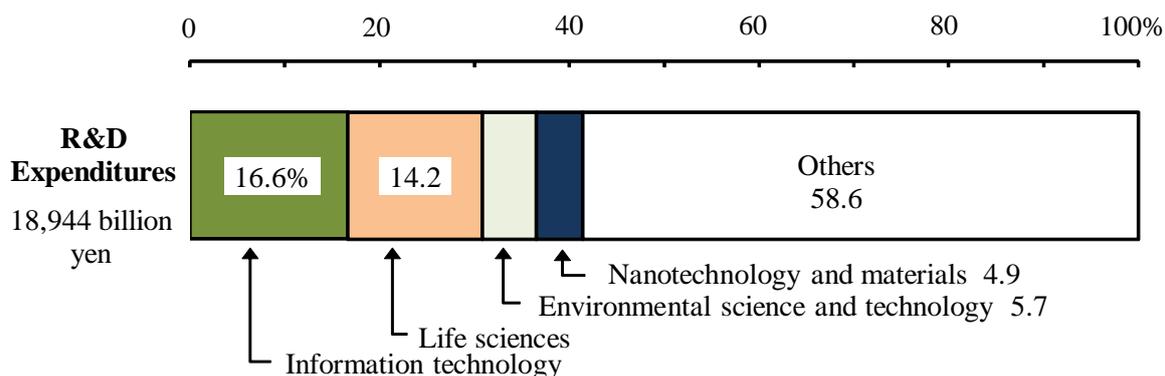
a) The survey coverage was expanded.

Source: Statistics Bureau, MIC.

As of the end of March 2008, the number of researchers in business enterprises amounted to 484,000 persons, while the number of researchers in universities and colleges was 302,000 persons. In terms of R&D expenditures in fiscal 2007, business enterprises spent 13.8 trillion yen (73.0 percent of total R&D expenditures), while universities and colleges spent 3.4 trillion yen (18.1 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.

Figure 8.1
Expenditures on Four Priority Fields to be Promoted (FY2007)

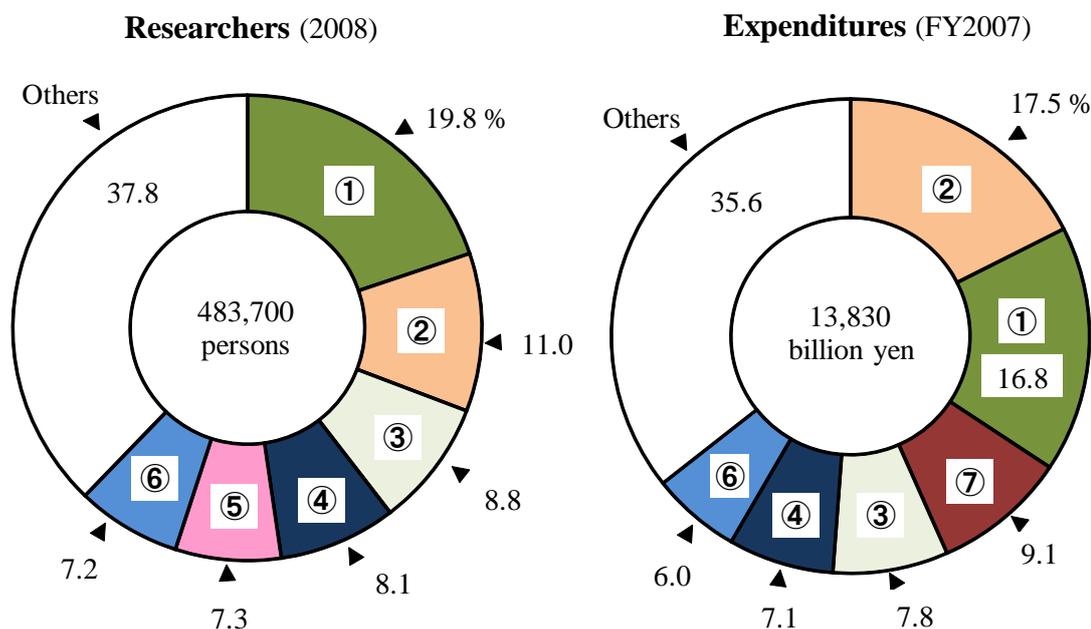


Source: Statistics Bureau, MIC.

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 2007, approximately 40 percent was spent in these four priority fields to be promoted: information technology (16.6 percent), life sciences (14.2 percent), environmental science and technology (5.7 percent), and nanotechnology and materials (4.9 percent).

The researchers at business enterprises totaled 484,000 persons at the end of March 2008. Approximately 90 percent of them, or 430,000 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 2007, business enterprises spent 13.8 trillion yen. Of this amount, 12.2 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 drugs and medicines industry.

Figure 8.2
Researchers and Expenditures by Industry (Business enterprises)



① Information and communication electronics equipment. ② Motor vehicle, parts and accessories.
 ③ Electrical machinery, equipment and supplies. ④ Business oriented machinery. ⑤ Chemical products.
 ⑥ Electronic parts, devices and electronic circuits. ⑦ Drugs and medicines.

Source: Statistics Bureau, MIC.

(2) Technology Trade

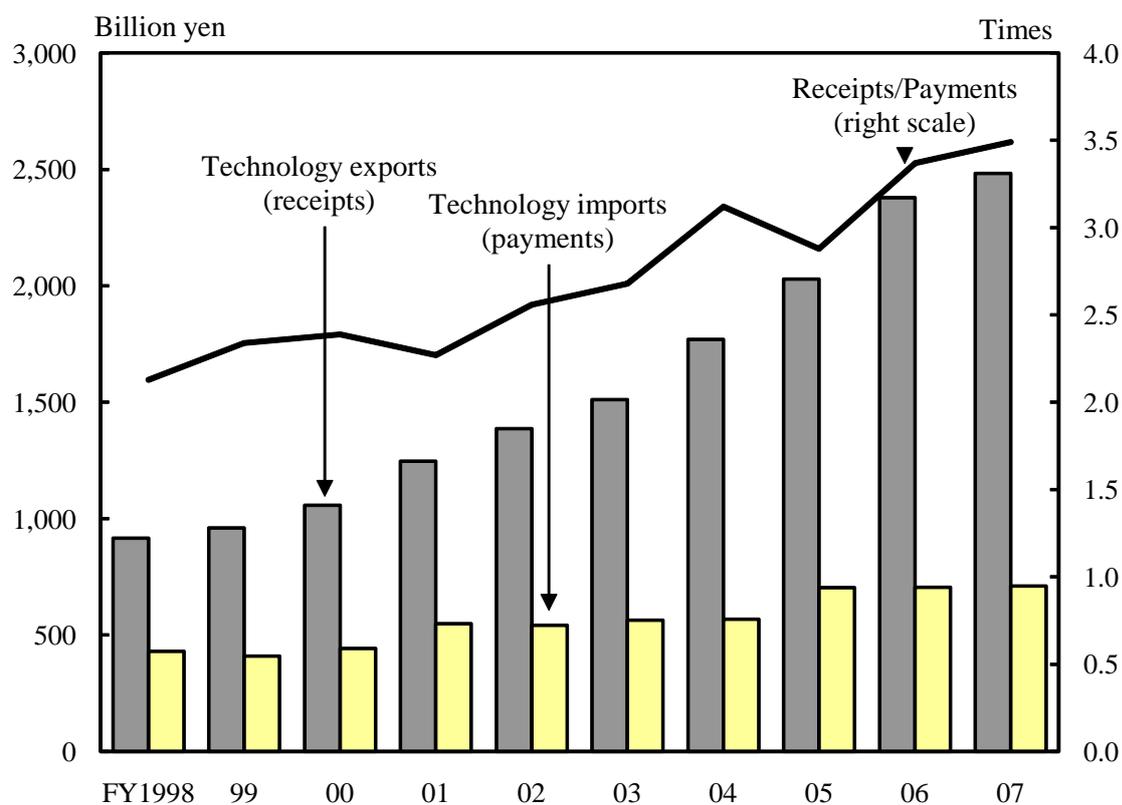
Technology trade is defined as export or import of technology by business enterprises with other countries, such as patents and expertise. In fiscal 2007, Japan received 2,482.3 billion yen from technology exports, which represented both an all-time high and an increase of 4.4 percent over the preceding fiscal year; of the total receipts, 73.5 percent was from overseas parent/subsidiary companies. Meanwhile, payments for technology imports reached 710.5 billion yen, which also signified an all-time high and an increase of 0.7 percent over the previous fiscal year; of this figure, 16.1 percent was payments to overseas parent/subsidiary companies.

Table 8.2
Technology Trade by Business Enterprise

Fiscal year	Technology Trade				Exports value	Imports value
	Exports		Imports			
	Value (billion yen)	Annual increase rate (%)	Value (billion yen)	Annual increase rate (%)		
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
2004	1,769.4	17.0	567.6	0.7		3.12
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

Source: Statistics Bureau, MIC.

Figure 8.3
Trends in Technology Trade ¹⁾

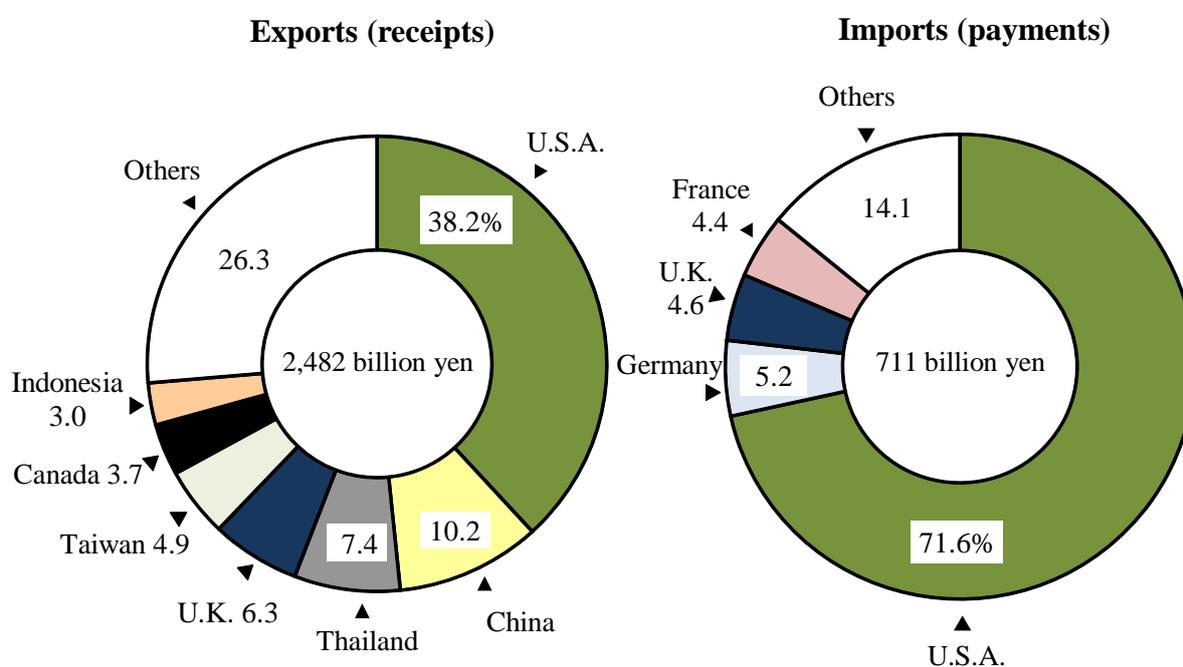


1) The survey coverage was expanded in FY 2001.

Source: Statistics Bureau, MIC.

In fiscal 2007, Japan exported 2,482.3 billion yen of technologies; major destinations for export were: the U.S.A. (948.1 billion yen, or 38.2 percent of total exports), followed by China (252.9 billion yen), Thailand (184.8 billion yen), and the U.K. (155.4 billion yen). On the other hand, Japan imported 710.5 billion yen of technologies, mainly from the U.S.A. (508.6 billion yen, or 71.6 percent of total imports), followed by Germany (37.2 billion yen), the U.K. (33.0 billion yen), and France (31.5 billion yen).

Figure 8.4
Composition of Technology Trade by Major Country/Region
 (FY2007)



Source: Statistics Bureau, MIC.

2. Patents

Lively R&D activities were indicated by an increase in the number of patent applications. In 2007, the total number of patent applications submitted in Japan amounted to 396,291, which represented an increase of 1.2 percent over 1997.

Table 8.3
Patents

Item	(Cases)				
	1995	2000	2005	2006	2007
Applications	369,215	436,865	427,078	408,674	396,291
Registrations	109,100	125,880	122,944	141,399	164,954
Existing vested rights	681,459	1,040,607	1,123,055	1,146,871	1,206,335

Source: Ministry of Economy, Trade and Industry.

Table 8.4
PCT International Applications by Country of Origin

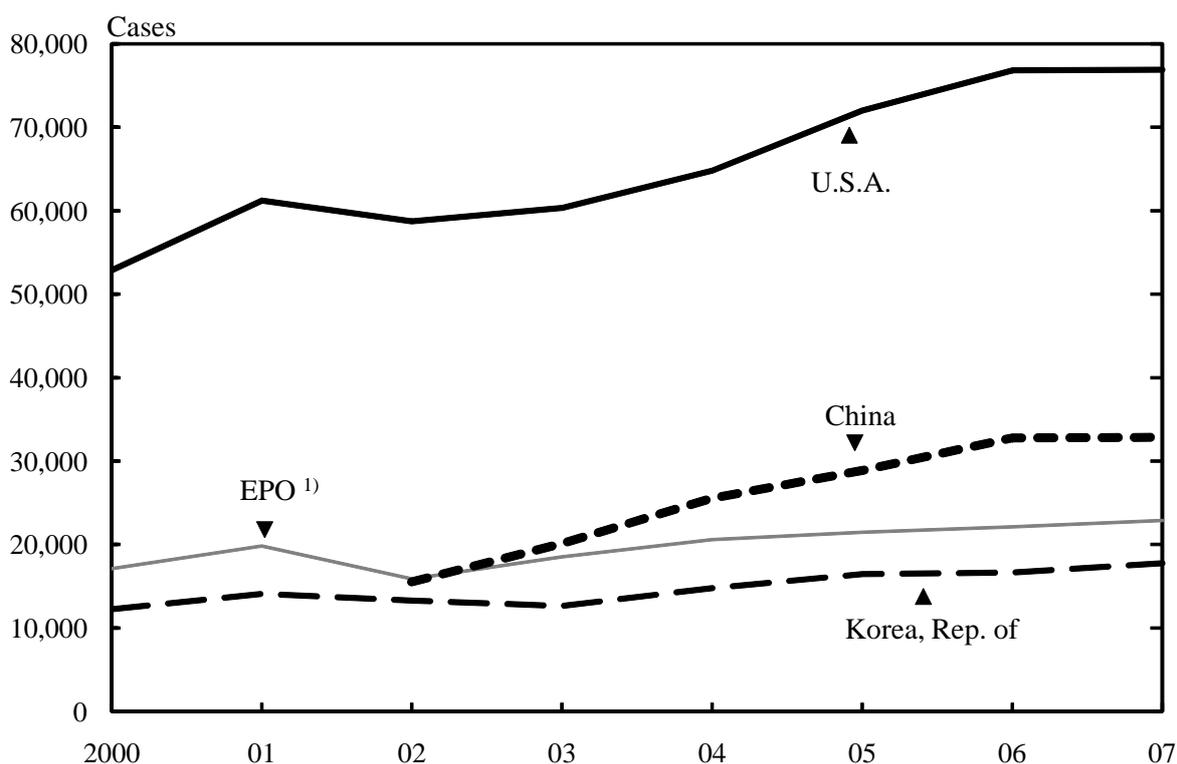
Country	(Cases)					Annual growth (%)
	2004	2005	2006	2007	2008*	
Total	122,610	136,688	149,156	159,886	163,800	2.4
U.S.A.	43,350	46,803	50,941	54,086	53,521	-1.0
Japan	20,264	24,869	27,033	27,744	28,744	3.6
Germany	15,214	15,984	16,732	17,818	18,428	3.4
Korea, Rep. of	3,558	4,688	5,944	7,061	7,908	12.0
France	5,184	5,748	6,242	6,568	6,867	4.6
China	1,706	2,503	3,951	5,441	6,089	11.9
U.K.	5,027	5,084	5,090	5,539	5,517	-0.4
Netherlands	4,284	4,500	4,529	4,355	4,349	-0.1
Sweden	2,851	2,883	3,316	3,657	4,114	12.5
Switzerland	2,898	3,290	3,577	3,778	3,832	1.4

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 2009. In 2008, the number of international patent applications made based on the Patent Cooperation Treaty (PCT) exceeded 164,000, of which Japan filed 28,744, 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 76,897 filings. The number of Japanese-filed patent applications in China has been on a constant rise since 2002. It reached 32,870 in 2007, more than double the 2002 figure of 15,511.

Figure 8.5
Number of Patent Applications Filed in Major Countries/Organizations by Japanese



1) European Patent Office.

Source: Ministry of Economy, Trade and Industry.

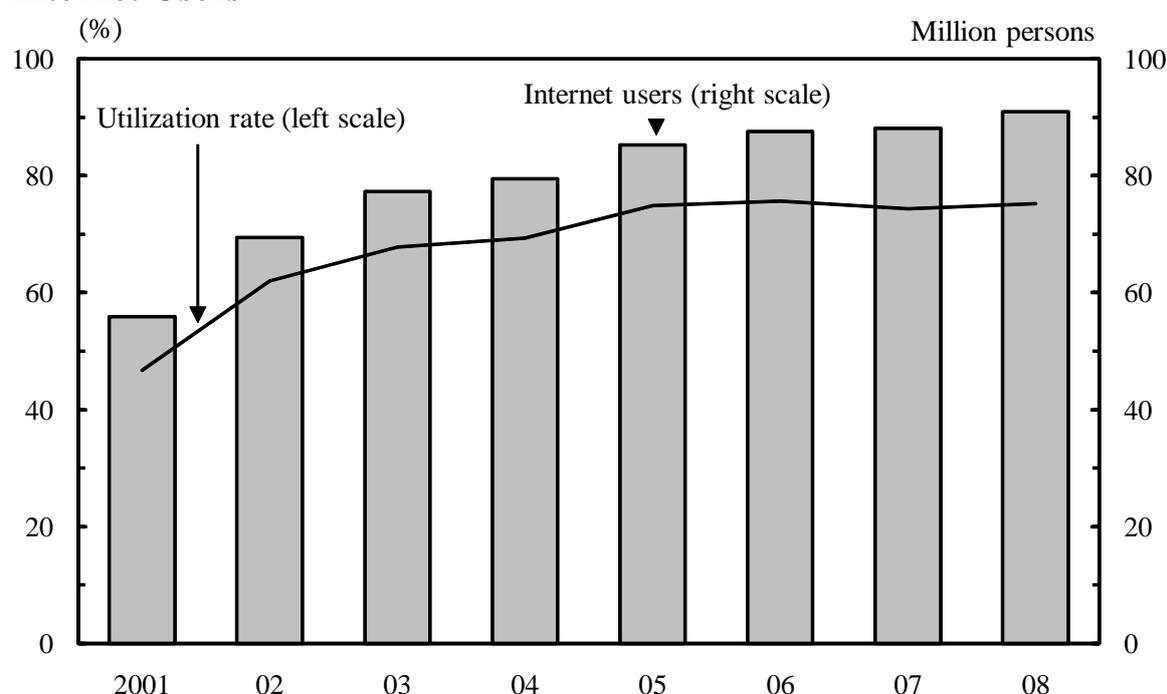
3. Information and Communication

(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 2008, 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 90.91 million, or 75.3 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 2008 was estimated to be 75.06 million, accounting for 82.6 percent of the people aged 6 years and over who have accessed the Internet.

Figure 8.6
Internet Users ¹⁾



1) Ages 6 years and over.

Source: Ministry of Internal Affairs and Communications.

Among enterprises, the Internet user rate at the end of 2008 was 99.0 percent (up 0.3 percentage points from the previous year).

(2) Progress of Communication Technologies

As of the end of March 2008, the contracts of broadband (connection) service subscriptions totaled 28.75 million, marking an 8.8-percent annual increase. Among broadband subscribers, the number of DSL (digital subscriber line) subscribers reached 12.71 million, accounting for 44.2 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 2008, the total number of IP phone subscribers was 17.54 million.

Subscribers for Internet connection service using cable television networks (cable Internet) as of the end of March 2008 totaled 3.87 million (up 7.3 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 2008, the number of FTTH (connection) subscribers was 12.15 million, marking a 38.2-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 and Postal Service

The number of fixed phone subscription contracts was 41.37 million (down 7.6 percent year-on-year) at the end of March 2009. Meanwhile, the number of mobile phone subscribers (cell phones and personal handyphone systems) totaled 107.34 million at the end of March 2008, marking a rise by 4.4 percent year-on-year to 112.05 million at the end of March 2009.

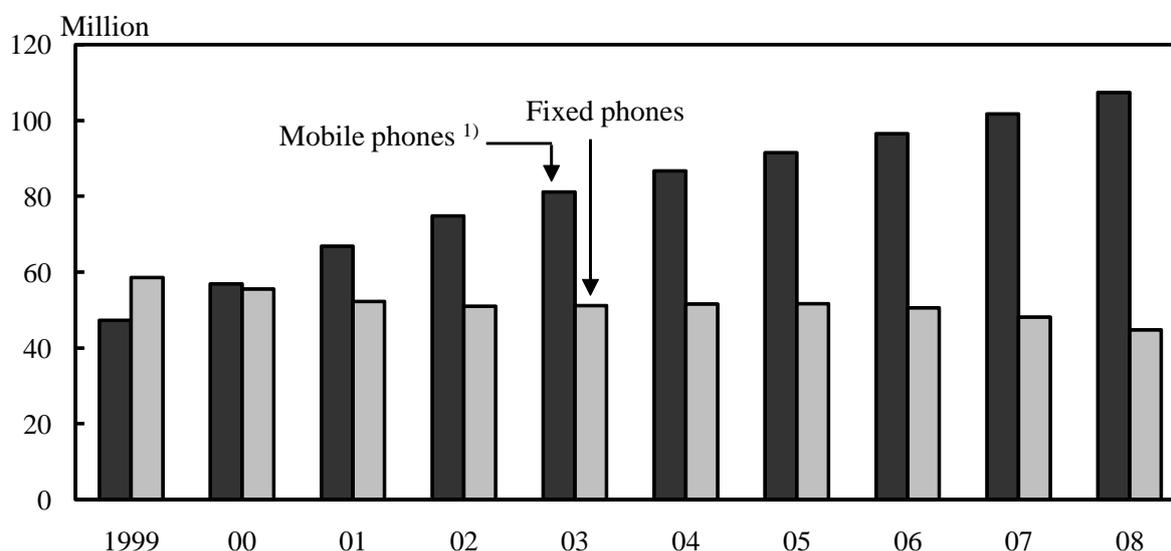
Table 8.5
Telecommunications Services

	(Thousands)					
Item	1995	2000	2005	2006	2007	2008
Public phones (NTT ¹⁾ only ...	801	736	442	393	361	329
Fixed phone service						
subscribers	59,940	55,550	51,630	50,560	48,170	44,780
Mobile phone subscribers	4,331	56,846	91,474	96,484	101,698	107,339
ISDN (Integrated Services						
Digital Network) circuits	340	6,680	7,980	7,490	7,000	6,450
DSL (Digital Subscriber Line)						
subscribers	-	0	13,676	14,518	14,013	12,711
Cable Internet subscribers	-	216	2,691	3,310	3,607	3,872
FTHH (Fiber to the home)						
subscribers	-	-	2,889	5,448	8,795	12,153
International phone calls,						
sent and received	599,400	801,200	# 1,103,700	1,220,400	1,430,000	1,293,100

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.

Japan Post was privatized on October 1, 2007 to form the Japan Post Group (Japan Post Holdings Co., Ltd., Japan Post Service Co., Ltd., Japan Post Network Co., Ltd., Japan Post Bank Co., Ltd. and Japan Post Insurance Co., Ltd.).

There were 24,540 post offices and 192,157 mailboxes in service nationwide at the end of March 2008.

Japan Post Service Co., Ltd. handled 23.29 billion pieces of domestic mail (letters and parcels) in fiscal 2008 (a 2.3-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 2008 amounted to 69.25 million pieces (a decrease of 4.8 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	FY2006	FY2007	FY2008
Domestic						
Letters	24,262.9	26,114.4	22,666.1	22,284.2	21,317.8	20,587.5
Parcels	400.2	310.5	2,075.0	2,317.4	2,527.9	2,702.0
International						
Sent	122.8	106.0	77.5	75.7	72.7	69.2
Letters ¹⁾	119.9	104.3	76.1	74.2	71.2	67.7
Parcels	2.9	1.7	1.5	1.5	1.6	1.6

1) Including express mail services (EMS).

Source: Japan Post Service Co., Ltd.

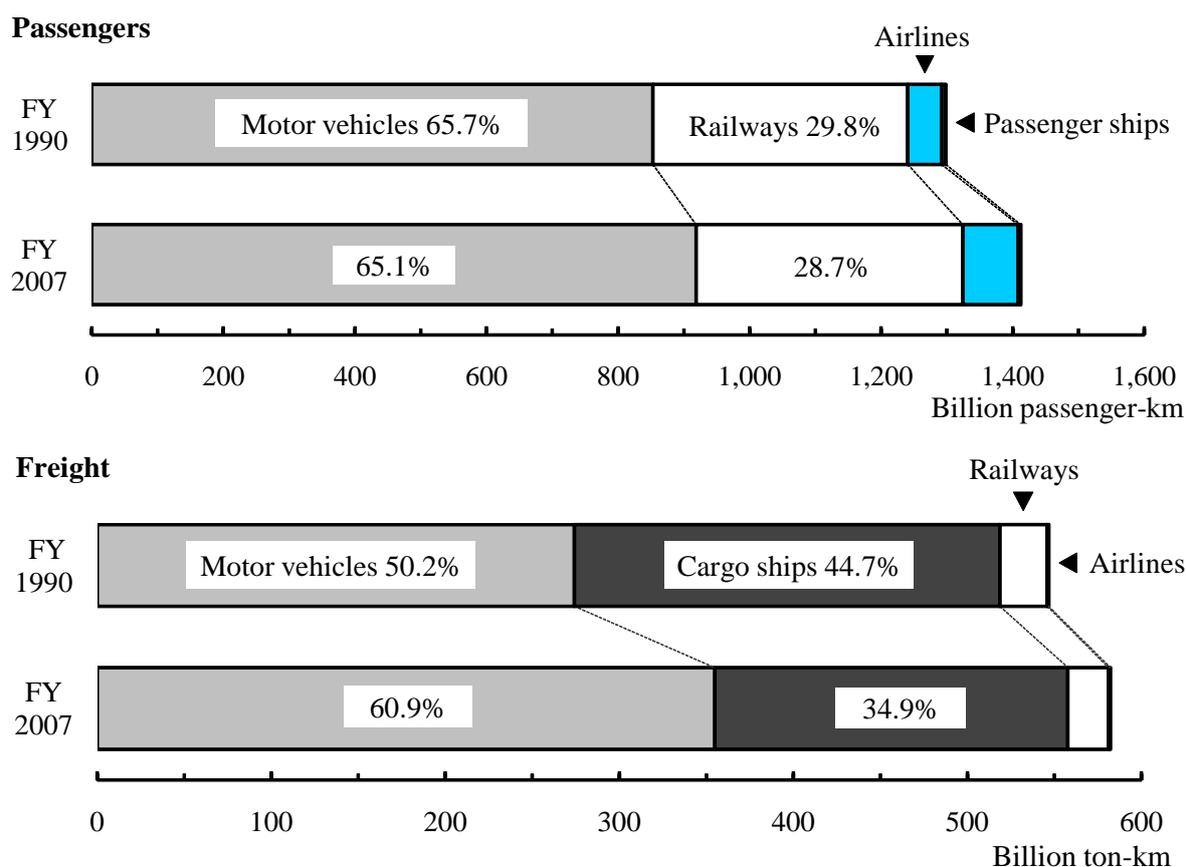
Chapter 9

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 2007 showed a marked growth in motor vehicle transportation for both passengers and freight. In the face of the increasing importance of the current issue of CO₂ emissions reduction, since approximately 90 percent of CO₂ emissions in the transport sector is attributable to motor vehicles, the government is accordingly making various efforts, including encouraging a shift from driving cars to public transportation and the wider use of energy-efficient cars.

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. Public transportation authorities have been taking measures to upgrade their services, by introducing multiple-use cards and IC (Integrated Circuit) cards that can be used with different public railway/bus operators, and by improving the transit convenience between public transport at terminal stations.

In fiscal 2007, the number of domestic transport passengers was 89.95 billion (up 1.8 percent from the previous fiscal year). The total volume of passenger transport was 1.41 trillion passenger-kilometers (up 0.7 percent).

Table 9.1
Domestic Passenger Transport

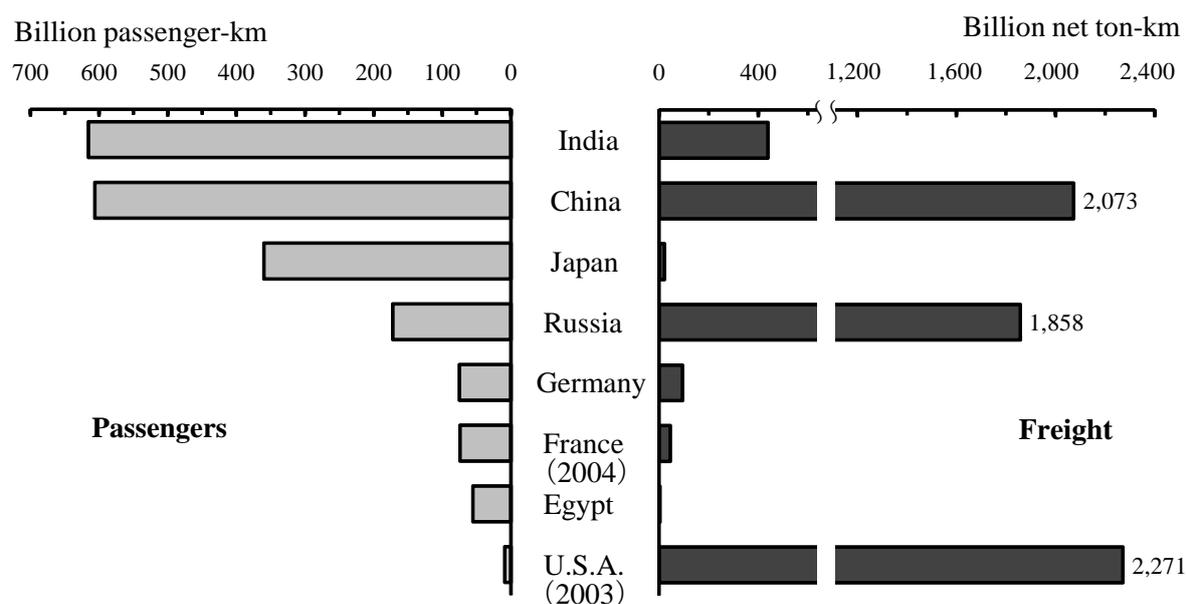
Item	Passengers carried (billions)		Passenger kilometers (billions)	
	FY2006	FY2007	FY2006	FY2007
Total transport volume	88.38	89.95	1,403.38	1,412.77
Railways	22.24	22.84	395.91	405.54
JR (Japan Railways)	8.78	8.99	249.03	255.21
Other than JR	13.47	13.85	146.88	150.33
Motor vehicles	65.94	66.91	917.94	919.06
Buses	5.91	5.96	88.70	88.97
Business purpose	4.54	4.56	72.62	71.98
Non-business purpose	1.37	1.40	16.08	16.99
Passenger cars	38.78	38.76	578.03	570.63
Taxis and limousine hires	2.21	2.14	11.45	11.10
Private cars ¹⁾	36.57	36.63	566.58	559.53
Light vehicles ²⁾	19.23	20.18	202.75	210.80
Trucks	2.02	2.00	48.46	48.66
Airlines	0.10	0.09	85.75	84.33
Passenger ships	0.10	0.10	3.78	3.83

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

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

In fiscal 2007, the Japan Railways (JR) group reported 8.99 billion passengers (up 2.4 percent from the previous fiscal year) and 255.21 billion passenger-kilometers (up 2.5 percent). Railways other than JR reported 13.85 billion passengers (up 2.9 percent) and 150.33 billion passenger-kilometers (up 2.4 percent).

Figure 9.2
Rail Transport by Country (2005)



Source: United Nations.

In order to encourage the use of buses, various efforts toward improving their convenience and safety have been promoted. Business purpose buses recorded an increase (up 0.5 percent from the previous fiscal year) to 4.56 billion passengers, but a decline in passenger-kilometers (down 0.9 percent) to 71.98 billion passenger-kilometers in fiscal 2007.

Taxi and limousine hire services have marked a long-term downward trend in passengers. They carried 2.14 billion passengers (down 3.3 percent from the previous fiscal year) and reported 11.10 billion passenger-kilometers (down 3.1 percent); both figures of passengers and passenger-kilometers declined in fiscal 2007. Passenger transport via private cars registered 36.63 billion passengers (up 0.2 percent) and 559.53 billion passenger-kilometers (down 1.2 percent).

Table 9.2
Number of Motor Vehicles Owned

Type of vehicles	(Thousands)				
	FY1995	FY2000	FY2005	FY2006	FY2007
Trucks and trailers	20,235	18,065	16,707	16,491	16,265
Buses	243	236	232	232	231
Passenger cars	45,069	52,449	57,098	57,510	57,551
Special purpose vehicles	1,524	1,754	1,619	1,600	1,578
Two-wheeled vehicles ¹⁾	3,036	3,021	3,337	3,403	3,456

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

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

Air passenger transport hit a record high with 96.97 million people carried in fiscal 2006. There were 94.85 million air passengers carried in fiscal 2007 (down 2.2 percent from the previous fiscal year), which amounted to 84.33 billion passenger-kilometers (down 1.7 percent).

In fiscal 2007, passenger ships reported 100.79 million passengers (up 1.6 percent from the previous fiscal year) and 3.83 billion passenger-kilometers (up 1.3 percent).

(2) Domestic Freight Transport

In the area of domestic freight, a total of 5.39 billion metric tons (down 0.7 percent from the previous fiscal year) of freight was transported for a total of 582.24 billion ton-kilometers (up 0.6 percent) in fiscal 2007.

As for transport tonnage volume in fiscal 2006, 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.

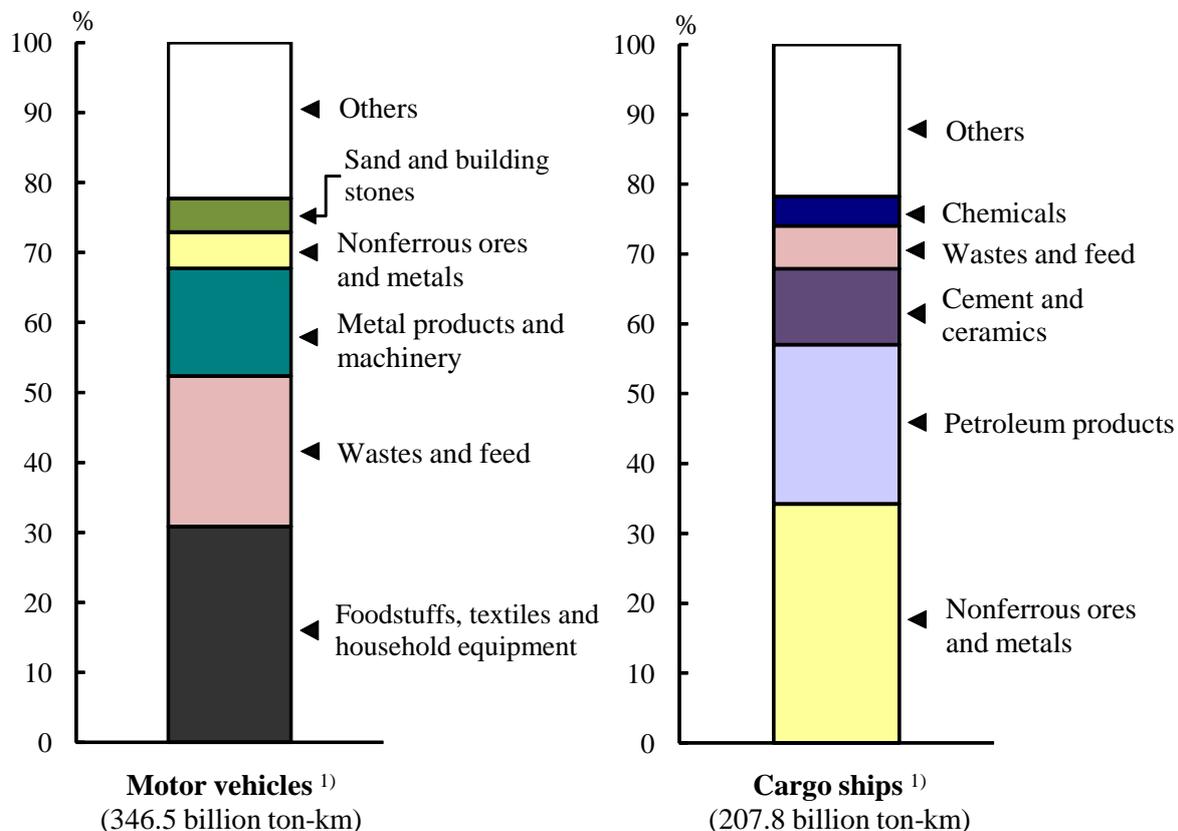
Table 9.3
Domestic Freight Transport

Item	Freight tonnage (millions)		Ton kilometers (billions)	
	FY2006	FY2007	FY2006	FY2007
Total transport volume	5,430.9	5,394.2	578.67	582.24
Railways	51.9	50.9	23.19	23.33
JR (Japan Railways)	36.4	36.0	22.99	23.14
Other than JR	15.5	14.9	0.21	0.19
Motor vehicles	4,961.3	4,932.5	346.53	354.80
Business purpose	2,899.6	2,927.9	302.18	310.19
Non-business purpose	2,061.7	2,004.6	44.35	44.62
Domestic cargo ships	416.6	409.7	207.85	202.96
Airlines ¹⁾	1.1	1.1	1.09	1.15

1) Including overweight baggage and postal mail.

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

Figure 9.3
Breakdown of Freight Transport (FY2006)



1) Including non-business purpose.

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

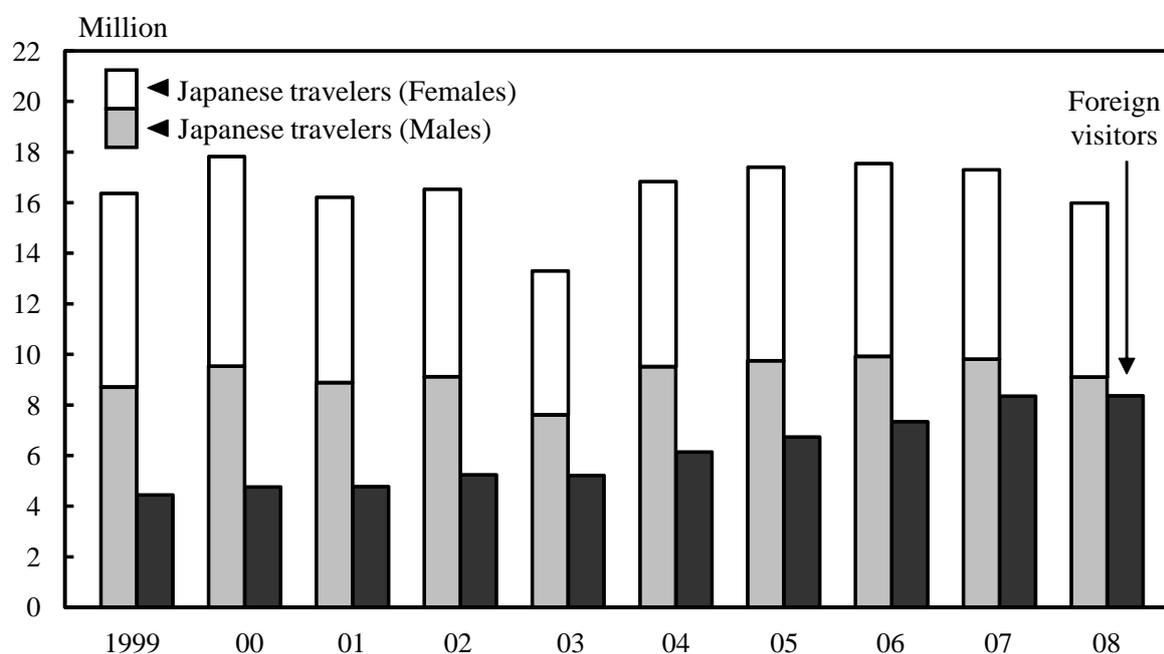
2. International Transport

(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 2008, they transported 16.43 million passengers (down 7.5 percent from the previous year) on international flights, and registered 72.81 billion passenger-kilometers (down 7.5 percent).

The number of Japanese overseas travelers in 2008 dropped from the previous year to 15.99 million (down 7.6 percent). According to the reports on arrivals by tourist offices in countries around the world, the places most visited by Japanese people in 2008 were China, the U.S.A. and the Republic of Korea.

Figure 9.4
Japanese Overseas Travelers and Foreign Visitor Arrivals



Source: Ministry of Justice; Japan National Tourism Organization.

Table 9.4
Japanese Travelers

Country or area of destination	2005		2006		2007	
	Number of arrivals (1,000)	Annual growth (%)	Number of arrivals (1,000)	Annual growth (%)	Number of arrivals (1,000)	Annual growth (%)
China	3,390	1.7	3,746	10.5	3,977	6.2
U.S.A. ¹⁾	3,884	3.6	3,673	-5.4	3,531	-3.8
Korea, Rep. of	2,440	-0.1	2,339	-4.1	2,236	-4.4
Hong Kong SAR	1,211	7.5	1,311	8.3	1,324	1.0
Thailand	1,197	-1.3	1,312	9.6	1,278	-2.6
Taiwan	1,124	26.7	1,161	3.3	1,166	0.4
France	735	14.5	671	-8.7	708	5.4
Germany ²⁾	730	2.1	760	4.1	662	-12.9

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

Source: Japan National Tourism Organization.

Table 9.5
Foreign Visitors

Country or area of origin	2007		2008	
	Number of arrivals (1,000)	Percent distribution	Number of arrivals (1,000)	Percent distribution
Total arrivals	8,347	100.0	8,351	100.0
Korea, Rep. of	2,601	31.2	2,382	28.5
Taiwan	1,385	16.6	1,390	16.6
China	942	11.3	1,000	12.0
U.S.A.	816	9.8	768	9.2
Hong Kong SAR	432	5.2	550	6.6
Australia	223	2.7	242	2.9
U.K.	222	2.7	207	2.5
Thailand	167	2.0	192	2.3
Canada	166	2.0	168	2.0
Singapore	152	1.8	168	2.0

Source: Japan National Tourism Organization.

The number of foreign visitors to Japan was 8.35 million in 2008, almost the same as the previous year. Broken down by country/region, the number of visitors from Asian countries was the highest, totaling 6.15 million persons (up 0.4 percent from the previous year). Among Asian countries, the number of visitors from the Republic of Korea was the highest, amounting to 2.38 million, a figure that accounted for 28.5 percent of the total number of foreign visitors to Japan.

Of the total number of foreign visitors to Japan tourists numbered 6.05 million persons, or 72.4 percent of total foreign visitors. The highest number of tourists came from the Republic of Korea with 1.89 million travelers, followed by Taiwan with 1.26 million travelers.

(2) International Freight Transport

The volume of seaborne foreign transport in 2007 was 833.22 million tons, up 3.8 percent over the previous year. Of this figure, total exports increased by 3.7 percent to 56.70 million tons, and total imports increased by 4.8 percent to 527.47 million tons.

Table 9.6
Seaborne Foreign Transport

Year	(Thousand tons)			
	Total	Exports	Imports	Cross Transport
1990	597,821	32,970	469,612	95,239
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

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

Air-shipped international freight in 2008 totaled 1.31 million tons in terms of volume (down 2.7 percent from the previous year) and 7.45 billion tons in terms of ton-kilometers (down 13.4 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 Sector¹⁾

	(Thousands)			
	1999 ²⁾	2002	2004	2007 ³⁾
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 ⁴⁾	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)

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.

3) 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.

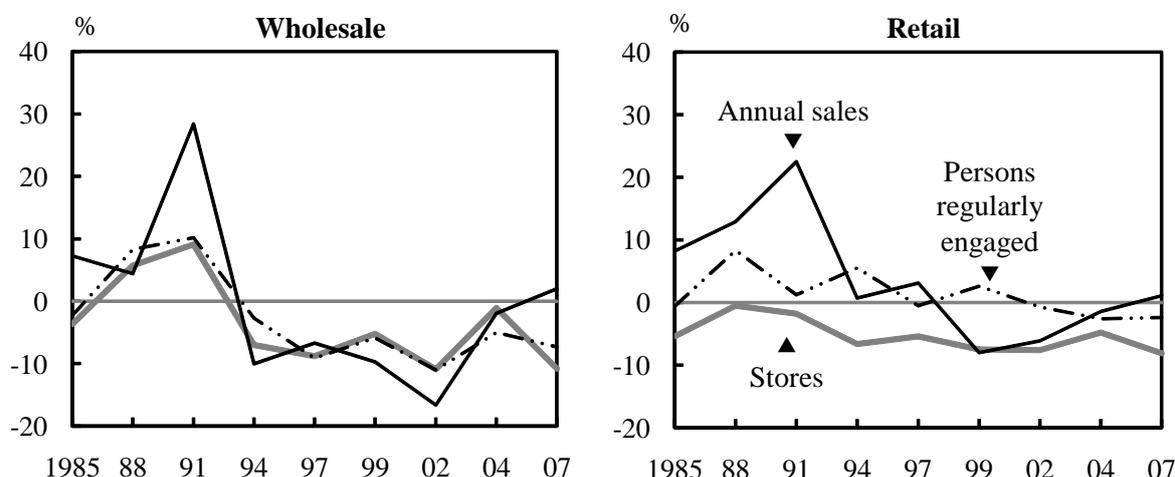
Source: Ministry of Economy, Trade and Industry.

(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.

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.

Figure 10.1
Trends in Wholesale and Retail Trade



Source: Ministry of Economy, Trade and Industry.

Table 10.2
Stores, 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 ¹⁾	11,685	3,623	8,062
Persons regularly engaged	A	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	59	163
Workers dispatched from outside units	C	80	333
Persons regularly engaged and temporary employees dispatched to outside units	D	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.

Table 10.3
Retail Establishments by Sales Form Classification (2007)

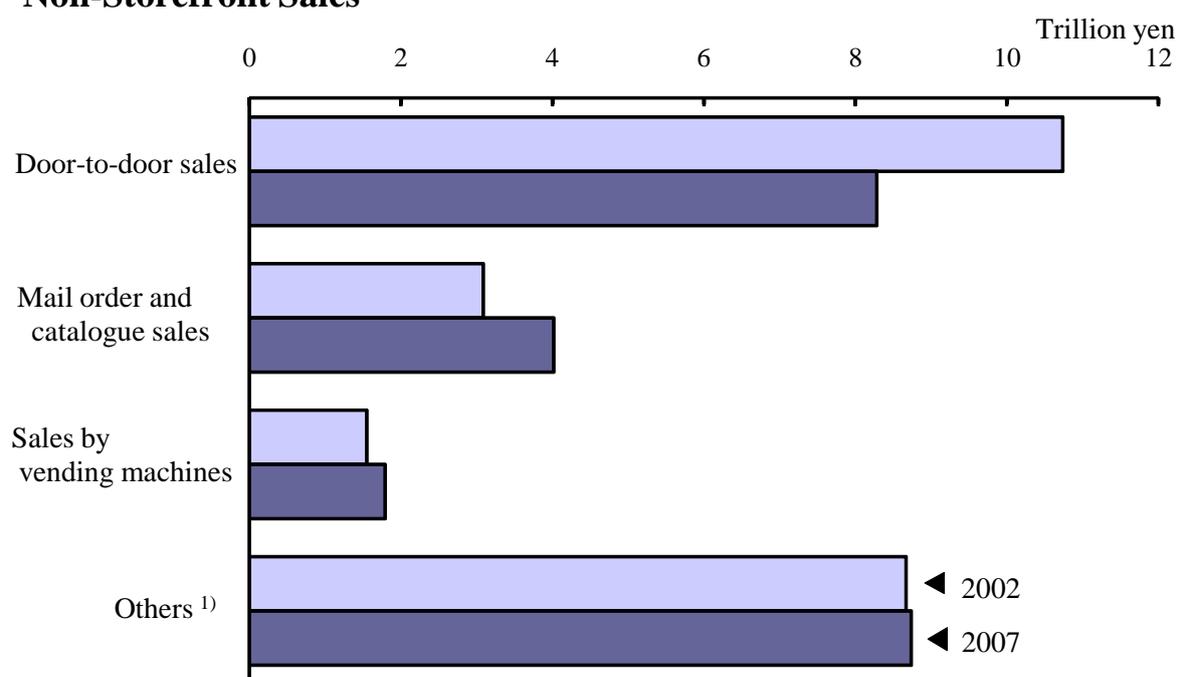
	Stores	Persons engaged	Persons regularly engaged	Annual sales	Sales floor space per store
	(1,000)	(1,000)	(1,000)	(Billion yen)	(m ²)
Total	1,137,859	8,062	7,579	134,705	156
Department stores	271	341	118	7,709	23,630
General merchandise supermarkets .	1,585	387	378	7,447	9,403
Large-scale stores	1,380	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

Source: Ministry of Economy, Trade and Industry.

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 10.4
Food Service Establishments

Size of operation (employed persons)	Establishments				Employed persons ¹⁾			
	2001		2006		2001		2006	
	Number (1,000)	Ratio (%)	Number (1,000)	Ratio (%)	Number (1,000)	Ratio (%)	Number (1,000)	Ratio (%)
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

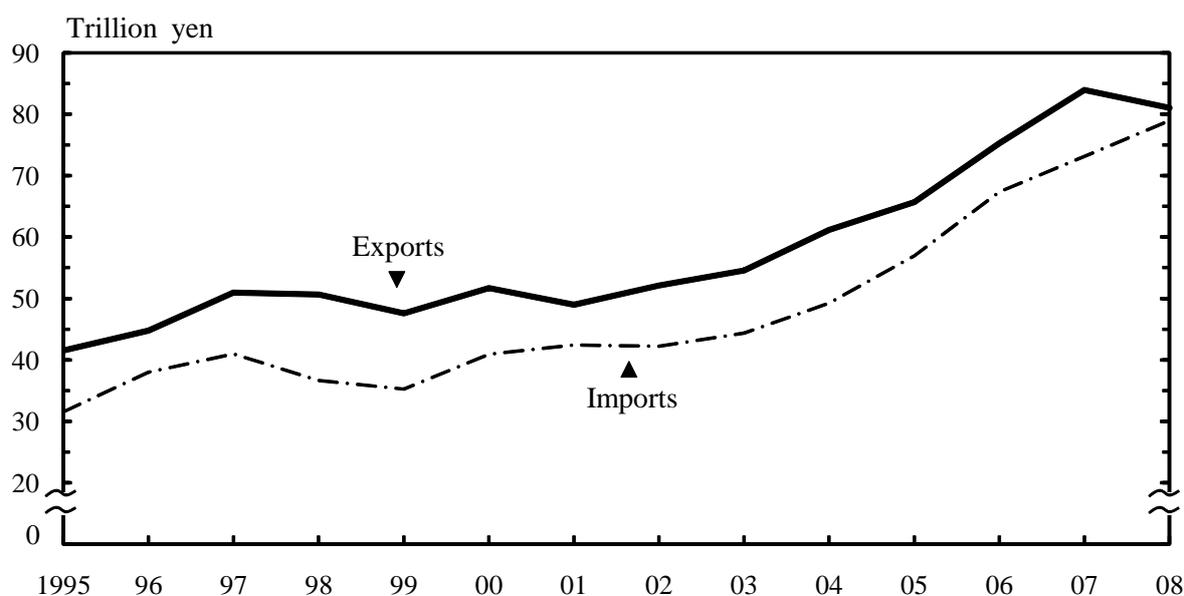
Trade, International Balance of Payments, and International Cooperation

1. Trade

(1) Overview of Trade

Japan has continued to produce a trade surplus since 1981. In terms of Japan's international trade on a customs clearance basis in 2008, exports (in FOB value) showed an annual decrease of 3.5 percent to 81.0 trillion yen, the first decrease in seven years. Imports (in CIF value) grew by 8.0 percent to 79.0 trillion yen, thus increasing for the sixth consecutive year. As a result, Japan's trade surplus decreased for the first time in two years, falling by 80.9 percent from the previous year to 2.1 trillion yen.

Figure 11.1
Foreign Trade



Source: Ministry of Finance.

Table 11.1
Trends in Foreign Trade and Indices of Trade

Year	Value (billion yen)			Indices of trade (2005=100)					
	(Customs clearance basis)			Exports			Imports		
	Exports (FOB)	Imports (CIF)	Balance	Value index	Quantum index ¹⁾	Unit value index	Value index	Quantum index ¹⁾	Unit value index
1999	47,548	35,268	12,280	72.4	79.9	90.6	61.9	76.4	81.0
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

1) Quantum index = Value index / Unit value index × 100

Source: Ministry of Finance.

Japan's 2008 exports decreased by 1.9 percent from the previous year in terms of unit value index (the first decrease in five years), and decreased by 1.5 percent from the previous year in terms of quantum index (the first decrease in seven years).

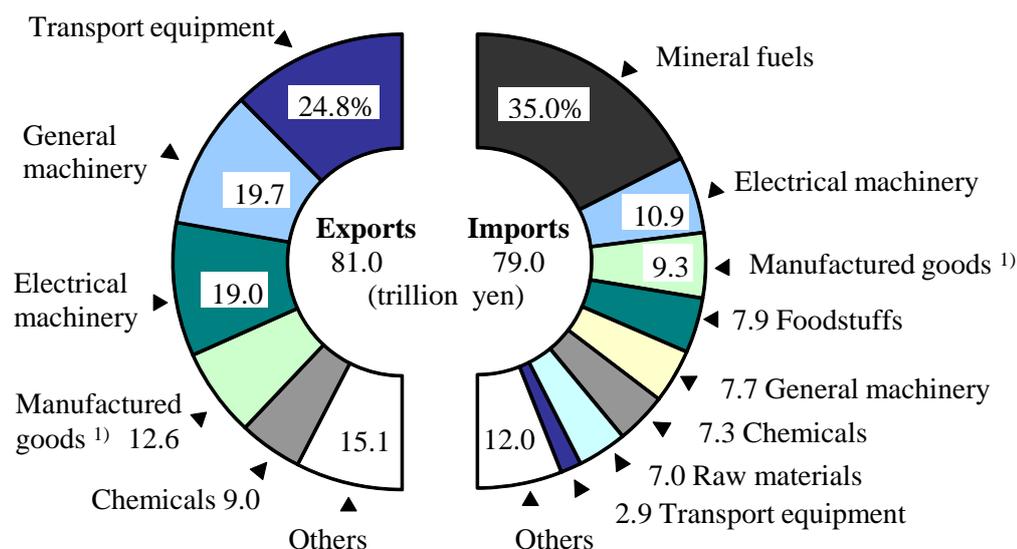
Japan's 2008 imports rose by 8.6 percent from the previous year in terms of unit value index (an increase for the fifth consecutive year), but decreased by 0.7 percent from the previous year in terms of quantum index (a decrease for the second consecutive year).

(2) Trade by Commodity

Japan's 2008 exports totaled 81.0 trillion yen. By item category, transport equipment accounted for 24.8 percent of the total export value, followed by 19.7 percent in general machinery and 19.0 percent in electrical machinery. Motor vehicles, which are in the transport equipment category, constituted 17.0 percent of the total export value, up 1.8 percent in quantity but down 4.1 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 total value of Japan's 2008 imports was 79.0 trillion yen. By item category, mineral fuels accounted for 35.0 percent of the total import value, followed by 10.9 percent in electrical machinery, and 9.3 percent in manufactured goods (iron and steel products, non-ferrous metals, textile yarn and fabrics, etc.). Crude and partially refined petroleum, which are in the mineral fuels category, constituted 20.6 percent of the total import value, up 0.9 percent in quantity and 32.4 percent in value from the previous year. Energy resource imports increased greatly in value in 2008, with crude oil being the foremost example. 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 (2008)



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

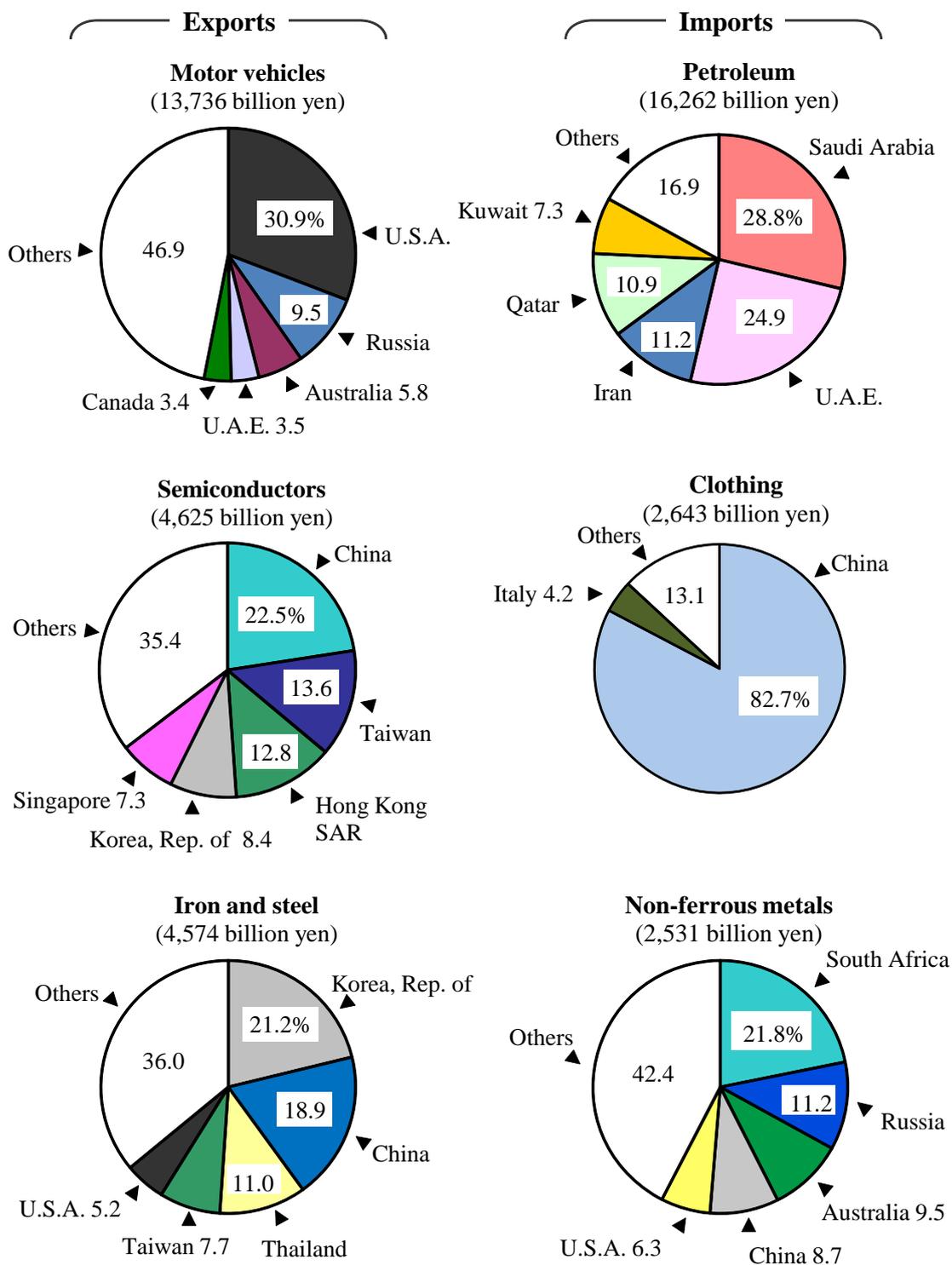
TRADE, INTERNATIONAL BALANCE OF PAYMENTS, AND
INTERNATIONAL COOPERATION

Table 11.2
Value of Exports and Imports, by Principal Commodity

Item	2005	2006	2007	2008	(Billion yen)
					Annual growth (%)
Exports, total	65,657	75,246	83,931	81,018	-3.5
Foodstuffs	319	358	417	403	-3.3
Raw materials	742	900	1,046	1,054	0.7
Mineral fuels	473	645	1,026	1,869	82.1
Chemicals	5,848	6,794	7,745	7,269	-6.2
Plastics	1,716	2,043	2,339	2,232	-4.6
Manufactured goods ¹⁾	7,397	8,674	9,876	10,177	3.0
Iron and steel products	3,037	3,485	4,042	4,574	13.1
General machinery	13,352	14,800	16,631	15,928	-4.2
Power generating machinery	2,186	2,320	2,593	2,509	-3.2
Electrical machinery	14,549	16,076	16,950	15,368	-9.3
Semiconductors and other electronic parts	4,402	4,855	5,243	4,625	-11.8
Transport equipment	15,197	18,244	20,839	20,068	-3.7
Motor vehicles	9,929	12,300	14,317	13,736	-4.1
Others	7,779	8,757	9,400	8,883	-5.5
Scientific and optical instruments	2,478	2,469	2,090	2,024	-3.2
Imports, total	56,949	67,344	73,136	78,955	8.0
Foodstuffs	5,559	5,710	6,041	6,212	2.8
Fish and shellfish	1,562	1,573	1,501	1,453	-3.2
Raw materials	3,505	4,733	5,670	5,538	-2.3
Mineral fuels	14,560	18,657	20,206	27,658	36.9
Petroleum, crude and partly refined	8,823	11,535	12,279	16,262	32.4
Chemicals	4,321	4,909	5,471	5,737	4.9
Manufactured goods ¹⁾	5,417	6,554	7,409	7,336	-1.0
Non-ferrous metals	1,462	2,162	2,619	2,531	-3.3
General machinery	5,661	6,240	6,515	6,074	-6.8
Computers and units thereof	2,066	2,102	1,867	1,796	-3.8
Electrical machinery	7,402	8,645	9,310	8,628	-7.3
Semiconductors and other electronic parts	2,348	2,873	2,852	2,479	-13.1
Transport equipment	2,063	2,259	2,534	2,316	-8.6
Others	8,463	9,637	9,980	9,454	-5.3
Clothing and clothing accessories	2,469	2,754	2,796	2,643	-5.5

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

Figure 11.3
Japan's Major Export and Import Commodities (2008)



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.

Table 11.3

Trends in Exports and Imports by Country/Region

(Billion yen)

Year	Total	Asia	China	Korea, Rep. of	Taiwan	U.S.A.	EU 27 ¹⁾	Middle East	Oceania
Exports from Japan									
2004	61,170	29,637	7,994	4,785	4,542	13,731	9,462	1,565	1,603
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
Imports to Japan									
2004	49,217	22,224	10,199	2,383	1,805	6,763	6,209	6,782	2,457
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

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.

(A) Trade with U.S.A.

Japan's 2008 trade balance with the U.S.A. was 6.2 trillion yen in surplus, smaller than the previous year (down 27.8 percent from the previous year). Exports (in FOB value) amounted to 14.2 trillion yen (down 15.9 percent, recording a decrease for the second consecutive year); major contribution for the drop was in transport equipment and general machinery. Imports (in CIF value) totaled 8.0 trillion yen (down 3.7 percent), marking the first drop in four years; the decrease was due mainly to the contributions in electrical machinery and general machinery.

(B) Trade with EU

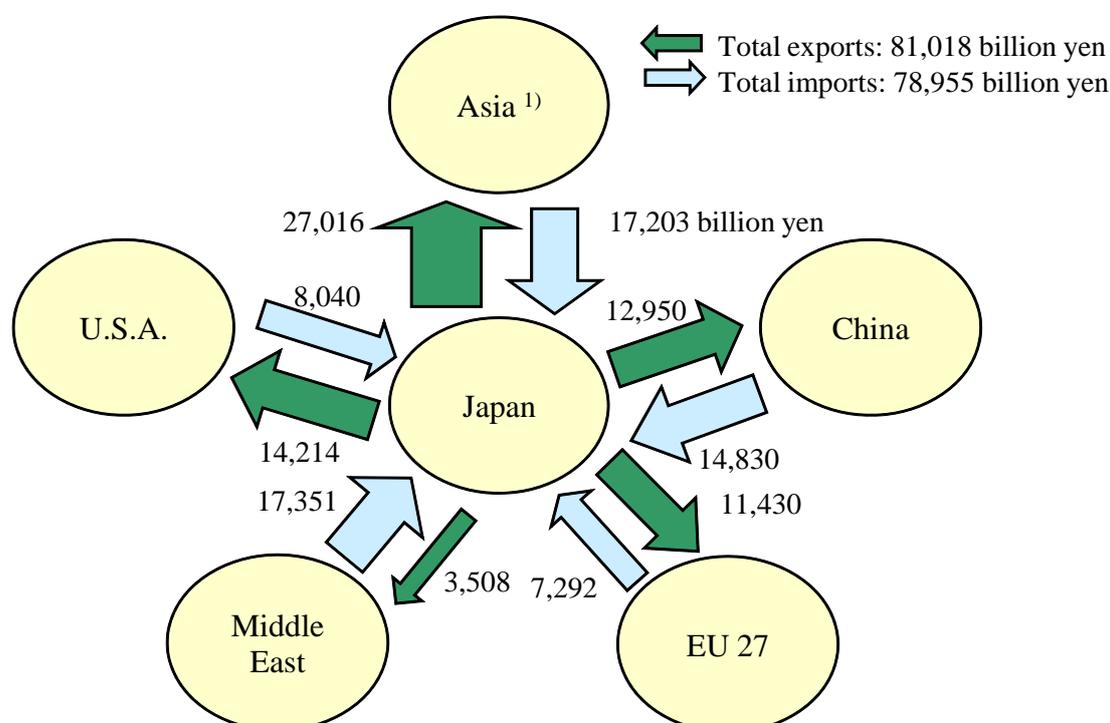
Japan's 2008 trade balance with the 27 member countries of the EU registered a narrowed surplus of 4.1 trillion yen (down 12.6 percent). Exports (in FOB value) totaled 11.4 trillion yen (down 7.8 percent), due

mainly to the contributions for the drop in general machinery and transport equipment. Imports (in CIF value) totaled 7.3 trillion yen (down 4.8 percent), because of contributions for the drop in general machinery and transport equipment, etc.

(C) Trade with Asia

Japan's 2008 trade balance with Asia resulted in 7.9 trillion yen in surplus, the first decrease in two years (down 10.2 percent). Exports (in FOB value) totaled 40.0 trillion yen (down 1.1 percent), marking the first drop in seven years; this was mainly due to the contributions for the drop in electrical machinery and chemicals. Meanwhile, imports (in CIF value) amounted to 32.0 trillion yen (up 1.5 percent), still on the continuing upward trend in recent years; this was mainly attributed to the growth in mineral fuels and chemicals.

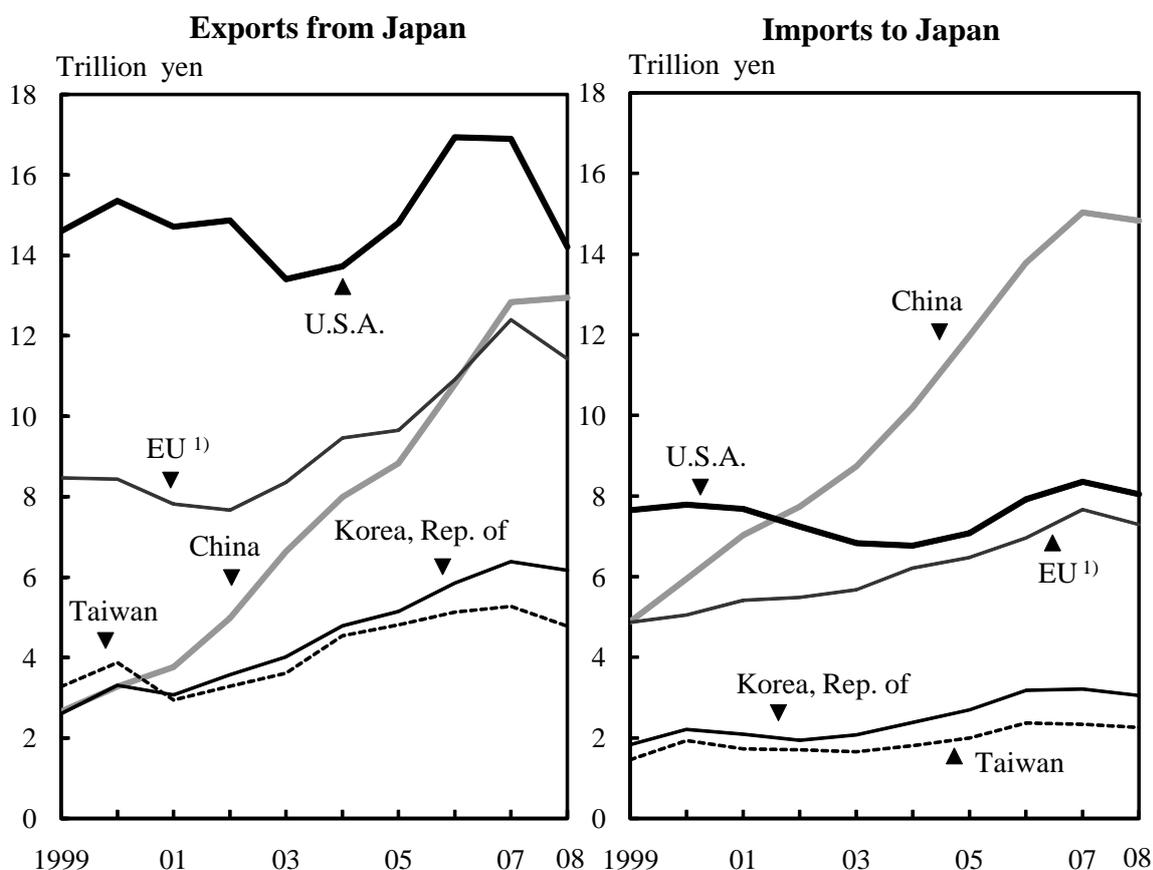
Figure 11.4
Japan's Foreign Trade by Country/Region (2008)



1) Excluding China
Source: Ministry of Finance.

Of particular note, imports from mainland China have expanded so dramatically in recent years that China replaced the U.S.A. in 2002 as the largest exporter to Japan; imports from China in 2008 was 14.8 trillion yen. In 2007, China replaced the U.S.A. as Japan's biggest trading partner with its combined value of imports and exports, even though the exports value to China was smaller than that to the U.S.A.

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 2008, the surplus narrowed for the first time in three years to 16.4 trillion yen, down 33.9 percent from the previous year. A breakdown of Japan's current account showed that its trade balance was 4.0 trillion yen, down 67.3 percent from the previous year and marking the first surplus decrease in two years. Also shown is that the services balance was 2.1 trillion yen in deficit, the first decrease in deficit in two years. The income balance decreased by 3.0 percent over the previous year to 15.8 trillion yen, the first decrease in surplus in six years.

On the other hand, the balance of the capital and financial account registered the fourth consecutive year of deficit (excess outflow), being 18.4 trillion yen in the red.

Table 11.4
International Balance of Payments

Item	2005	2006	2007	2008
	(Billion yen)			
Current account	18,259.1	19,848.8	24,793.8	16,379.8
Goods and services	7,693.0	7,346.0	9,825.3	1,889.9
Trade balance	10,334.8	9,464.3	12,322.3	4,027.8
Exports	62,631.9	71,630.9	79,725.3	77,334.9
Imports	52,297.1	62,166.5	67,403.0	73,307.1
Services	-2,641.8	-2,118.3	-2,497.1	-2,137.9
Income	11,381.7	13,745.7	16,326.7	15,841.5
Current transfers	-815.7	-1,242.9	-1,358.1	-1,351.5
Capital and financial account ¹⁾	-14,006.8	-12,466.5	-22,538.3	-18,389.5
Financial account	-13,457.9	-11,913.2	-22,065.3	-17,831.2
Direct investment	-4,740.0	-6,602.5	-6,005.4	-10,707.4
Portfolio investment	-1,070.0	14,796.1	8,251.5	-29,188.9
Financial derivatives	-802.3	283.5	324.9	2,456.2
Other investment	-6,845.6	-20,390.3	-24,636.2	19,608.9
Capital account	-549.0	-553.3	-473.1	-558.3
Changes in reserve assets ¹⁾	-2,456.2	-3,719.6	-4,297.4	-3,200.1
Errors and omissions	-1,796.0	-3,662.7	2,041.9	5,209.8

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 2008 amounted to 519.2 trillion yen, while its foreign liabilities (the liabilities of residents of Japan to non-residents) was 293.7 trillion yen. As a result, Japan's net foreign assets (foreign assets minus foreign liabilities) reached 225.5 trillion yen, marking the first drop in three years.

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

(Billion yen)						
Item	2003	2004	2005	2006	2007	2008
Assets	385,538	433,864	506,191	558,106	610,492	519,179
Liabilities	212,720	248,067	325,492	343,024	360,271	293,671
Net assets	172,818	185,797	180,699	215,081	250,221	225,508

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 rapidly from 1999, reaching \$1,030.6 billion at the end of 2008. This represented an increase of \$57.3 billion (5.9 percent) from the end of the previous year.

Table 11.6
Reserve Assets ¹⁾

(Million U.S. dollars)					
End of year	Total	Foreign currency ²⁾	Reserve position in IMF	SDRs	Gold ³⁾
2002	469,728	451,458	7,203	2,525	8,542
2003	673,529	652,790	7,733	2,765	10,241
2004	844,543	824,264	6,701	2,802	10,776
2005	846,897	828,813	2,878	2,585	12,621
2006	a) 895,320	874,596	1,933	2,812	15,639
2007	a) 973,365	947,987	1,395	3,034	20,580
2008	a) 1,030,647	1,003,300	2,659	3,033	21,281

1) End of year. 2) Including securities in market value. 3) Market value.

a) 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 89.51 yen in January 2009. As of the end of June 2009, the rate was 95.56 yen.

Figure 11.6
Yen Exchange Rate against the U.S. Dollar



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
Net Flow of Development Cooperation¹⁾

	(Million U.S. dollars)				
Item	1995	2000	2005	2006	2007
Total value	42,295	11,423	23,259	26,179	30,315
Official flows	20,033	8,467	10,726	13,574	7,890
Official development assistance (ODA)	14,489	13,508	13,147	11,136	7,679
Bilateral official development assistance	10,419	9,768	10,406	7,262	5,778
Grants	6,298	5,678	9,195	7,650	5,983
Grants-in-aid	2,876	2,100	6,524	5,047	3,414
Technical cooperation	3,422	3,578	2,671	2,603	2,569
Loans, etc.	4,120	4,090	1,212	-389	-205
Contributions to multilateral institutions, etc. ...	4,071	3,740	2,740	3,874	1,901
Other official flows (OOF)	5,544	-5,041	-2,421	2,438	211
Official export credits (over one year)	981	-1,239	-1,202	-1,305	-772
Direct investment finance, etc.	3,541	-3,709	-222	4,038	543
Concessional lending to multilateral institutions, etc.	1,021	-93	-997	-294	441
Private flows at market terms (PF)	22,046	2,725	12,278	12,290	21,979
Private export credits (over one year)	3,054	-799	-3,433	275	2,586
Direct investments	9,398	2,874	14,472	14,144	18,037
Bilateral investment in securities, etc.	9,543	702	1,158	-1,201	3,251
Concessional lending to multilateral institutions, etc.	50	-52	81	-928	-1,896
Grants by private voluntary agencies	216	231	255	315	446
ODA as percentage of GNI (%)	a) 0.28	0.28	0.28	0.25	* 0.17
ODA as percentage of GNI (DAC average) (%)	a) 0.27	0.22	0.33	0.31	* 0.28

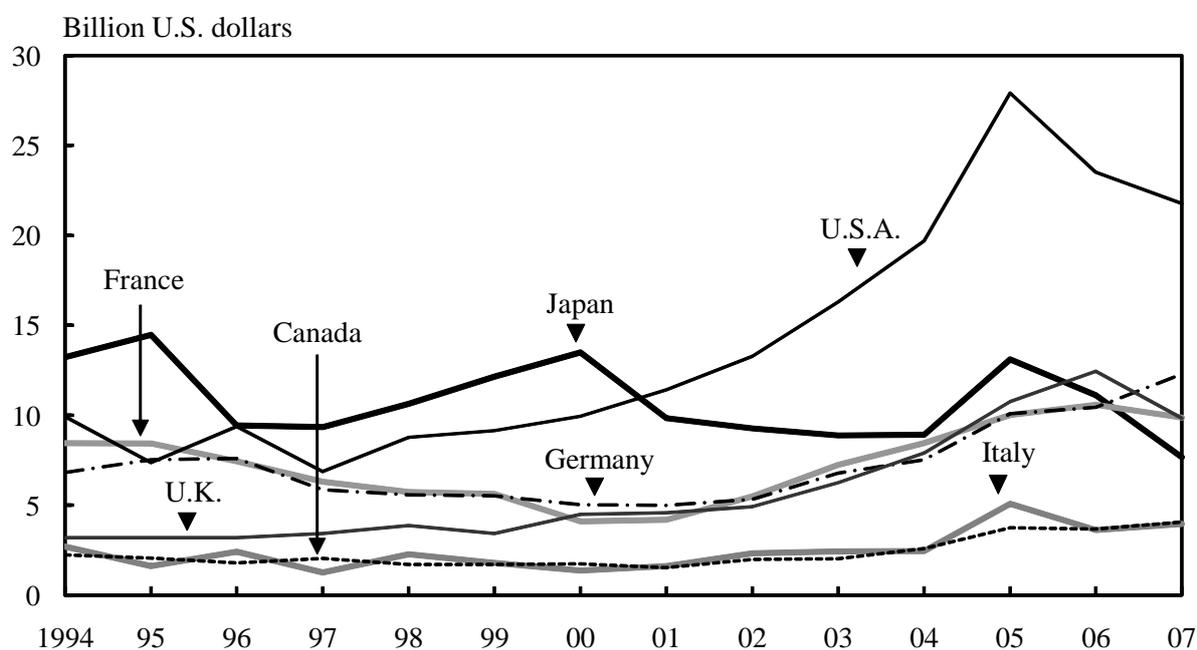
1) Net disbursement at current prices. A minus sign indicates that the amount recovered was greater than the amount lent. a) ODA as percentage of GNP (%).

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, however, Japan's ODA budget has been declining because of the country's severe economic and financial situation. Its 2007 ODA spending (on the basis of net disbursement at current prices) was \$7.7 billion, down 31.0 percent from the previous year. Reasons include smaller contributions to multilateral institutions, etc. and the absence of any major debt relief, such as that granted to Nigeria in 2006.

In 2007, the 22 member countries of the Development Assistance Committee (DAC) of the OECD provided \$103.5 billion in ODA. Of this total, Japan's ODA contribution accounted for approximately 7 percent, making Japan the fifth-largest contributor behind the U.S.A., Germany, France and the U.K. The ratio of Japan's ODA to Gross National Income (GNI) was 0.17 percent, or a decrease of 0.08 percentage points compared with that of the previous year.

Figure 11.7
Trends in ODA by Country ¹⁾



1) Net disbursement at current prices.

Source: Ministry of Foreign Affairs; OECD.

Of the \$7.7 billion in ODA provided by Japan in 2007, \$5.8 billion or 75.2 percent was bilateral ODA (down 20.4 percent year-on-year), and \$1.9 billion or 24.8 percent was ODA contributed through multilateral institutions (down 50.9 percent).

Bilateral ODA provided in 2007 consisted of \$3.4 billion in grants-in-aid, \$2.6 billion in technical cooperation, and negative \$0.2 billion in loans, etc. (negative value indicates a larger amount of repayment received in 2007 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: Africa, 29.1 percent; Asia, 28.0 percent; Middle East, 16.2 percent; Latin America, 3.9 percent; Europe, 1.9 percent; and Oceania, 1.2 percent.

Table 11.8

Regional Distribution of Bilateral ODA ¹⁾

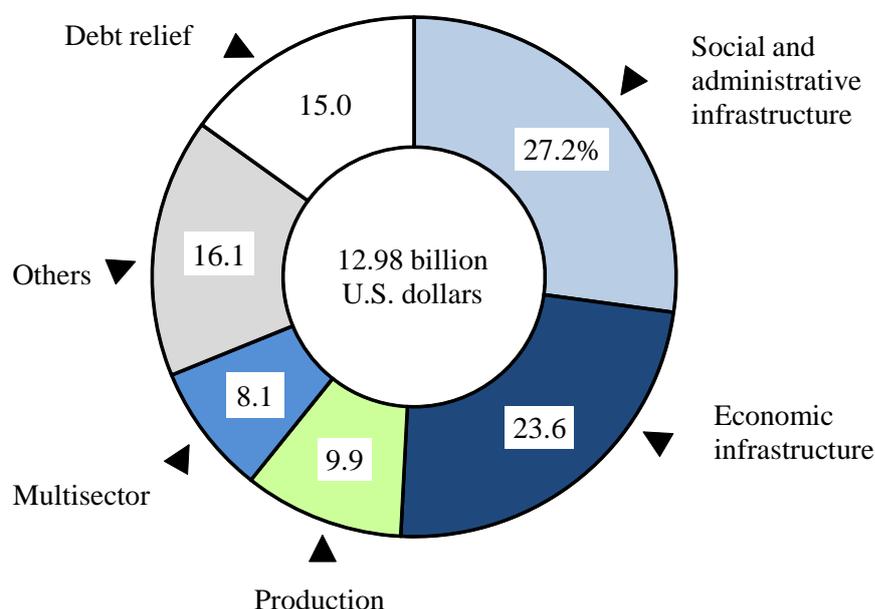
Region	(Million U.S. dollars)					
	1995	2000	2004	2005	2006	2007
Total	10,557	9,640	5,954	10,464	7,430	5,840
Asia	5,745	5,284	2,545	3,841	1,974	1,633
ASEAN	2,229	3,126	897	1,968	686	612
Middle East	721	727	1,029	3,477	1,049	949
Africa	1,333	970	649	1,139	2,533	1,701
Latin America	1,142	800	309	409	431	226
Oceania	160	151	42	94	76	70
Europe	153	118	141	309	220	109
Unspecified	1,303	1,592	1,240	1,194	1,146	1,152

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

Source: Ministry of Foreign Affairs.

Bilateral ODA in 2007 (including aid to Eastern European countries and graduated countries) was broken down by purpose (on a commitment basis) as follows: 27.2 percent for improving the social and administrative infrastructure (including education, water supply and sanitation), followed in descending order by economic infrastructure, and then the production sector.

Figure 11.8
Distribution of Bilateral ODA by Purpose (2007) ¹⁾



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

In addition to the monetary assistance described above, Japan has promoted the development of human resources and transfer of technology through its ODA activities. This plays a vital role not only to help nation building of developing countries but also to further bilateral understanding.

Table 11.9
Number of Persons Involved in Technical Cooperation
by Type and Program ¹⁾

Type of cooperation	FY2000	FY2004	FY2005	FY2006	FY2007
Total	31,968	33,856	37,291	42,546	34,216
Trainees received	17,513	20,089	24,504	30,334	21,280
Dispatched					
Experts	3,381	4,340	3,488	4,541	4,940
Research team	9,428	7,548	6,862	5,747	6,104
Japan Overseas					
Cooperation Volunteers	1,370	1,422	1,804	1,529	1,482
Other volunteers	276	457	633	395	410

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 66.50 million people in Japan in 2008, down 190,000 (0.3 percent) from the previous year and was the first decrease in four years.

Table 12.1
Population by Labor Force Status

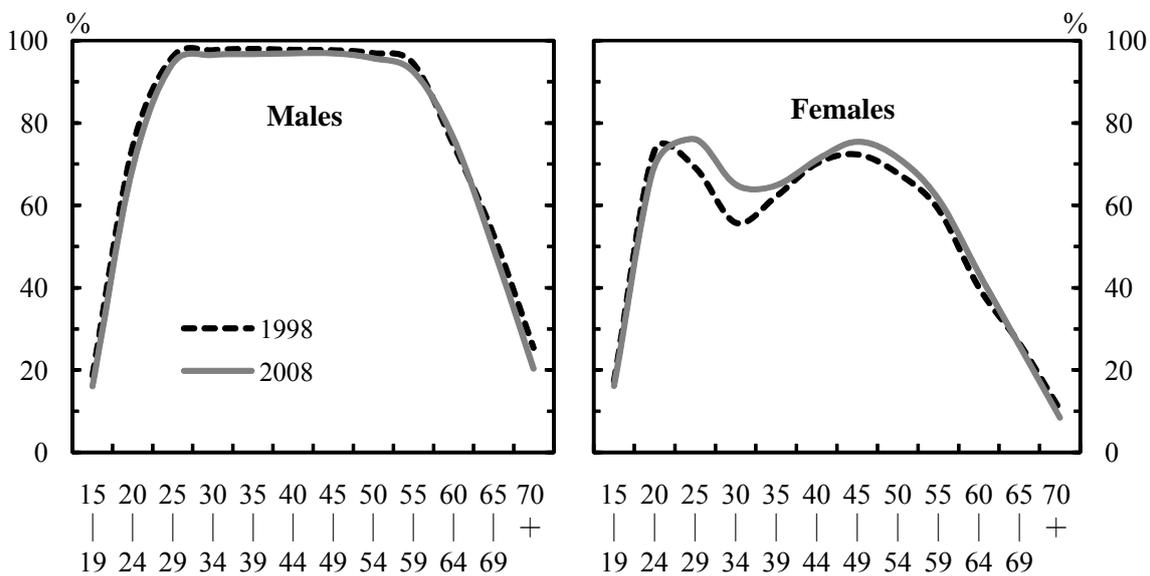
Year	Population aged 15 years and over	Labor force			Not in labor force	Unemployment rate (%)
		Total	Employed	Unemployed		
(Thousands)						
Total						
1990	100,890	63,840	62,490	1,340	36,570	2.1
1995	105,100	66,660	64,570	2,100	38,360	3.2
2000	108,360	67,660	64,460	3,200	40,570	4.7
2005	110,070	66,500	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
Males						
1990	49,110	37,910	37,130	770	10,950	2.0
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
Females						
1990	51,780	25,930	25,360	570	25,620	2.2
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

Source: Statistics Bureau, MIC.

The 2008 labor force participation rate (rate of the labor force to the population aged 15 years and over) was 60.2 percent (down 0.2 percentage points from the previous year). Observed by sex, the rate was 72.8 percent for men (down 0.3 percentage points) and 48.4 percent for women (down 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 ten years ago (1998), the participation rate of women in the 25-29 age group has increased by 6.9 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 9.3 percentage points. There has thus been a noticeable change in the M-shaped curve, which has become flatter over the decade.

Figure 12.1
Labor Force Participation Rate by Sex



Source: Statistics Bureau, MIC.

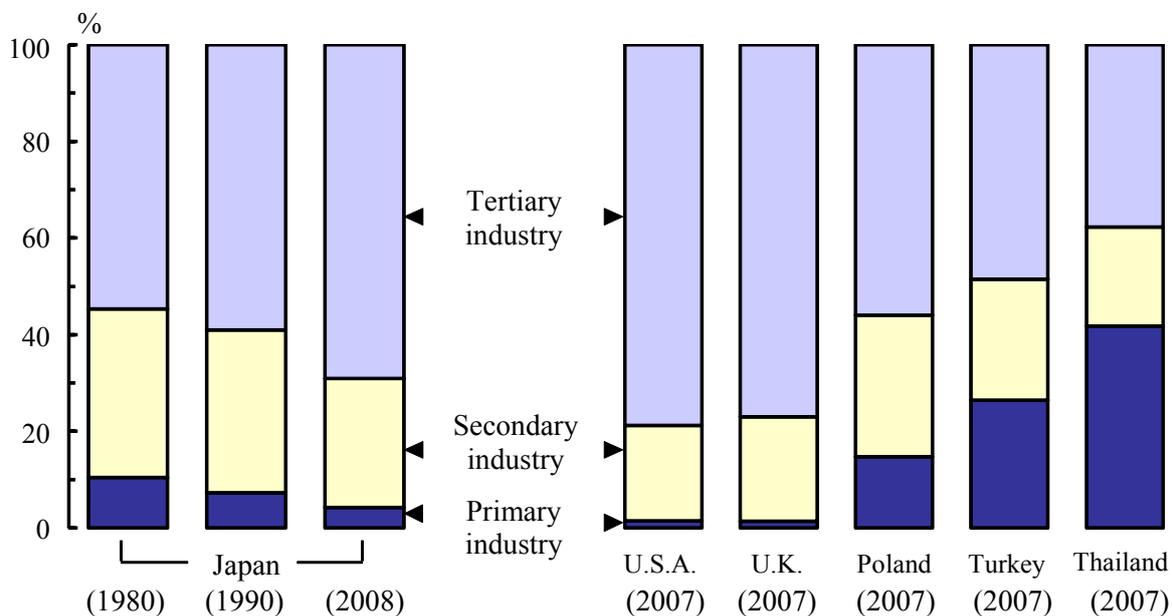
2. Employment

The number of employed persons in Japan had declined continuously since 1998; however, in 2004 it began to increase. In 2008, the number of employed persons fell from 64.12 million (58.1 percent of the population aged 15 years and over) in the previous year to 63.85 million (57.8 percent), marking the first drop in five years.

(1) Employment by Industry

In 2008, the primary industry accounted for 4.2 percent of employment; the secondary industry, 26.4 percent; and the tertiary industry, 68.2 percent.

Figure 12.2
Structure of Employment by Country



Source: Statistics Bureau, MIC; International Labour Organization.

Table 12.2
Employment by Industry

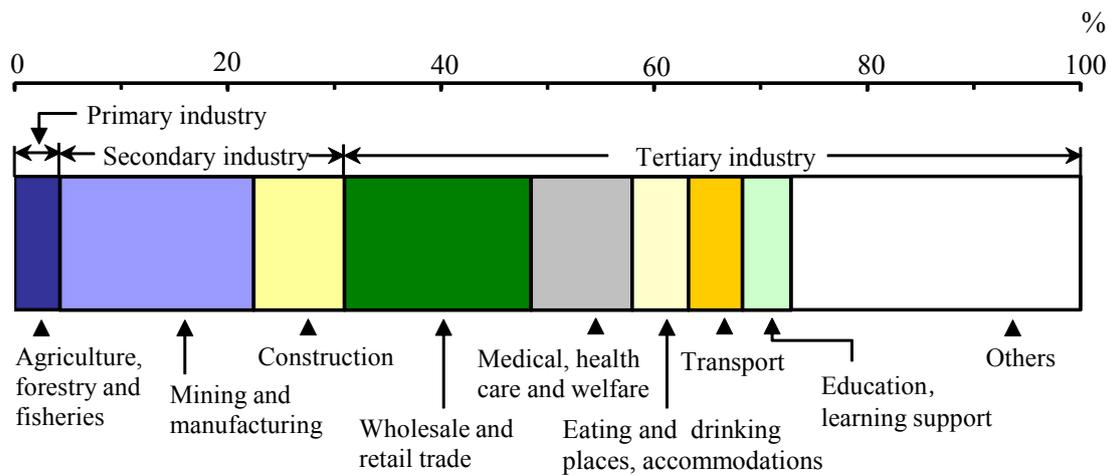
Industries	2004	2005	2006	2007	2008	(Thousands)	
						Percentage	
						Males	Females
Total ¹⁾	63,290	63,560	63,820	64,120	63,850	58.4	41.6
Primary industry	2,860	2,820	2,720	2,720	2,680	58.6	41.4
Agriculture and forestry	2,640	2,590	2,500	2,510	2,450	57.1	42.9
Fisheries	220	230	220	210	230	73.9	26.1
Secondary industry	17,380	17,130	17,230	17,210	16,840	74.5	25.5
Mining	40	30	30	40	30	100.0	0.0
Construction	5,840	5,680	5,590	5,520	5,370	85.5	14.5
Manufacturing	11,500	11,420	11,610	11,650	11,440	69.2	30.8
Tertiary industry	42,360	42,850	43,180	43,420	43,570	52.2	47.8
Electricity, gas, heat supply and water	310	350	360	330	320	90.6	9.4
Information and communications	1,720	1,760	1,810	1,970	2,090	74.8	25.2
Transport	3,230	3,170	3,240	3,230	3,200	82.5	17.5
Wholesale and retail trade	11,230	11,220	11,130	11,130	11,050	49.4	50.6
Finance and insurance	1,590	1,570	1,550	1,550	1,640	48.8	51.2
Real estate	710	750	790	850	830	62.7	37.3
Eating and drinking places, accommodations	3,470	3,430	3,370	3,420	3,340	40.9	59.1
Medical, health care and welfare ..	5,310	5,530	5,710	5,790	5,980	24.1	75.9
Education, learning support	2,840	2,860	2,870	2,840	2,880	45.0	55.0
Compound services	810	760	750	720	570	61.4	38.6
Services, n.e.c.	8,810	9,160	9,380	9,330	9,440	56.1	43.9
Government, n.e.c.	2,330	2,290	2,220	2,260	2,230	77.1	22.9

1) Including "Industries unable to classify."

Source: Statistics Bureau, MIC.

As the Japan Standard Industrial Classification (JSIC) was revised in 2002, a strict comparison cannot be made between the figures for 2003 and later and those for 2002 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 declined again in 2008.

Figure 12.3
Employment by Industry (2008)



Source: Statistics Bureau, MIC.

In the tertiary industry, employment increased from the previous year by 190,000 in the "medical, health care and welfare" sector and by 110,000 in the sector of "services, not elsewhere classified." Meanwhile, a fall was marked in the "wholesale and retail trade" and the "eating and drinking places, accommodations" sectors, both by 80,000 each.

Depending on the industrial sector, a difference was seen in the employment tendency between men and women. The percentage of male employment was the highest in "electricity, gas, heat supply and water" (90.6 percent), followed by "construction" (85.5 percent) in 2008. Meanwhile, female employment was the highest in "medical, health care and welfare" (75.9 percent), followed by "eating and drinking places, accommodations" (59.1 percent) and "education, learning support" (55.0 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 400,000 from the previous year. 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 12.3
Employment by Occupation

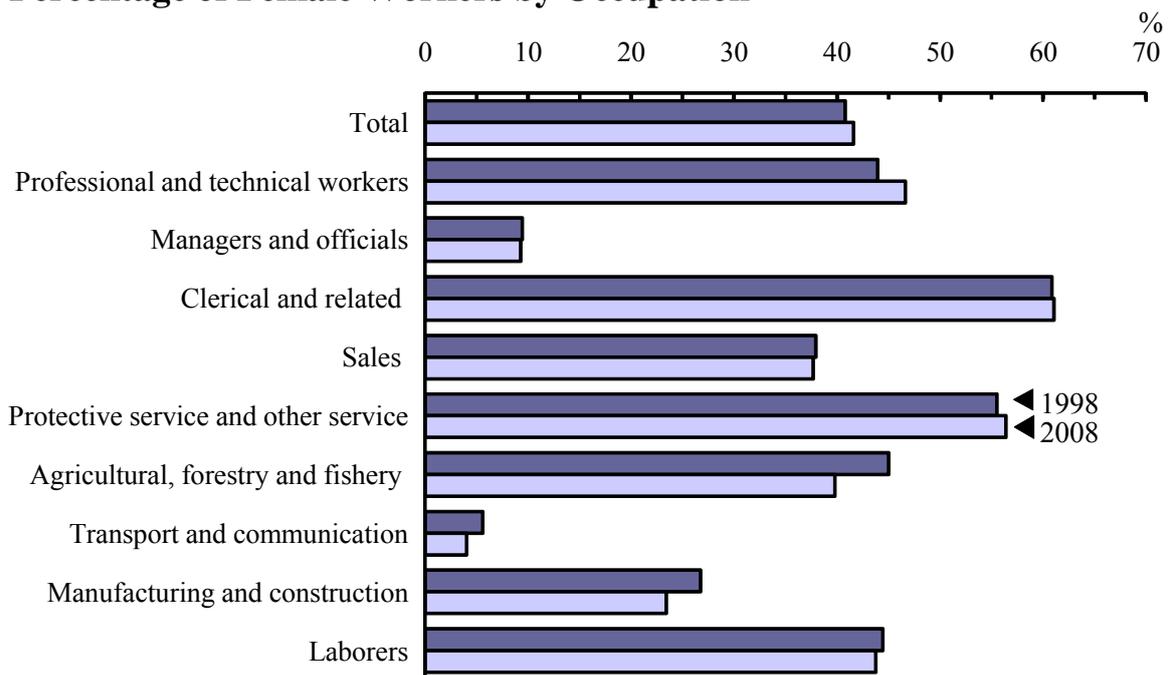
Occupation						(Thousands)	
	1995	2000	2005	2007	2008	Percentage	
						Males	Females
Total ¹⁾	64,570	64,460	63,560	64,120	63,850	58.4	41.6
Professional and technical workers	7,900	8,560	9,370	9,380	9,500	53.4	46.6
Managers and officials	2,360	2,060	1,890	1,730	1,720	90.7	9.3
Clerical and related workers	12,520	12,850	12,470	12,620	12,920	38.9	61.1
Sales workers	9,450	9,110	8,920	8,880	8,700	62.3	37.7
Protective service and other service workers	6,100	6,770	7,570	7,870	7,890	43.5	56.5
Agricultural, forestry and fishery workers	3,630	3,210	2,790	2,690	2,640	60.1	39.9
Workers in transport and communication	2,370	2,210	2,040	2,050	1,990	96.0	4.0
Craftsmen and manufacturing and construction workers	16,870	15,800	14,160	14,410	14,010	76.6	23.4
Laborers	3,100	3,470	3,630	3,760	3,770	56.2	43.8

1) Including "Labor force status not reported."

Source: Statistics Bureau, MIC.

In 2008, women were particularly prominent among "clerical and related workers" (61.1 percent) and "protective service and other service workers" (56.5 percent). On the other hand, the percentage of women was particularly low among "managers and officials" and "workers in transport and communication."

Figure 12.4
Percentage of Female Workers by Occupation

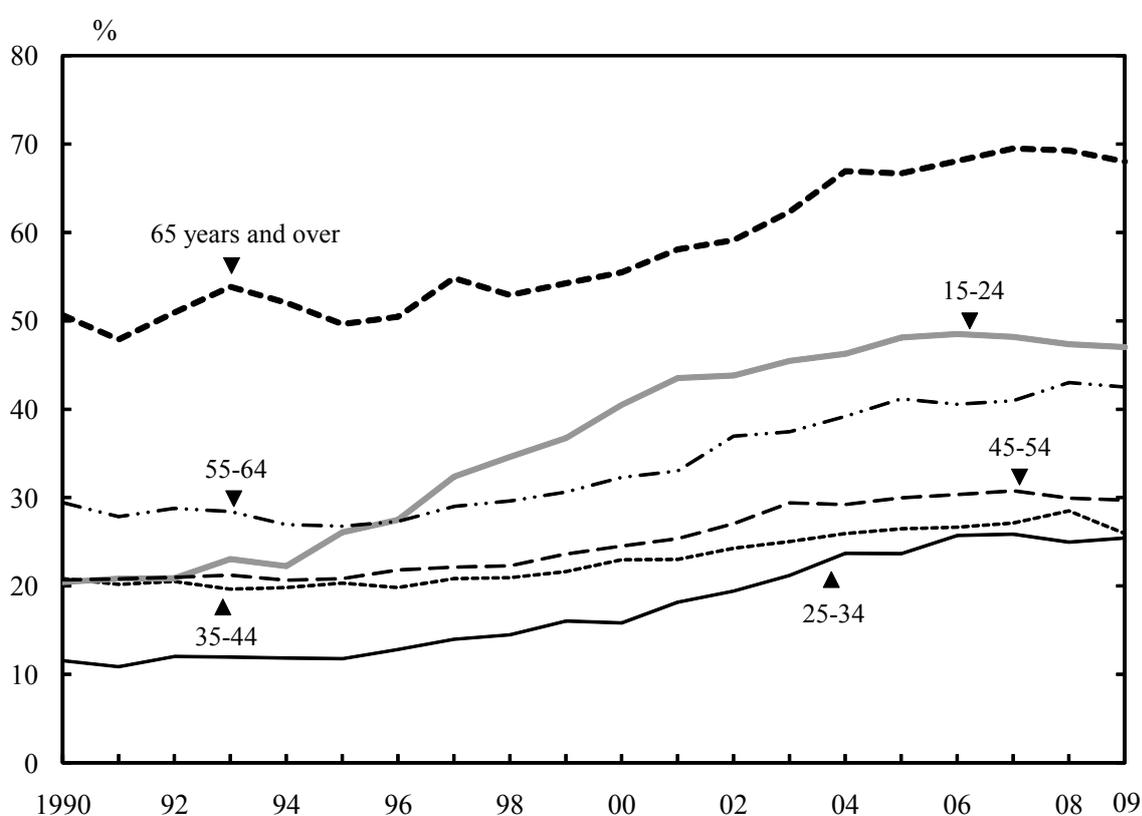


Source: Statistics Bureau, MIC.

(3) Employment by Employment Pattern

Observed by working patterns in Japan, the ratio of regular staff has been on a declining trend since the 1980s, while that of non-regular staff, including part-time workers and dispatched workers, has increased. The latter figure soared in younger age groups from the mid-1990s to the beginning of the 2000s.

Figure 12.5
Percentage of Non-Regular Staff by Age Group ¹⁾



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 2008, there were 51.59 million employees (excluding company executives), of whom 17.60 million, or 34.1 percent, were non-regular staff. The ratio of non-regular staff among all male employees was 19.2 percent, while the corresponding ratio for females was 53.6 percent, revealing a large difference between the sexes.

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

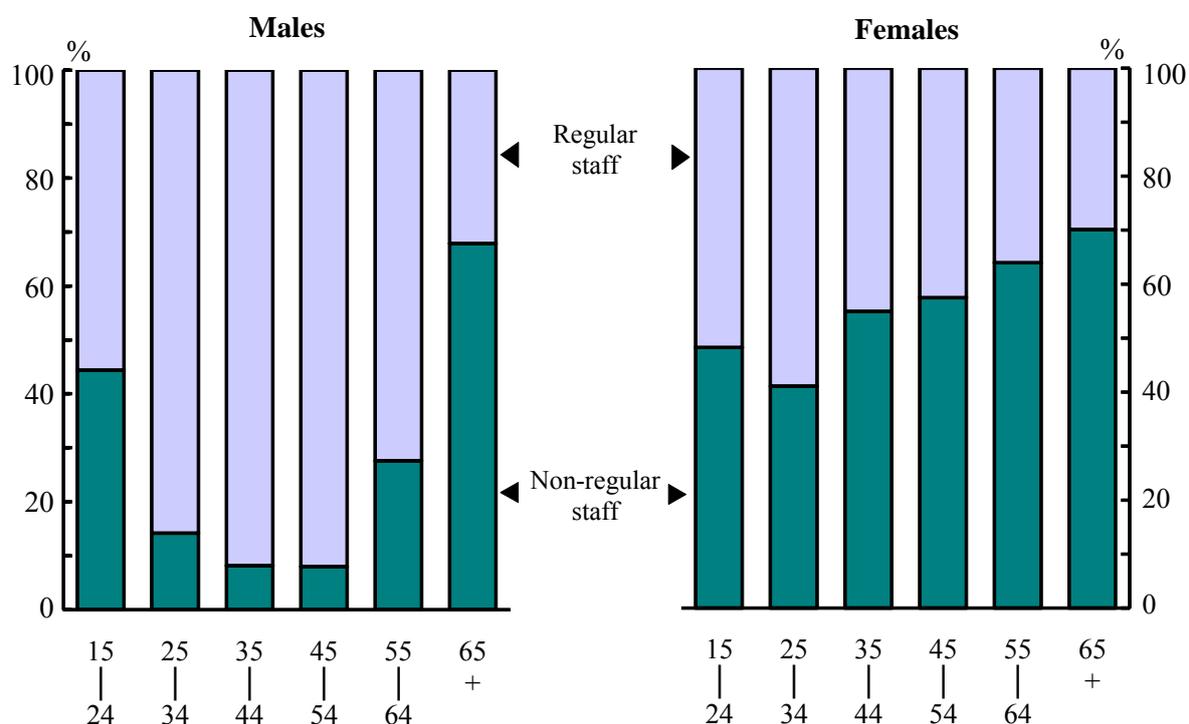
Table 12.4
Employment by Employment Pattern (2008)

	Employees ¹⁾		(Thousands)	
	Regular staff	Percentage	Non-regular staff	Percentage
Total	51,590	65.9	17,600	34.1
Males	29,170	80.8	5,590	19.2
Females	22,420	46.4	12,020	53.6

1) Excluding company executives.

Source: Statistics Bureau, MIC.

Figure 12.6
Employment Pattern by Sex and Age (2008)



Source: Statistics Bureau, MIC.

Such a diversification in employment patterns is attributable to businesses changing the proportion of regular staff to non-regular staff 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.

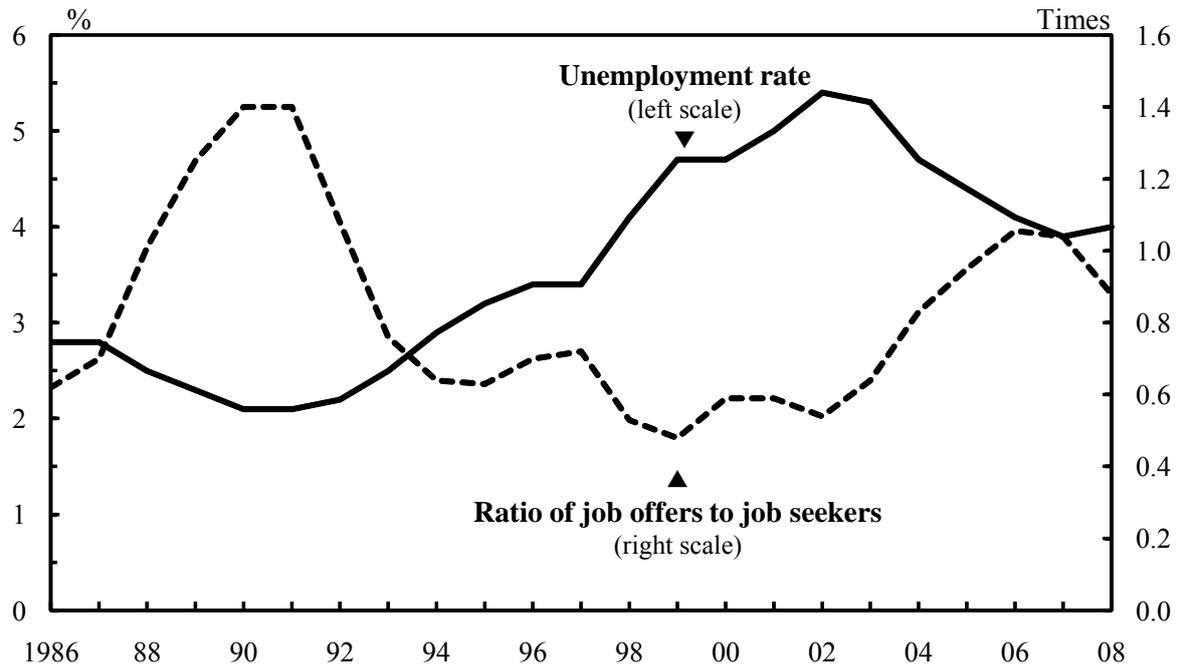
The employment conditions for new graduates have become tougher since 2008, when the economy started slowing down, bringing down the employment rate among March 2009 graduates to a level lower than the previous year.

3. Unemployment

In 2008 the unemployed numbered 2.65 million persons, recording the first increase in six years. The unemployment rate was 4.0 percent, up 0.1 percentage point from the previous year. This upward trend has continued in 2009, with the unemployment rate for May 2009 rising to 5.2 percent (a seasonally adjusted figure).

The ratio of job offers to job seekers marked 1.08 in December 2006 when it peaked out. It has been on a falling trend since then, marking 0.44 in May 2009 (a seasonally adjusted figure).

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

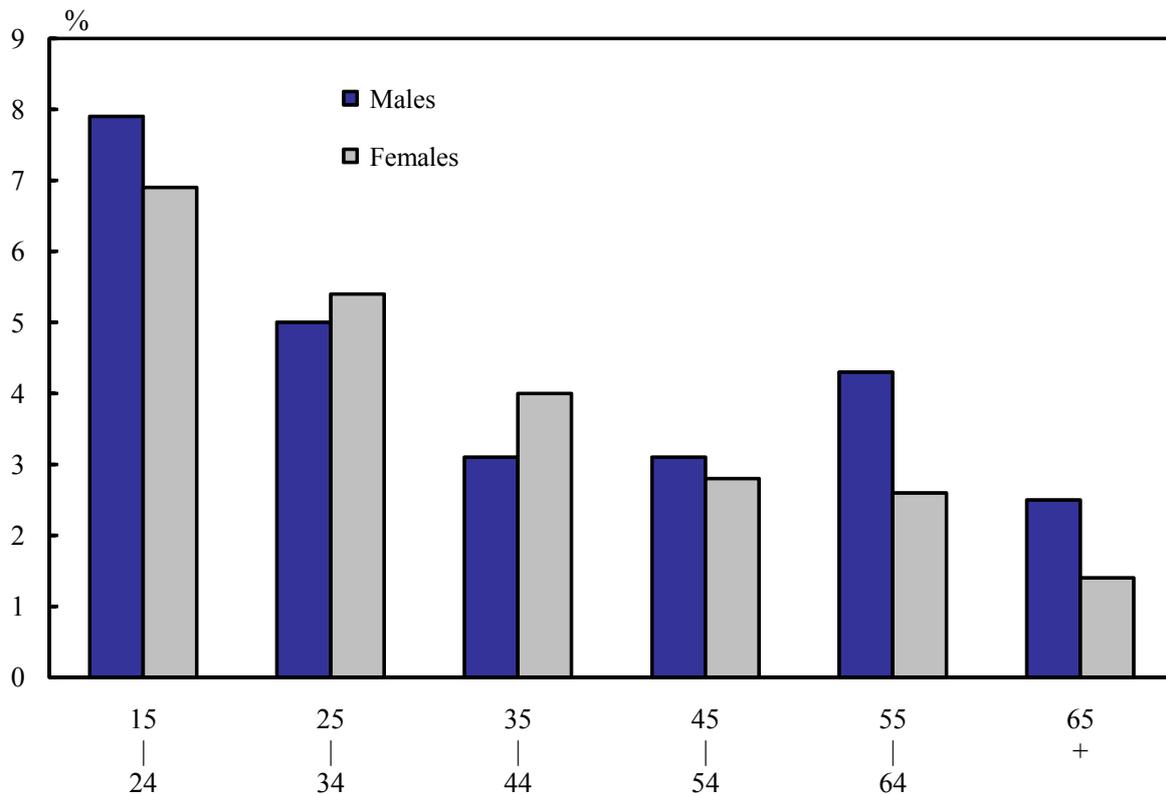


Source: Statistics Bureau, MIC; Ministry of Health, Labour and Welfare.

A breakdown by sex shows that the unemployment rate in 2008 was 4.1 percent among men, and 3.8 percent among women. The unemployment rate has been higher among men for eleven consecutive years since 1998.

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

Figure 12.8
Unemployment Rates by Sex and Age (2008)

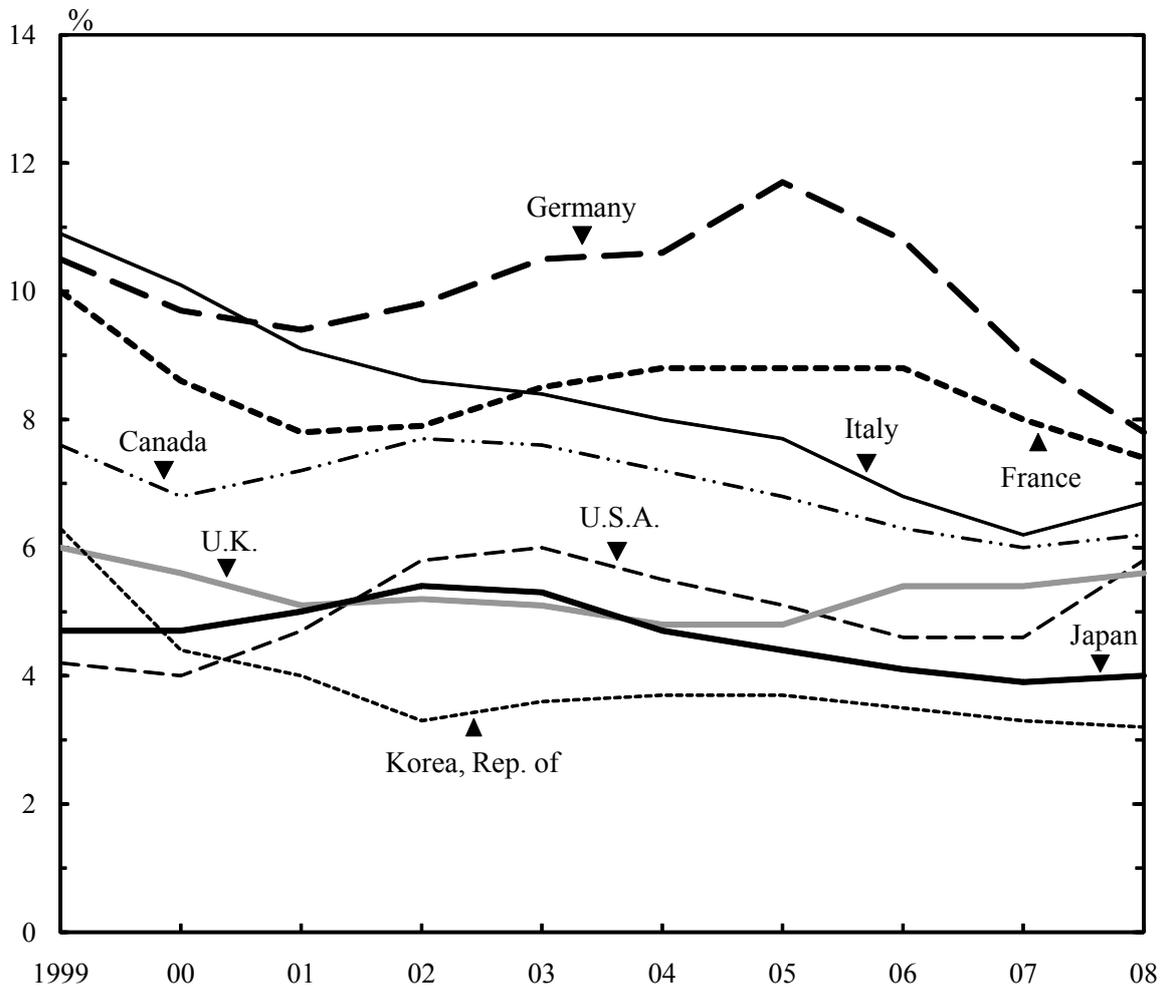


Source: Statistics Bureau, MIC.

Analyzing the total number of unemployed in 2008 (2.65 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, 0.88 million persons; (ii) voluntarily left their jobs for personal or family reasons, 1.00 million persons; and (iii) new job seekers just graduated from schools, 0.11 million.

In terms of the duration of unemployment, most were unemployed for "less than 3 months" (0.96 million persons), followed by "1 year or more" (0.87 million persons). The younger a job seeker is, the shorter their job-seeking period tends to be; on the contrary, the older the person, the longer the job-seeking period tends to be.

Figure 12.9
Unemployment Rates by Country



Source: Statistics Bureau, MIC; Cabinet Office.

4. Hours of Work and Wages

In 2008, the monthly average of total hours worked was 149.3 per regular employee (in establishments with 5 or more regular employees), down 0.9 percent from the previous year. Multiplying this figure by 12, we obtain an annual average of 1,792 hours.

Of the total monthly hours worked, 138.6 were scheduled working hours, representing a decrease of 0.8 percent from the previous year. Non-scheduled work such as overtime work averaged 10.7 hours per month, representing a decrease of 2.7 percent. Working days averaged 19.3 days per month in 2008.

Due to the revision of the Labor Standards Law in 1988, working hours have been on a downward trend, reducing the gap between Japan and other major countries. A country-to-country observation in the manufacturing industry, an industry for which internationally comparable data were available, showed that in 1985, the annual total hours worked (including those for non-scheduled work such as overtime) were 2,168 in Japan; 1,929 in the U.S.A.; 1,910 in the U.K.; 1,663 in Germany and 1,644 in France. In contrast, the equivalent 2006 figures were 2,003 in Japan; 1,962 in the U.S.A.; 1,874 in the U.K.; 1,538 in Germany and 1,537 in France.

In 2008, the monthly average of total cash earnings for regular employees (in establishments with 5 or more regular employees) was 331,000 yen. This total amount includes 271,000 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 61,000 yen in "special cash earnings" (which include summer and year-end bonuses, payments to celebrate employees' marriages, etc.).

Table 12.5
Hours of Work and Wages ¹⁾ (Monthly average)

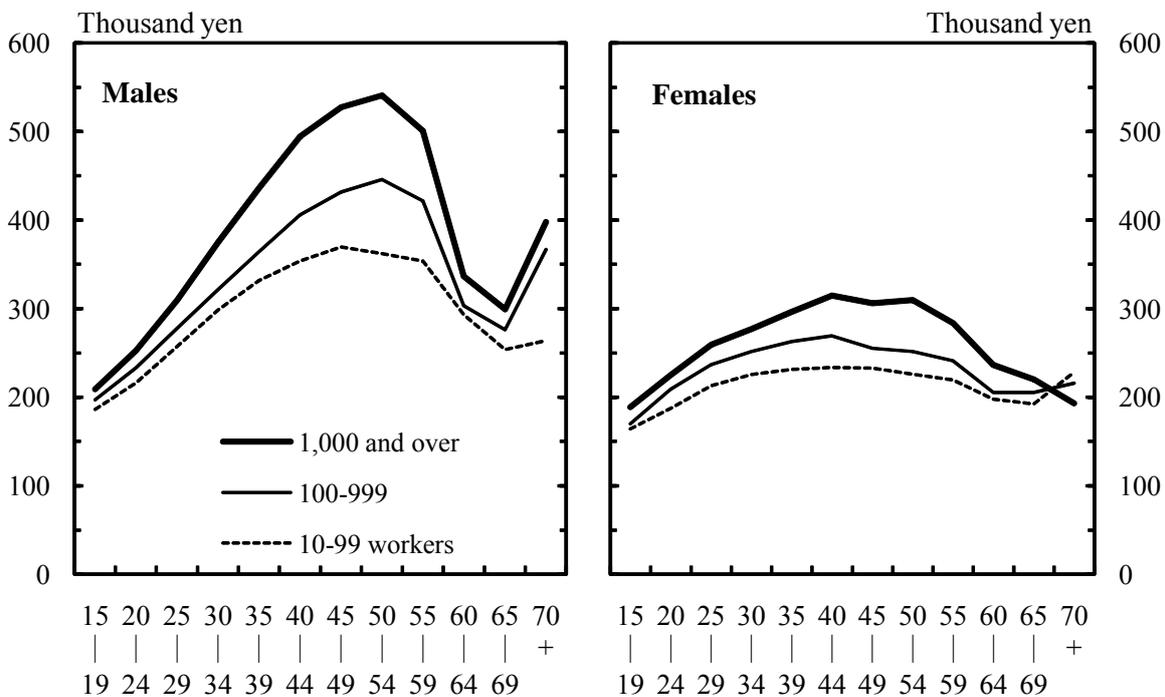
Year	Days worked	Hours of Work			Wages (1,000 yen)				
		Total	Scheduled	Non-schedule	Total	Contractual	Scheduled	Non-schedule	Special ²⁾
1995	20.3	159.2	149.6	9.6	363	282	264	18	81
2000	20.0	154.4	144.6	9.8	355	284	265	19	72
2005	19.5	150.2	139.8	10.4	335	273	253	19	62
2006	19.5	150.9	140.2	10.7	336	273	253	20	63
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
Increase rates (%) ³⁾									
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
2006	-	0.5	0.3	2.6	0.3	0.0	-0.3	2.6	1.5
2007	-	-0.6	-0.6	0.8	-0.7	-0.2	-0.2	0.7	-3.0
2008	-	-0.9	-0.8	-2.7	0.4	0.4	0.5	-1.5	0.2

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.

Figure 12.10
Monthly Contractual Cash Earnings by Size of Enterprise (2008)



Source: Ministry of Health, Labour and Welfare.

Chapter 13

Family Budgets and Prices

1. Family Budgets

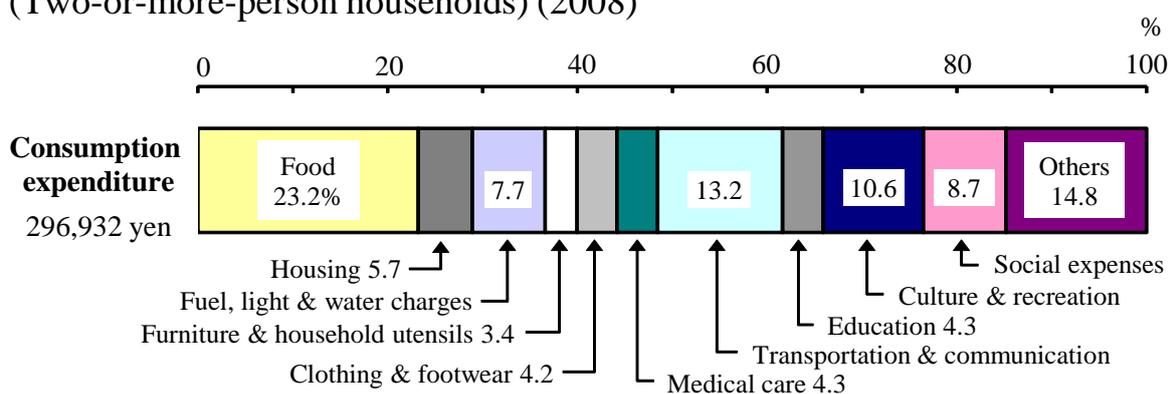
There are approximately 49 million households in Japan, of which 70 percent are two-or-more-person households and 30 percent are one-person households. Family budgets vary significantly depending on the employment situation and ages of their members. In this section, family budgets in various types of households are described on the basis of the 2008 results of the Family Income and Expenditure Survey.

(1) Income and Expenditure

(A) Two-or-more-person Households

The 2008 average monthly consumption expenditure per two-or-more-person households (the average number of household members being 3.13 and the average age of the household head being 55.7 years) was 296,932 yen. It decreased from the previous year by 0.3 percent in nominal terms and 1.9 percent in real terms. The share of food expenses to the whole consumption expenditure (Engel's coefficient) was 23.2 percent.

Figure 13.1
Average Monthly Consumption Expenditure
 (Two-or-more-person households) (2008)



Source: Statistics Bureau, MIC.

(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 3.45 and the average age of the household head being 47.4

years) was 534,235 yen in 2008, of which over 80 percent came from the household head's income.

Table 13.1**Average Monthly Income and Expenditure (Workers' households ¹⁾)**

Item	(Thousand yen)				
	2004	2005	2006	2007	2008
Income (A)	531.7	524.6	525.7	528.8	534.2
Wages and salaries	502.2	493.8	495.0	497.4	500.7
Others	29.4	30.8	30.7	31.4	33.5
Disposable income (A-C)	446.3	441.2	441.4	442.5	442.7
Expenditure	417.0	412.9	404.5	409.7	416.4
Consumption expenditure (B)	331.6	329.5	320.2	323.5	324.9
Non-consumption expenditure (C) ²⁾	85.4	83.4	84.3	86.3	91.5
Surplus ((A-C)-B)	114.7	111.7	121.2	119.0	117.8
Net savings and insurance	75.6	71.8	82.2	80.9	81.2
Average propensity to consume (%) ³⁾	74.3	74.7	72.5	73.1	73.4
Ratio of net savings and insurance (%) ⁴⁾ ...	16.9	16.3	18.6	18.3	18.3
Engel's coefficient (%)	21.7	21.5	21.7	21.7	21.9
Annual rate of increase (%) (real terms)					
Disposable income	1.3	-0.7	-0.2	0.1	-1.5
Consumption expenditure	1.6	-0.2	-3.1	0.9	-1.1

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

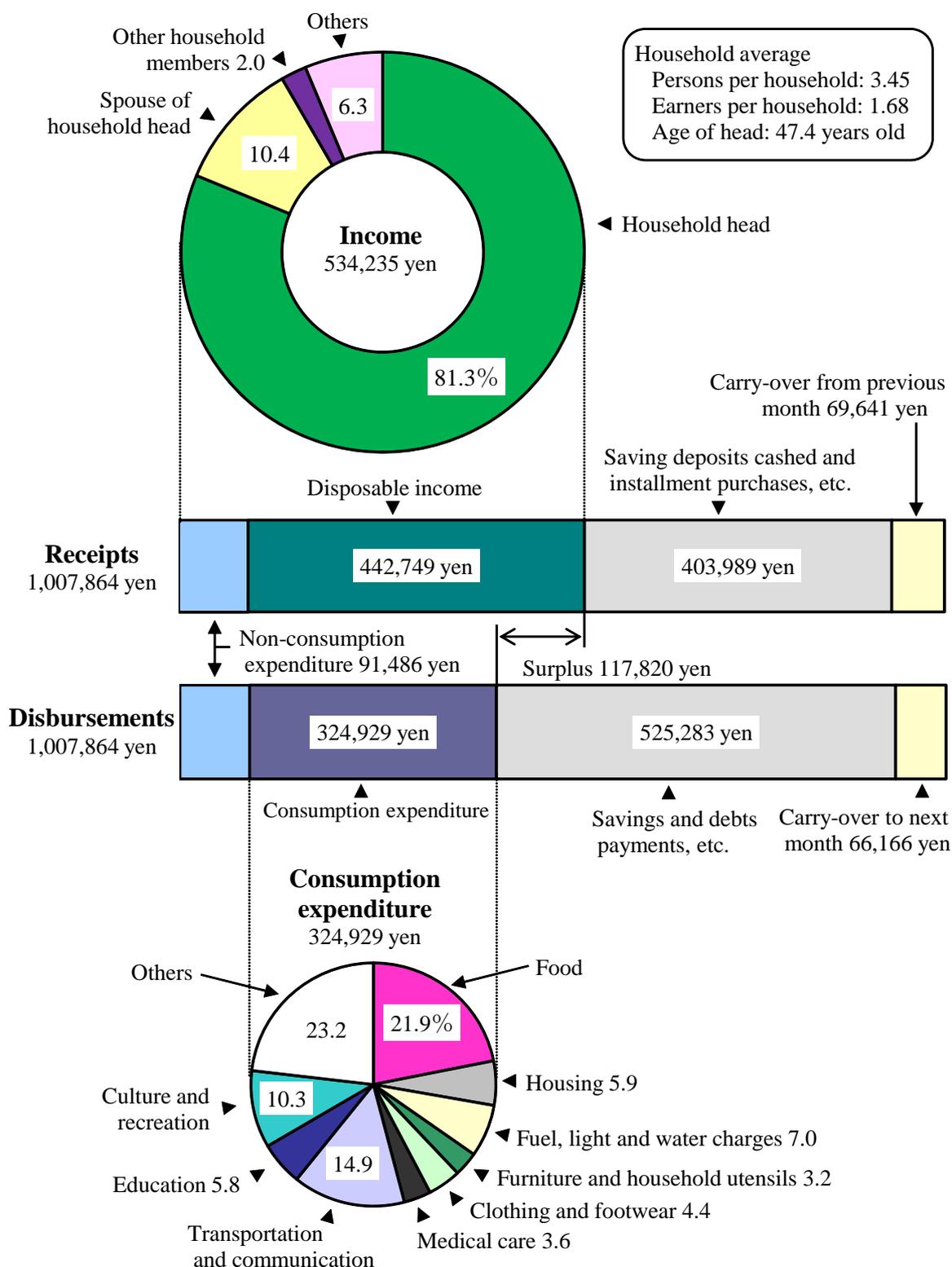
3) Ratio of consumption expenditure to disposable income. 4) Ratio of net savings and insurance to disposable income.

Source: Statistics Bureau, MIC.

Disposable income, calculated as income minus non-consumption expenditure such as taxes and social insurance contributions, was 442,749 yen. Of this disposable income, 324,929 yen was used for living expenses (consumption expenditure), such as food and housing expenses, while the remainder (surplus), totaling 117,820 yen, was applied to savings, life insurance premiums and repaying debt such as housing loans.

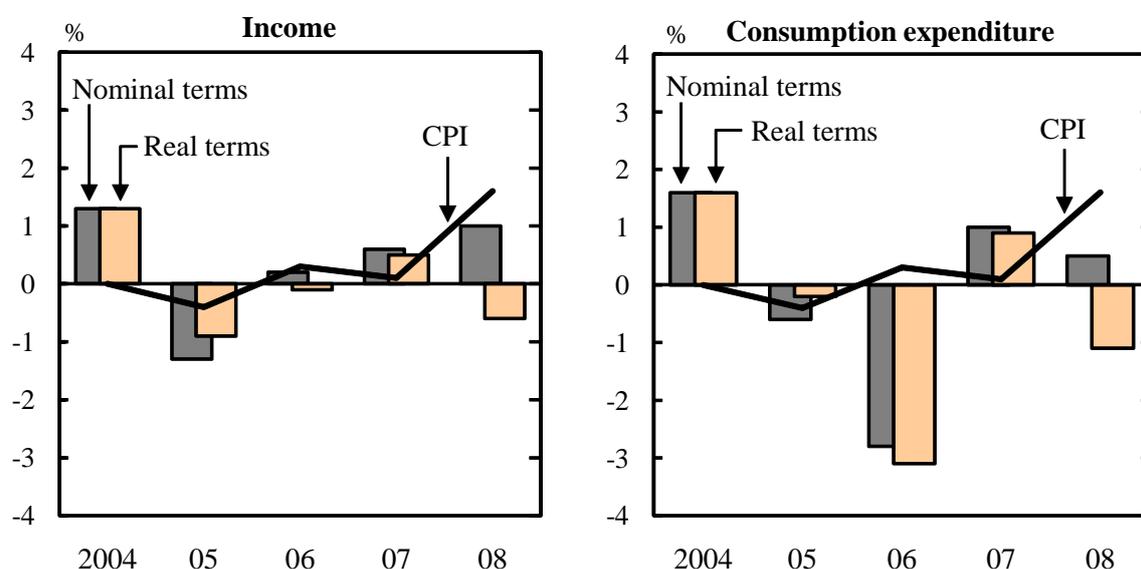
A comparison of consumption expenditure by category showed that spending on "Transportation and communication" and "Furniture and household utensils" increased in real terms compared with the previous year, while that on "Housing" and "Food" decreased in real terms.

Figure 13.2
Balance of Income and Expenditure
 (Monthly average, workers' households ¹⁾) (2008)



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

Figure 13.3
Annual Change in Household Income and Expenditure
 (Workers' households ¹⁾)

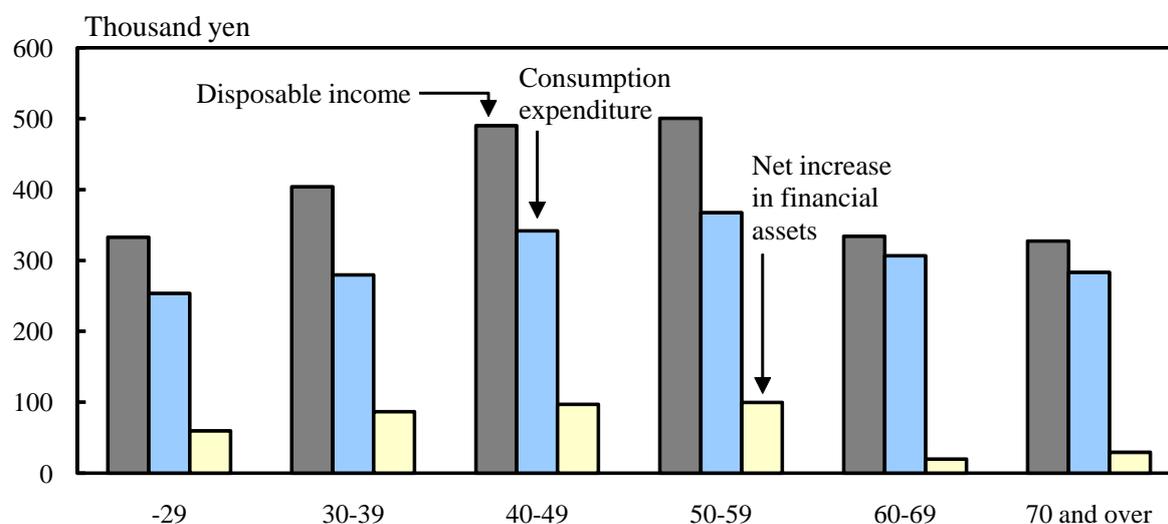


1) Two-or-more-person households.
 Source: Statistics Bureau, MIC.

Family budgets differ among households according to their stages in life. Observed by age group of the household head, the 2008 average monthly disposable income of workers' households was the highest in households in the 50s group (500,268 yen), followed by those in the 40s group (489,837 yen) and the 30s group (404,018 yen).

The 2008 average propensity to consume (the ratio of consumption expenditure to disposable income) was the lowest in households in the 30s group (69.2 percent). The figure was 69.7 percent in those in the 40s group, 73.5 percent in the 50s group, and 91.8 percent in the 60s group. The percentage tends to be higher as the age goes up, except for the under-30 group (76.1 percent) and the 70-and-over group (86.5 percent). Meanwhile, a net increase in financial assets (an amount added to savings) was the highest in households in the 50s group, followed by those in the 40s group.

Figure 13.4
Average Monthly Family Income and Expenditure by Age Group
of Household Head (Workers' households ¹⁾) (2008)



1) Two-or-more-person households.

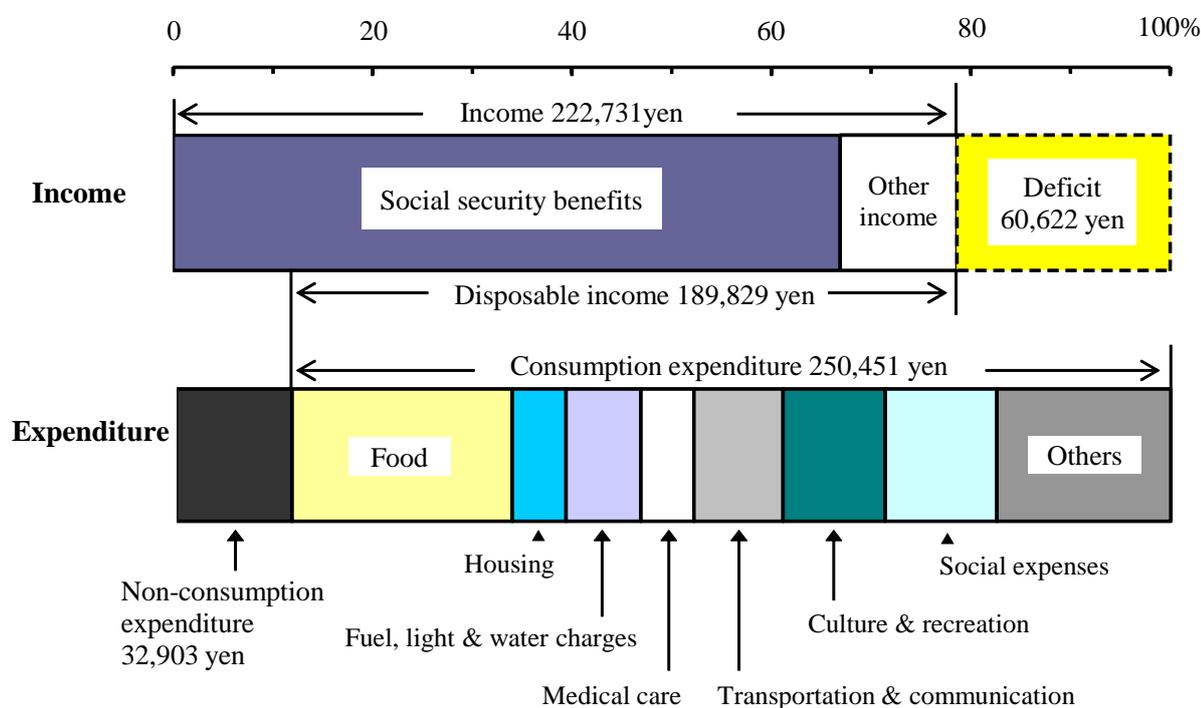
Source: Statistics Bureau, MIC.

(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 222,731 yen in 2008. Social security benefits amounted to 189,545 yen, thus accounting for 85.1 percent of income.

Disposable income averaged 189,829 yen, while consumption expenditure averaged 250,451 yen. The average propensity to consume in non-working elderly households was 131.9 percent, which means consumption expenditure exceeded disposable income. The deficit of disposable income to consumption expenditure (60,622 yen) increased from that of the previous year (54,917 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 ¹⁾) (2008)



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

(B) One-person Households

The average monthly consumption expenditure of one-person households in 2008 was 171,602 yen, up 1.4 percent in nominal terms but down 0.2 percent in real terms from the previous year. A year-on-year, age group comparison of average monthly consumption expenditure in real terms showed that it was up 3.2 percent from the previous year in the under-35 group, down 2.0 percent in the 35-59 group, and down 0.4 percent in the 60-and-over group. 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 less on categories such as "Housing" and "Transportation and communication."

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

	(Yen)					
	2004	2005	2006	2007	2008	Annual growth ¹⁾ (%)
Average	174,318	177,343	163,699	169,153	171,602	-0.2
Under 35 years	180,069	177,597	171,858	183,562	192,515	3.2
35-59	200,458	204,710	185,371	188,947	188,158	-2.0
60 and over	152,523	159,081	145,555	149,844	151,670	-0.4

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 2008 showed that the average amount of savings per workers' household was 12.50 million yen, resulting in its ratio to average yearly income (7.17 million yen) amounting to 174.3 percent. On the other hand, the average amount of debts per household was 6.52 million yen, which was 90.9 percent relative to yearly income. The portion for "Housing and land" accounted for 6.03 million yen of the debts (6.52 million yen). A total of 38.2 percent of workers' households held "Debts for housing and land."

Table 13.3
Average Amount of Savings and Debts (Workers' households ¹⁾)

(Thousand 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 (%)
2004	7,300	12,730	174.4	6,550	6,050	89.7	52.7
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

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 13.4
Amount of Savings and Debts by Age Group of Household Head
(Workers' households ¹⁾) (2008)

Item	Average	(Million yen)					
		-29	30-39	40-49	50-59	60-69	70 and over
Yearly income	7.17	4.55	5.89	7.63	8.54	6.42	6.21
Savings	12.50	2.78	6.40	11.53	16.09	19.91	22.82
Financial institutions	11.95	2.62	6.06	10.90	15.21	19.67	22.79
Demand deposits	2.34	1.29	1.88	2.04	2.50	3.52	4.90
Time deposits	4.79	0.77	2.19	4.10	6.43	8.33	9.03
Life insurance	3.34	0.39	1.47	3.59	4.44	4.70	3.79
Securities	1.47	0.17	0.51	1.18	1.84	3.11	5.08
Non-financial institutions	0.55	0.16	0.34	0.63	0.87	0.24	0.03
Debts	6.52	3.80	8.00	9.07	5.16	2.35	1.06
Housing and land	6.03	3.43	7.55	8.51	4.57	2.09	0.75
Other than housing and land	0.29	0.14	0.24	0.31	0.38	0.16	0.28
Monthly and yearly installments ..	0.20	0.22	0.21	0.25	0.20	0.09	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 price index (with base year 2005=100) was 101.7 in 2008, up 1.4 percent from the previous year. This was due to the fact that petroleum product prices were pushed up by oil price hikes and that food, etc. also became more expensive.

The May 2009 overall index (2005=100) marked 100.6, down 0.2 percent from the previous month. Compared year on year, it dropped by 1.1 percent, reflecting falling oil product prices and stabilizing food prices.

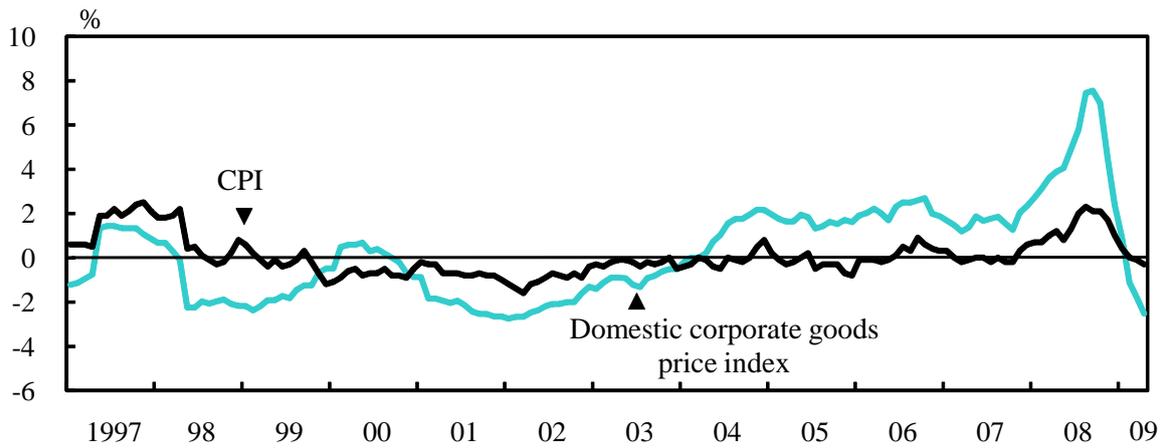
Table 13.5
CPI for Major Categories of Goods and Services

(2005=100)

Item	Weight	1995	2000	2006	2007	2008
Overall	10000	100.7	102.2	100.3	100.3	101.7
Overall, excluding imputed rent	8578	101.8	102.8	100.3	100.4	102.0
Food	2586	101.0	101.6	100.5	100.8	103.4
Housing	2039	96.7	100.3	100.0	99.8	100.0
Fuel, light and water charges	676	97.4	100.2	103.6	104.4	110.7
Furniture and household utensils	344	128.1	117.5	97.9	96.3	96.0
Clothing and footwear	464	102.5	106.0	100.8	101.4	101.9
Medical care	448	87.8	97.6	99.4	99.7	99.4
Transportation and communication	1392	103.6	101.3	100.3	100.4	102.4
Education	364	87.9	96.1	100.7	101.4	102.1
Culture and recreation	1100	110.7	109.4	98.5	97.2	96.7
Miscellaneous	586	95.1	98.2	100.9	101.7	102.1
Goods	4937	105.4	104.4	100.6	100.6	103.0
Services	5063	96.1	100.1	99.9	100.0	100.4

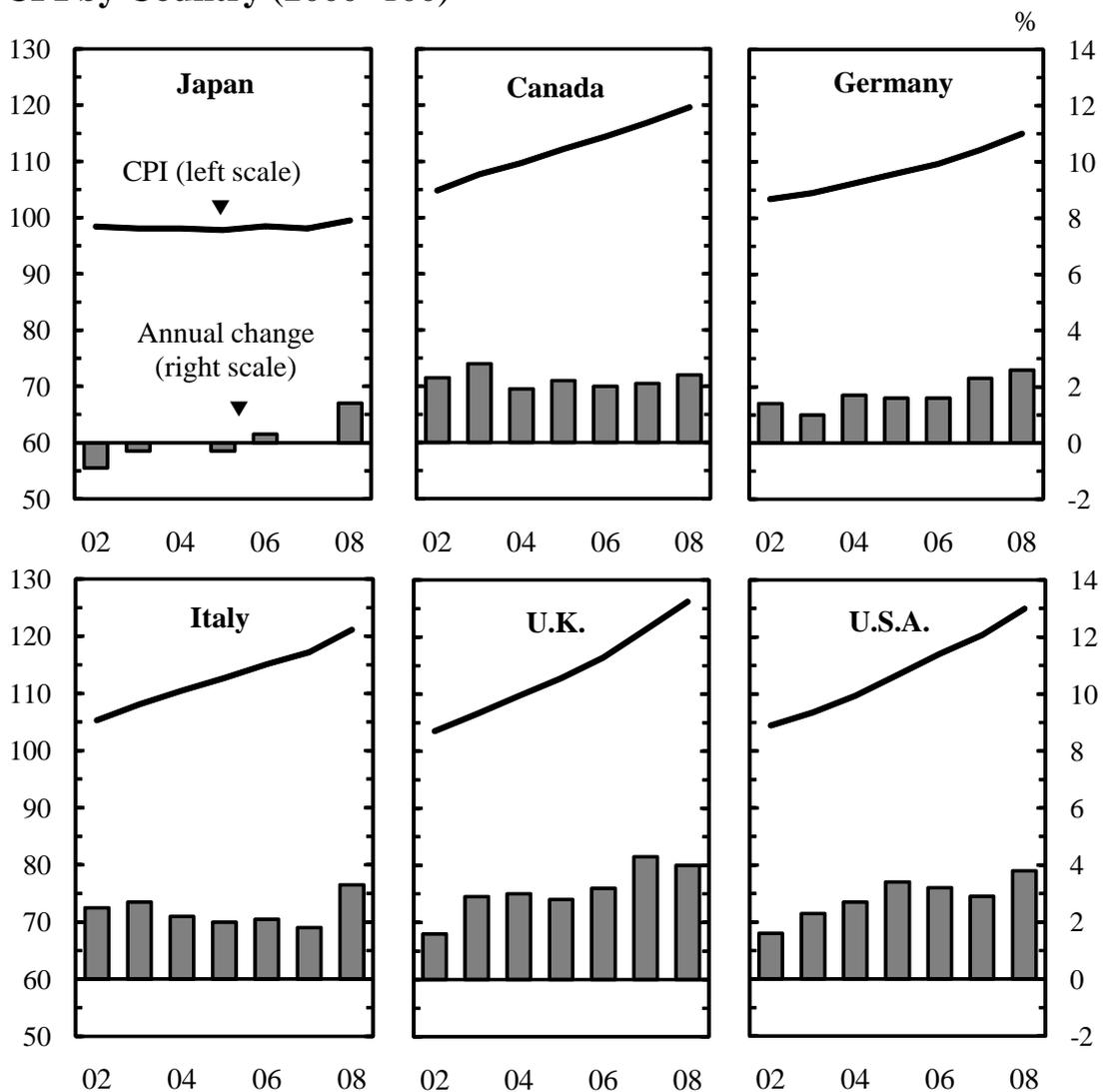
Source: Statistics Bureau, MIC.

Figure 13.6
Price Trends (Percent change from previous year)



Source: Statistics Bureau, MIC; Bank of Japan.

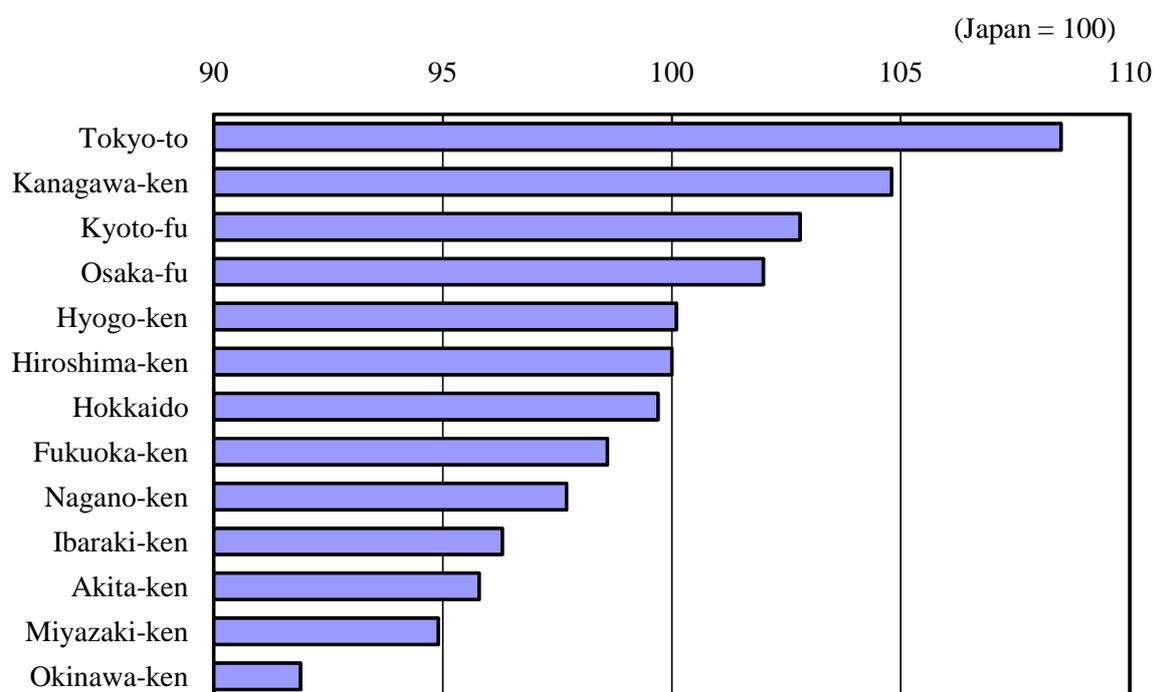
Figure 13.7
CPI by Country (2000=100)



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 was 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.

Figure 13.8
Regional Difference Index of Prices by Selected Prefecture (2007)



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 comprises 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 2008, the domestic corporate goods price index (2005 as the base year = 100) was 108.8, up 4.6 percent from the previous year, marking an increase for the fifth consecutive year. In May 2009, it reached 103.0, marking a 5.4-percent year-on-year decrease.

In 2008, the export price index, on a contractual currency basis, increased to 101.6 (up 2.1 percent from the previous year); measured in yen terms, the index decreased for the first time in four years to 99.0 (down 6.1 percent). Meanwhile, the import price index, on a contractual currency basis, increased to 139.7 (up 20.6 percent), registering its sixth straight year of growth. In yen terms, the index rose for the fifth consecutive year to 133.6 (up 9.2 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 2008, the corporate services price index (2000 as the base year =100) was 94.7, up 0.3percent from the previous year.

Table 13.6
Corporate Goods and Services Price Indices

Item	Weight	2000	2005	2006	2007	2008
Corporate goods price index (2005=100)						
Domestic corporate goods price index	1000.0	102.4	100.0	102.2	104.0	108.8
Manufactured products	918.8	102.3	100.0	102.1	103.8	108.5
Export price index (yen basis)	1000.0	101.7	100.0	103.1	105.4	99.0
Import price index (yen basis)	1000.0	84.7	100.0	113.9	122.4	133.6
Corporate services price index (2000=100)						
All items	1000.0	100.0	93.2	93.1	94.4	94.7
Transportation	193.3	100.0	103.8	104.9	111.0	113.0
Information services	106.1	100.0	93.0	93.2	94.1	94.2
Communications and broadcasting services	96.3	100.0	86.2	85.7	84.7	83.4
Leasing and rental	93.0	100.0	68.2	67.5	66.7	66.1

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 2007, Japan's total emission of greenhouse gases, which are a major cause of global warming, amounted to 1.37 billion tons (calculated after their conversion into carbon dioxide), representing an increase of 2.4 percent from the previous fiscal year. Carbon dioxide accounted for 94.9 percent of these greenhouse gases, with an emission volume of 1.30 billion tons. A breakdown of carbon dioxide emissions by sector revealed that emissions from the industrial sector accounted for 36.1 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.).

Table 14.1

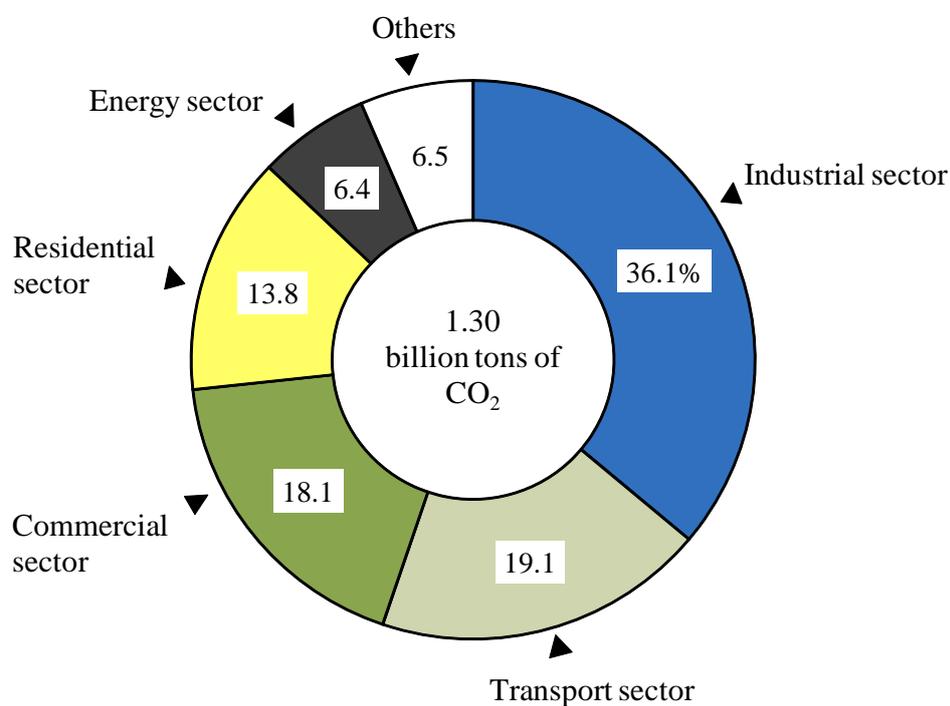
Breakdown of Carbon Dioxide Emissions in Japan ¹⁾

Item	(Million tons)					
	FY1990	FY1995	FY2000	FY2005	FY2006	FY2007
Total	1,143	1,227	1,255	1,287	1,270	1,304
Industrial sector	482	471	467	456	458	471
Transport sector	217	258	265	257	253	249
Commercial sector	164	185	206	237	232	236
Residential sector	127	148	158	174	166	180
Energy sector	68	73	71	79	77	83
Industrial processes	62	64	57	54	54	54
Waste (incineration, etc.)	22	27	31	30	30	31

1) Volume of carbon dioxide after reallocation to the end-use sector.

Source: Ministry of the Environment.

Figure 14.1
Sources of Carbon Dioxide Emissions in Japan ¹⁾ (FY2007)



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 Fundamental Law 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 2006 nationwide industrial waste generation totaled 418.50 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 1990 to 21.80 million tons in fiscal 2006.

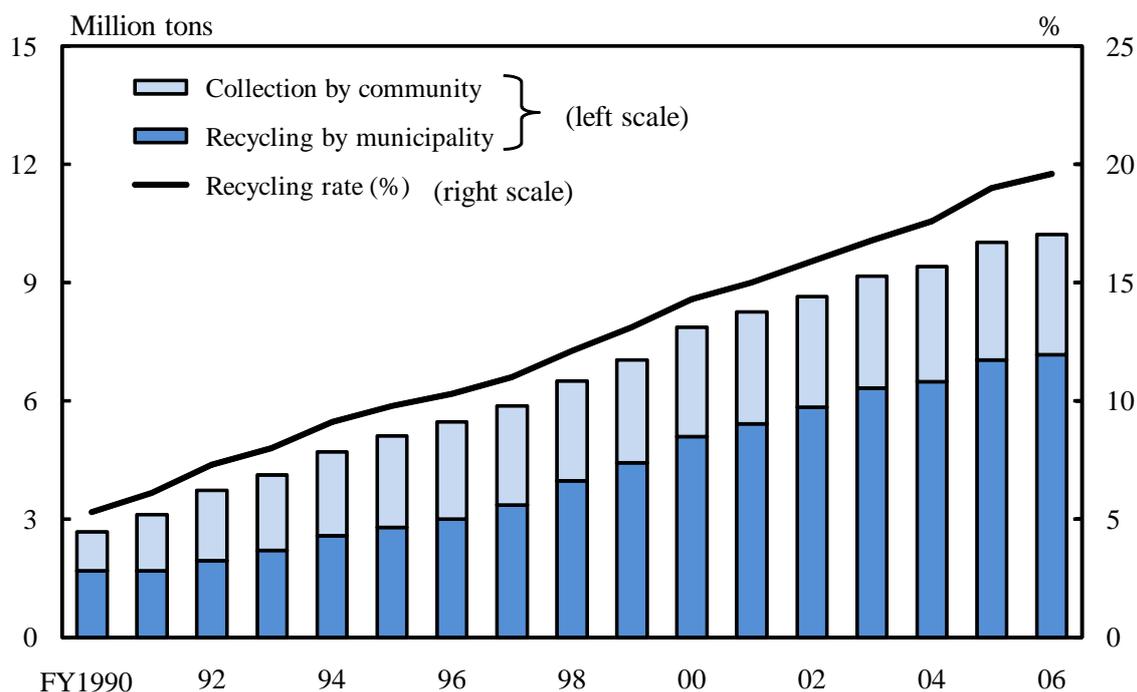
Meanwhile, a total of 52.04 million tons of "nonindustrial waste" (household waste and also shop, office and restaurant waste) was generated in fiscal 2006. This translates to 1,116 grams per person per day. In terms of nonindustrial waste disposal in fiscal 2006, the total volume processed was 49.02 million tons. The total volume of recycled waste was 10.22 million tons, with the recycling rate at 19.6 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)

	(Thousand tons)				
Item	FY1990	FY1995	FY2000	FY2005	FY2006
Industrial waste					
Total volume of waste generation	394,736	393,812	406,037	421,677	418,497
Recycling	150,568	146,620	184,237	218,888	214,772
Treatment for waste reduction	154,443	177,941	176,933	178,560	181,926
Final disposal	89,725	69,257	44,868	24,229	21,799
Nonindustrial waste					
Total volume of waste generation .....	...	52,224	54,834	52,720	52,036
Municipally scheduled and collected	42,495	44,100	46,695	44,633	44,168
Brought to transfer station	6,776	5,806	5,373	5,090	4,810
Recyclable waste collected					
by community	986	2,318	2,765	2,996	3,058
Waste generated daily per person					
(in grams)	1,115	1,138	1,185	1,131	1,116
Total volume of processed waste	49,282	49,899	52,090	49,754	49,016
Direct incineration	36,192	38,048	40,304	38,486	38,067
Intermediate treatment for recycling, etc.	}3,300	}6,131	6,479	7,283	7,179
Direct recycling			2,224	2,541	2,569
Direct final disposal	9,790	5,721	3,084	1,444	1,201

Source: Ministry of the Environment.

Figure 14.2
Recycling of Nonindustrial Waste



$$\text{Recycling rate (\%)} = \frac{\text{Total volume of recycled waste}}{\text{Total volume of processed waste} + \text{Volume of collection by community}} \times 100$$

$$\text{Total volume of recycled waste} = \text{Volume of recycling by municipality} + \text{Volume of collection by community}$$

Source: Ministry of the Environment.

2. Housing

According to the Housing and Land Survey conducted in October 2003, the total number of dwellings (in case of apartment buildings, counting the number of component apartments) in Japan was 53.89 million, up by 3.64 million (7.3 percent) from 1998. The number of households was 47.26 million, representing the excess in number of dwellings over households by 6.64 million.

In 2003, the number of occupied dwellings (where people usually live) amounted to 46.86 million, accounting for 87.0 percent of the total number of dwellings. Of these, the number of dwellings used exclusively for living totaled 45.26 million, accounting for 96.6 percent of the occupied dwellings.

A breakdown of occupied dwellings by class of ownership showed that owned houses totaled 28.67 million, accounting for 61.2 percent of the total, which represented an increase of 0.9 percentage points from the figure of 60.3 percent in 1998. Rented houses, on the other hand, numbered 17.17 million, accounting for 36.6 percent of the total.

Table 14.3
Housing Conditions

Year	Total households	Total number of dwellings	Occupied dwellings	Ownership		Dwellings exclusively for living	Floor space per dwelling (m ²)
				Owned	Rented		
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

Source: Statistics Bureau, MIC.

Table 14.4
Occupied Dwellings by Type of Building

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

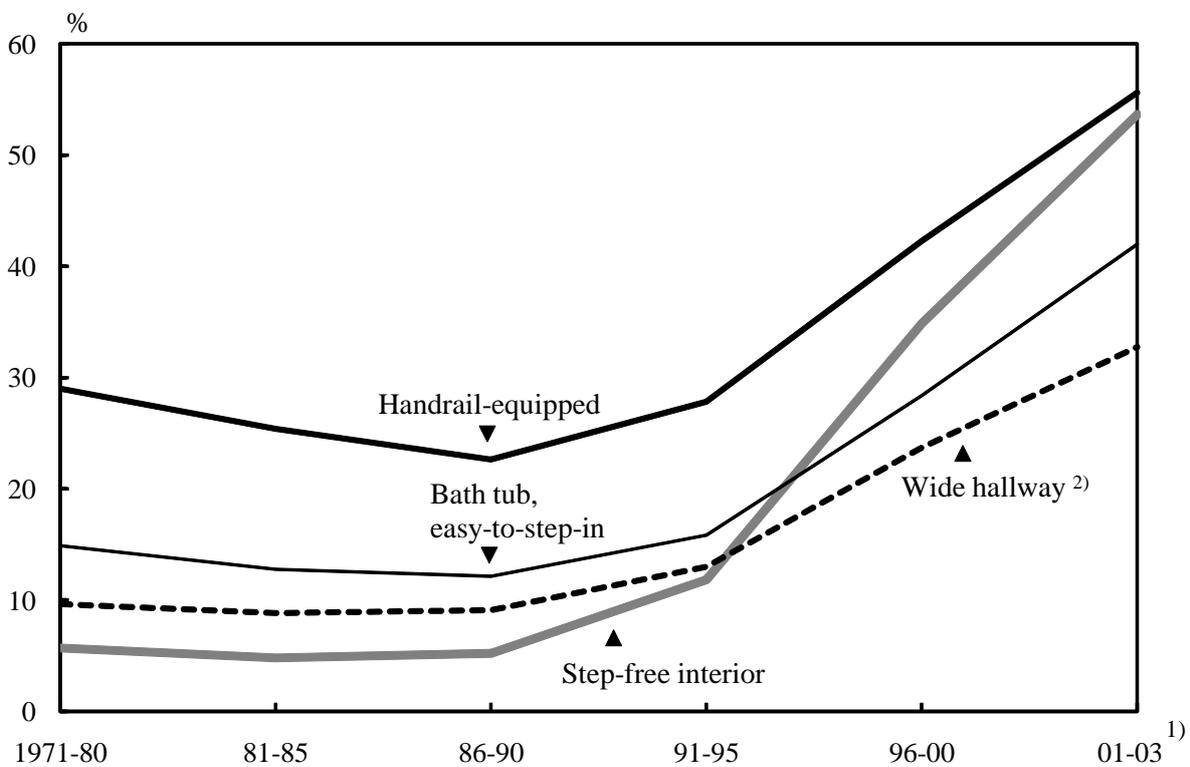
Source: Statistics Bureau, MIC.

Occupied dwellings by building type shows that 26.49 million or 56.5 percent were detached houses, and 18.73 million or 40.0 percent were apartments. The proportion of apartments has consistently increased in recent years.

In terms of construction materials, 24.51 million or 92.5 percent of the detached houses were wood-frame houses (including fire-resistant ones). On the other hand, 13.61 million or 72.6 percent of the component apartments were steel-framed concrete structures.

A high proportion of dwellings constructed recently have been equipped with facilities designed to allow the elderly and physically challenged persons to continue living in a familiar environment. Of those dwellings constructed in the period from 2001 to 2003, 55.6 percent were handrail-equipped and 53.7 percent step-free interior, whereas the percentages for dwellings constructed in the period from 1991 to 1995 were 27.8 percent and 11.8 percent, respectively.

Figure 14.3
Ratio of Housing with Barrier-Free Features by Year of Construction
 (2003)



1) From 2001 to September 2003. 2) 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 Policies 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 5,744 in 2007, being about one third of that of 1970.

In 2007, traffic deaths per 100,000 population were 4.5 persons, while the number of persons killed per 10,000 motor vehicles was 0.7 persons.

Table 14.5
Traffic Accidents and Casualties

Year	Traffic accidents	Injuries	Deaths ¹⁾	Traffic deaths ¹⁾	
				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
2006	886,864	1,098,199	6,352	0.8	5.0
2007	832,454	1,034,445	5,744	0.7	4.5

1) Death within 24 hours of the accident.

Source: National Police Agency.

4. Crime

In 2008, the reported number of penal code offenses (excluding cases related to traffic accidents) was 1.82 million, a decrease of 90,813 (4.8 percent) compared to the previous year. The proportion of thefts was the highest, accounting for approximately 75 percent, or 1.37 million cases (down 4.0 percent from the previous year).

The number of persons arrested for penal code offenses was 339,752 in 2008, a decrease of 25,825 (7.1 percent) compared to the previous year, marking a four-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 31.5 percent in 2008.

Table 14.6
Trends in Crime (Penal code offenses) ¹⁾

Year	Reported offenses	Resultant arrests	Persons arrested	Arrest rate ²⁾ (%)	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
2007	1,908,836	605,358	365,577	31.7	1,493.6
2008	1,818,023	573,392	339,752	31.5	1,423.7

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 2008, involving the abuse of computer technology and telecommunications technology, was 6,321, up 15.5 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 police, which are organizations under the authority of individual prefectures. As of April 2008, the prefectural police operated police headquarters, police schools, 1,206 police stations, 6,191 police boxes (Koban) and 7,020 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 fertility rate is staying substantially lower than the population replacement level, society is aging at an unprecedented pace at the same time. 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 owed 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 July 2008, the number of long-term care service users amounted to approximately 3.78 million.

Table 15.1
Trends in Social Security Benefit Expenditures by Institutional Scheme

Item	(Billion yen)				
	FY2000	FY2003	FY2004	FY2005	FY2006
Total	78,119	84,258	85,866	87,783	89,110
Medical insurance	14,573	14,712	15,277	16,141	16,534
Health and medical services for the aged ¹⁾	10,447	10,722	10,676	10,754	10,379
Long-term care insurance	3,252	5,110	5,577	5,823	6,000
Pension benefits	39,173	42,996	43,814	44,669	45,772
Employment insurance ²⁾	2,665	2,025	1,528	1,435	1,337
Worker's accident compensation insurance	1,019	973	959	953	966
Family allowance ³⁾	712	916	1,124	1,158	1,351
Public assistance	1,930	2,366	2,553	2,592	2,636
Social welfare	2,186	2,469	2,540	2,505	2,600
Public health	555	593	536	547	428
Gratuities for retired public employees ..	1,420	1,204	1,132	1,059	984
Aid for war victims	188	172	151	146	124

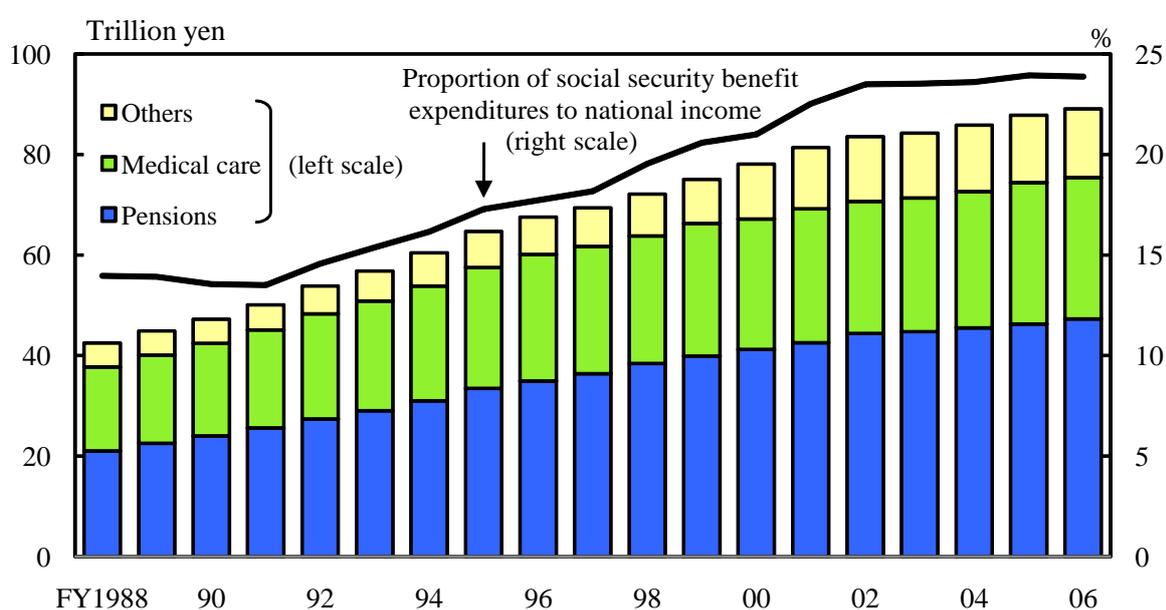
1) Including public health measures (e.g., medical check-ups and counseling, etc.).

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 2006, social security benefit expenditures totaled 89.1 trillion yen (up 1.5 percent from the previous fiscal year), a figure which amounted to 697,400 yen per person. The proportion of Japan's social security expenditure to national income registered 23.9 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



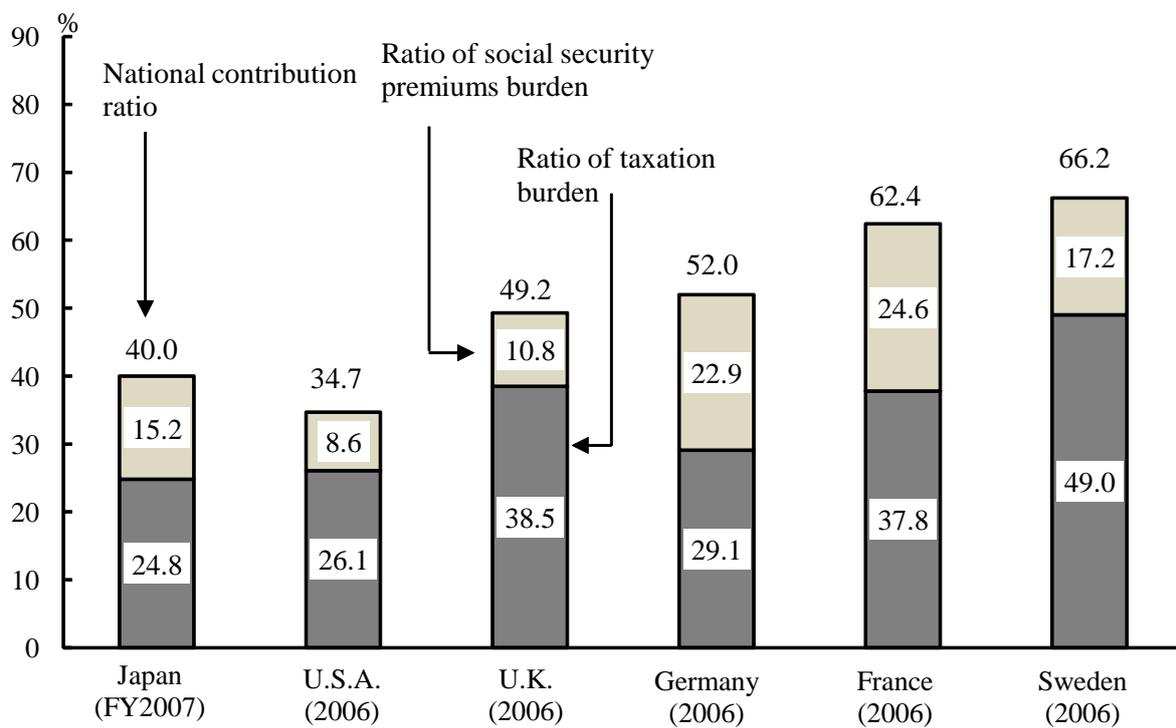
Source: Ministry of Health, Labour and Welfare.

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 2006, pensions accounted for more than half (53.1 percent) of total social security benefit expenditures, while medical care accounted for 31.5 percent, and social welfare and others for 15.4 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 104.4 trillion yen in fiscal 2006. This was financed by 56.2 trillion yen from social insurance contributions, 31.1 trillion yen from taxes and 17.1 trillion yen from other sources.

The national contribution ratio (the combined ratios of taxes and social security costs to national income) was 40.0 percent in fiscal 2007 (taxation burden: 24.8 percent; social security premiums: 15.2 percent), up 0.9 percentage points from 39.1 percent in fiscal 2006. The national contribution ratio in 2006 was 34.7 percent in the U.S.A., 49.2 percent in the U.K., and 66.2 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.

Table 15.2
Social Welfare Institutions (As of October 1, 2007) ¹⁾

Type of institutions	Institutions	Inmates	Personnel ²⁾
Total	61,804	2,765,504	764,229
Institutions under the Protection Law ³⁾	302	19,822	6,213
Welfare for the elderly	9,446	143,624	50,625
Nursing homes	958	62,406	17,538
Welfare centers	2,234	-	7,563
Support for the physically challenged, etc.	2,233	14,105	15,111
Rehabilitation for the physically challenged	1,188	49,085	26,202
Rehabilitation for the mentally challenged	3,873	175,971	73,262
Rehabilitation for the mentally ill	935	19,194	5,172
Support for social participation of the physically challenged ...	377	...	3,315
Protection for women	49	615	390
Child welfare ⁴⁾	33,524	2,207,034	509,719
Day nurseries	22,838	2,132,651	434,853
Maternal and child welfare	72	...	266
Others ⁵⁾	9,805	136,054	73,954
Pay nursing homes for the elderly	2,671	114,573	61,819

1) Due to institutional changes, "Special nursing homes for the elderly" are now deleted from the statistics, while "Support for the physically challenged, etc." and "Support for social participation of the physically challenged" are added. These changes must be noted in any comparison with the previous fiscal year. 2) In full time equivalent. 3) "Inmates" and "personnel" exclude medical care aid institutions. 4) "Inmates" exclude homes of living assistance for mothers and children, and maternity homes; "personnel" excludes maternity homes, and children's playgrounds. 5) "Inmates" and "personnel" exclude facilities for medical treatment, free of charge or at low cost.

Source: Ministry of Health, Labour and Welfare.

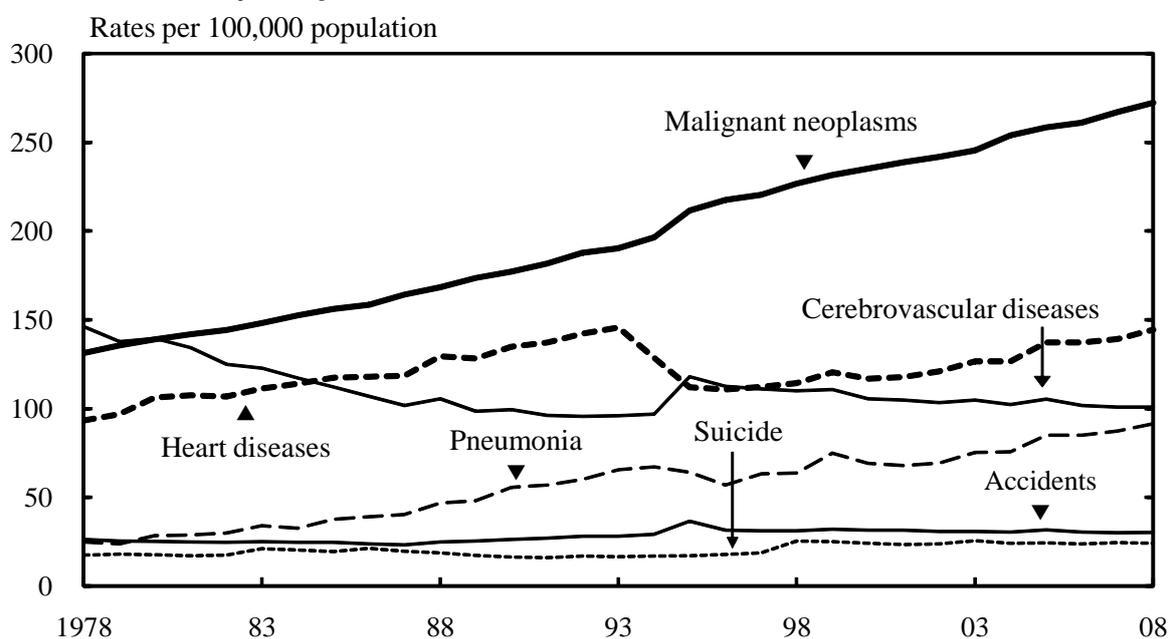
2. Health Care and Public Hygiene

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 86.05 years for women and 79.29 years for men in 2008. Japan's life expectancy remains the highest in the world. Japan's infant mortality rate fell to as little as 2.6 per 1,000 births in 2008.

Figure 15.3
Death Rates by Major Cause



Source: Ministry of Health, Labour and Welfare.

The death rate was 907.1 per 100,000 population in 2008. The leading cause of death was malignant neoplasms (277.2 per 100,000 population). Other major causes were lifestyle diseases such as heart diseases (144.4; excluding hypertensive diseases) and cerebrovascular diseases (100.8), in

which people's daily diet and behavior are significant factors therefor. 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 30.0 percent of all deaths in 2008.

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 30,197 in 2008. 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 275,127 physicians engaged in medical care, or 215.3 physicians per 100,000 population, in 2006. 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
Number of Medical Personnel at Work

Personnel	1998	2000	2002	2004	2006
Number					
Physicians	246,548	253,469	260,500	267,943	275,127
Dentists	86,847	89,668	91,783	94,022	95,944
Pharmacists	187,710	199,797	212,720	223,564	234,429
Nurses & Assistant nurses	985,821	1,042,468	1,097,326	1,146,181	1,194,121
Rates per 100,000 population					
Physicians	194.9	199.7	204.3	209.7	215.3
Dentists	68.7	70.6	72.0	73.6	75.1
Pharmacists	148.4	157.4	166.9	175.0	183.5
Nurses & Assistant nurses	779.5	821.3	860.7	896.9	934.6

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 1,268.0 per 100,000 population in 2007.

Table 15.4
Number of Medical Care Institutions and Beds

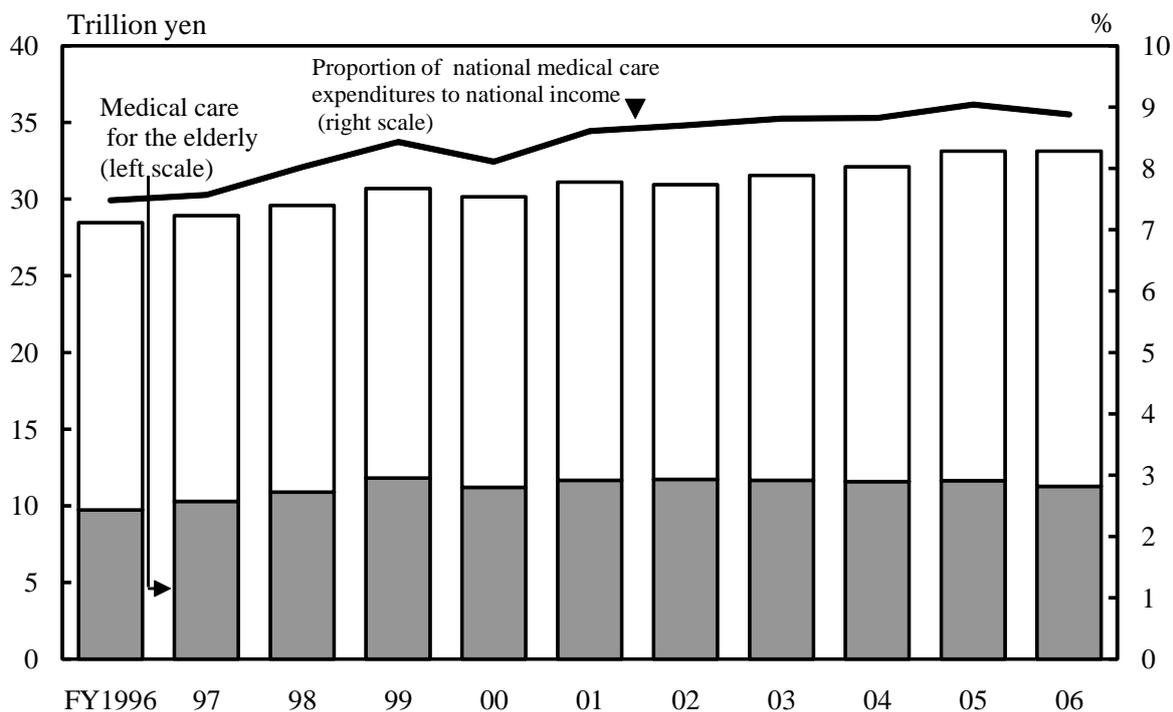
Type of Institution	2000	2004	2005	2006	2007
Number of institutions					
Total	165,451	172,685	173,200	174,944	176,192
Hospitals	9,266	9,077	9,026	8,943	8,862
General clinics	92,824	97,051	97,442	98,609	99,532
Dental clinics	63,361	66,557	66,732	67,392	67,798
Rates per 100,000 population					
Total	130.4	135.2	135.6	136.9	137.9
Hospitals	7.3	7.1	7.1	7.0	6.9
General clinics	73.1	76.0	76.3	77.2	77.9
Dental clinics	49.9	52.1	52.2	52.7	53.1
Number of beds					
Total	1,864,178	1,812,722	1,798,637	1,786,649	1,775,481
Hospitals	1,647,253	1,631,553	1,631,473	1,626,589	1,620,173
General clinics	216,755	181,001	167,000	159,898	155,143
Dental clinics	170	168	164	162	165
Rates per 100,000 population					
Total	1,468.7	1,419.7	1,407.7	1,398.3	1,389.6
Hospitals	1,297.8	1,277.8	1,276.9	1,273.1	1,268.0
General clinics	170.8	141.8	130.7	125.1	121.4
Dental clinics	0.1	0.1	0.1	0.1	0.1

Source: Ministry of Health, Labour and Welfare.

National medical care expenditures have been increasing gradually. In fiscal 2006, the expenditures totaled 33.1 trillion yen or 8.88 percent of Japan's national income. The cost of medical care per person averaged 259,300 yen in fiscal 2006.

Medical costs for treating the elderly in fiscal 2006 were 11.3 trillion yen, or about one-third of national medical care expenditure, and accounted for 3.02 percent of the national income. The per-capita cost of medical care for the elderly averaged 832,373 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 ¹⁾



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 schooling, which began at some lower and upper secondary schools in 1999. On an additional note, school years in Japan start in April and end in March.

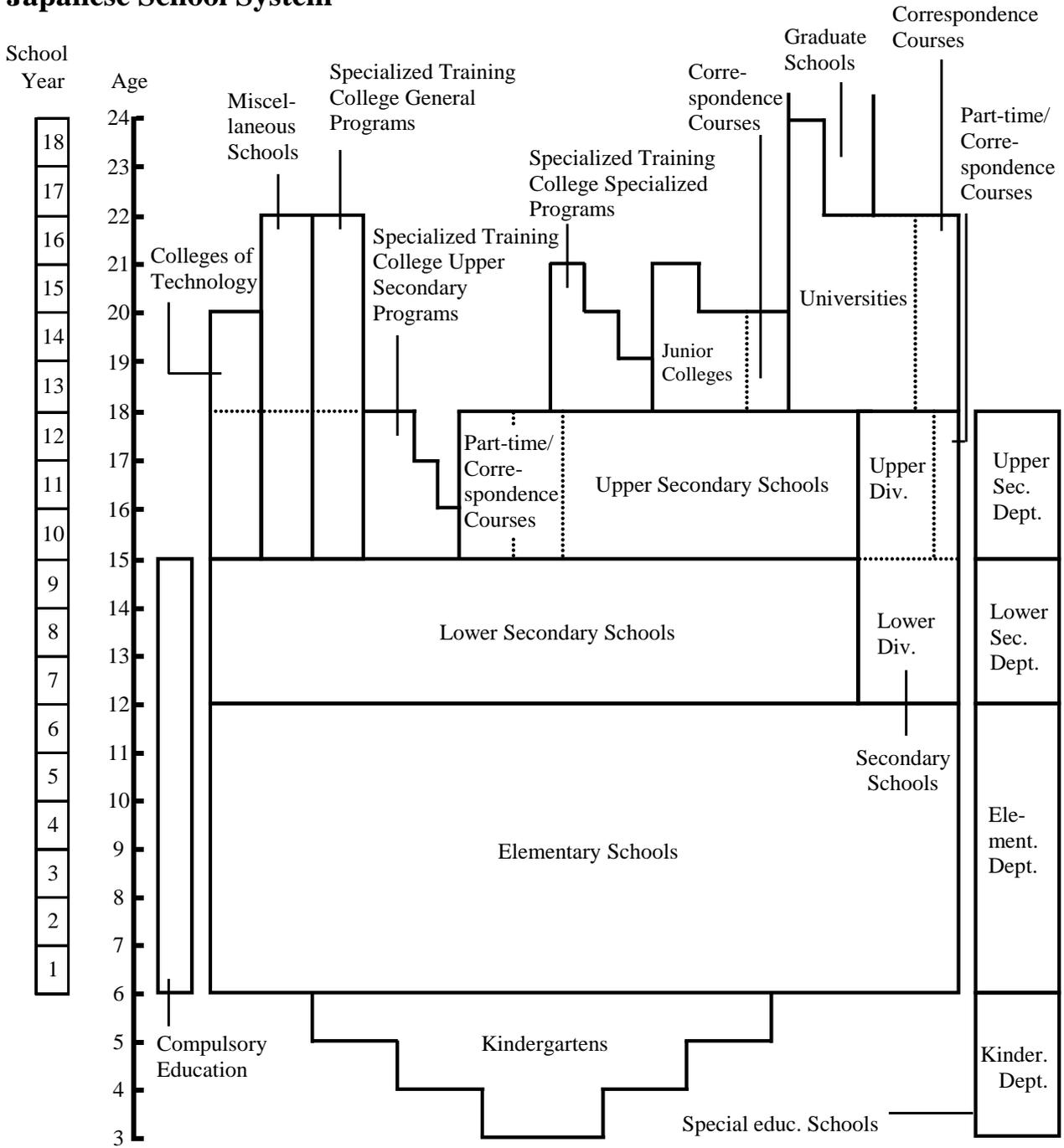
Table 16.1
Educational Institutions in Japan (As of May 1, 2008)

Type of institution	Schools				Full-time teachers (1,000)	Students (1,000)	
	Total	National	Public	Private		Males	Females
Kindergartens	13,626	49	5,301	8,276	111	848	826
Elementary schools	22,476	73	22,197	206	419	3,644	3,478
Lower secondary schools	10,915	76	10,104	735	250	1,835	1,757
Upper secondary schools	5,243	16	3,906	1,321	241	1,704	1,663
Secondary schools	37	3	21	13	1	9	9
Special educ. schools ¹⁾	1,026	45	966	15	69	73	40
Colleges of technology	64	55	6	3	4	50	9
Junior colleges	417	2	29	386	11	19	154
Universities	765	86	90	589	170	1,695	1,141
Graduate schools	604	85	76	443	99	183	80
Specialized training colleges	3,401	11	206	3,184	42	300	358
Miscellaneous schools	1,585	-	11	1,574	10	68	69

1) Schools for mentally and 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.

Table 16.2
Number of University Students (As of May 1, 2008)

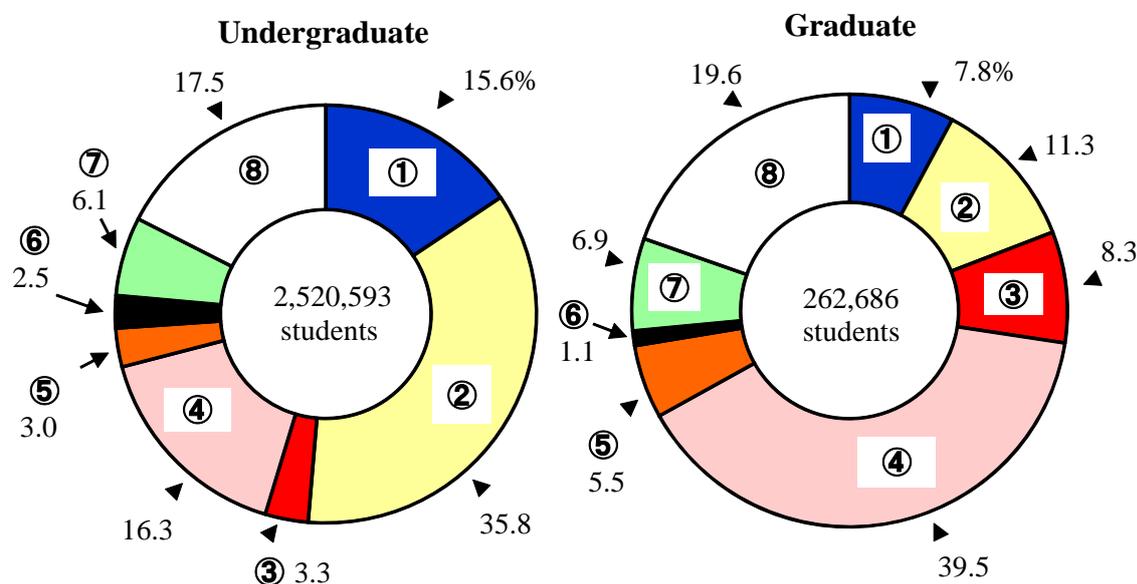
	2000	2005	2006	2007	2008
Total	2,740	2,865	2,859	2,829	2,836
Undergraduate	2,472	2,508	2,505	2,514	2,521
Graduate schools	205	254	261	262	263
Others ¹⁾	63	102	93	52	53
Females	992	1,125	1,127	1,127	1,141
Undergraduate	913	1,009	1,012	1,024	1,037
Graduate schools	54	76	79	80	80
Others ¹⁾	25	40	37	23	24
National	624	628	629	627	624
Public	107	125	128	130	132
Private	2,009	2,112	2,102	2,072	2,080

(Thousand persons)

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, 2008)



① Humanities. ② Social sciences. ③ Natural sciences. ④ Engineering. ⑤ Agriculture. ⑥ Medicine and dentistry. ⑦ Education and teacher training. ⑧ Others.

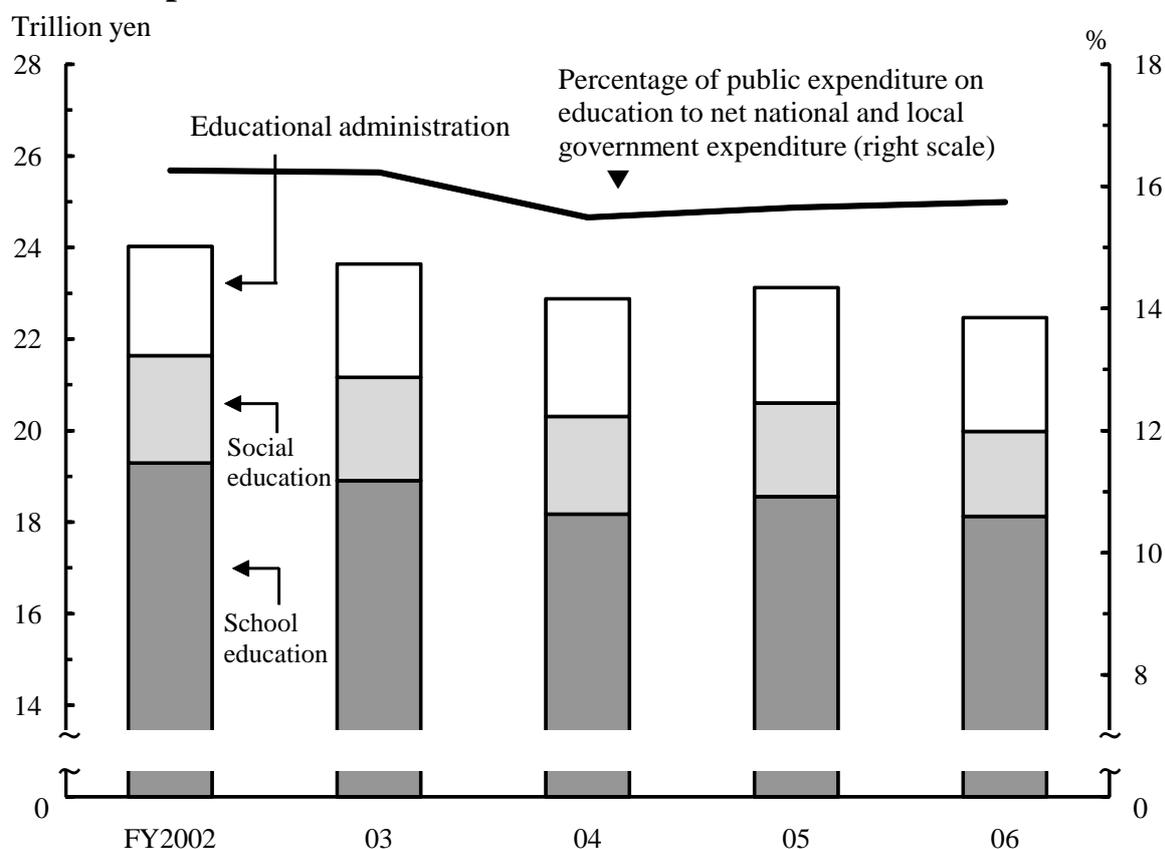
Source: Ministry of Education, Culture, Sports, Science and Technology.

Of the March 2009 upper secondary school graduates, 52.9 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 2008 was 55.3 percent (56.5 percent of male and 54.1 percent of female graduates), including graduates from previous years.

Fiscal 2006 public expenditure on education in Japan was 22.5 trillion yen, which was equivalent to 15.7 percent of the net expenditure of national and local governments. Fiscal 2006 school expenditure by households with children attending public school averaged 56,655 yen per elementary school pupil, 133,183 yen per lower-secondary school student and 343,922 yen per upper-secondary school student.

As of May 1, 2008, a total of 95,303 foreign students were enrolled in Japanese junior colleges, universities, and graduate schools. Of the total foreign students, 90.5 percent were from Asia, including 57,003 from China, 13,129 from the Republic of Korea and 3,278 from Taiwan.

Figure 16.3
Public Expenditures on Education



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

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.

Table 16.3
Social Education Facilities (As of October 1, 2005)

Facilities	Number	Facilities	Number
Citizens' public halls	17,143	Botanical gardens	12
Libraries	2,979	Zoological and botanical gardens	9
Museums	1,196	Aquariums	38
General museums	156	Centers for children and youths	1,320
Science museums	108	Women's education centers	183
Historical museums	405	Culture halls	1,885
Art museums	423	Cultural centers ¹⁾	698
Outdoor museums	13		
Zoological gardens	32		

1) As of November 1, 2005.

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

Table 16.4
Sports Facilities (As of October 1, 2005)

Facilities	Public	Private	Facilities	Public	Private
Total	48,055	16,780	Tennis courts, indoor	145	296
Fields and tracks	953	31	Tennis courts, outdoor	5,121	1,169
Baseball grounds	6,449	216	Physical training gyms	1,616	1,320
Other ball game grounds ...	1,177	215	Dance halls	59	965
Playgrounds	6,917	274	Golf courses	64	2,268
Swimming pools, indoor ..	1,533	1,678	Golf practice ranges	28	1,972
Swimming pools, outdoor	2,498	149	Camping sites	1,687	443
Gymnasiums	6,674	451	Gate ball and croquet fields ..	2,421	292
<i>Judo</i> and <i>Kendo</i> gyms	2,404	479			

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 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)

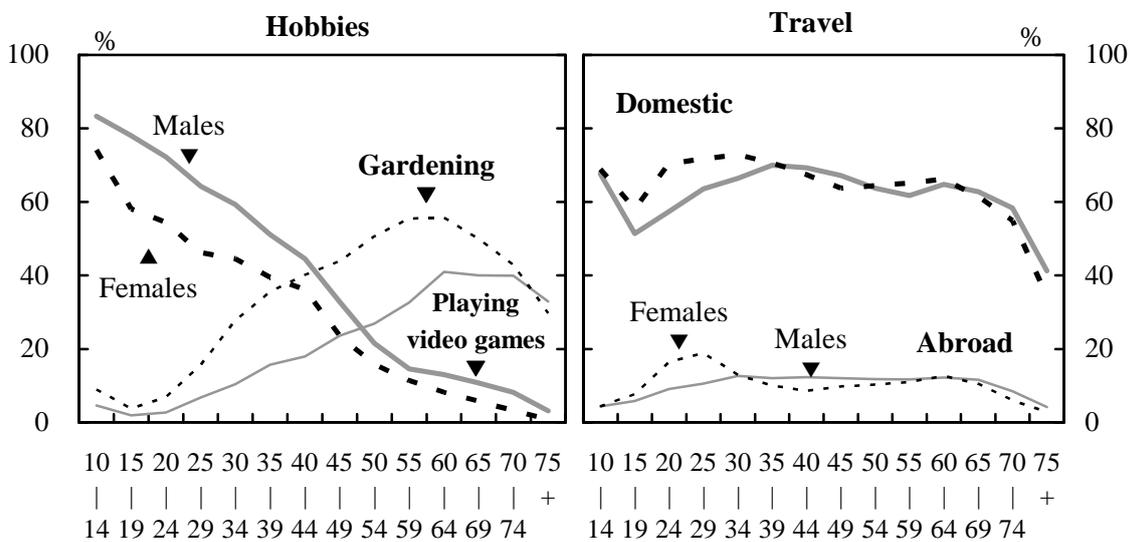
Leisure Activities	Total	Males	Females
Free time per day (hours and minutes)	6:23	6:31	6:15
Active leisure time (hours and minutes)	1:17	1:28	1:06
Participation rate (%) ¹⁾			
Hobbies and amusements	84.9	85.2	84.6
Sports ²⁾	65.3	70.4	60.5
Studies and researches ²⁾	35.2	34.4	36.0
Internet use ³⁾	59.4	62.5	56.5
Travel (domestic) ⁴⁾	62.2	62.0	62.5
Travel (abroad) ⁴⁾	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 women preferred "cooking, sewing and other household management-related topics" (13.8 percent), as well as "arts and culture" (13.3 percent).

Figure 16.4
Participation Rates for Major Leisure Activities by Age Group (2006)



Source: Statistics Bureau, MIC.

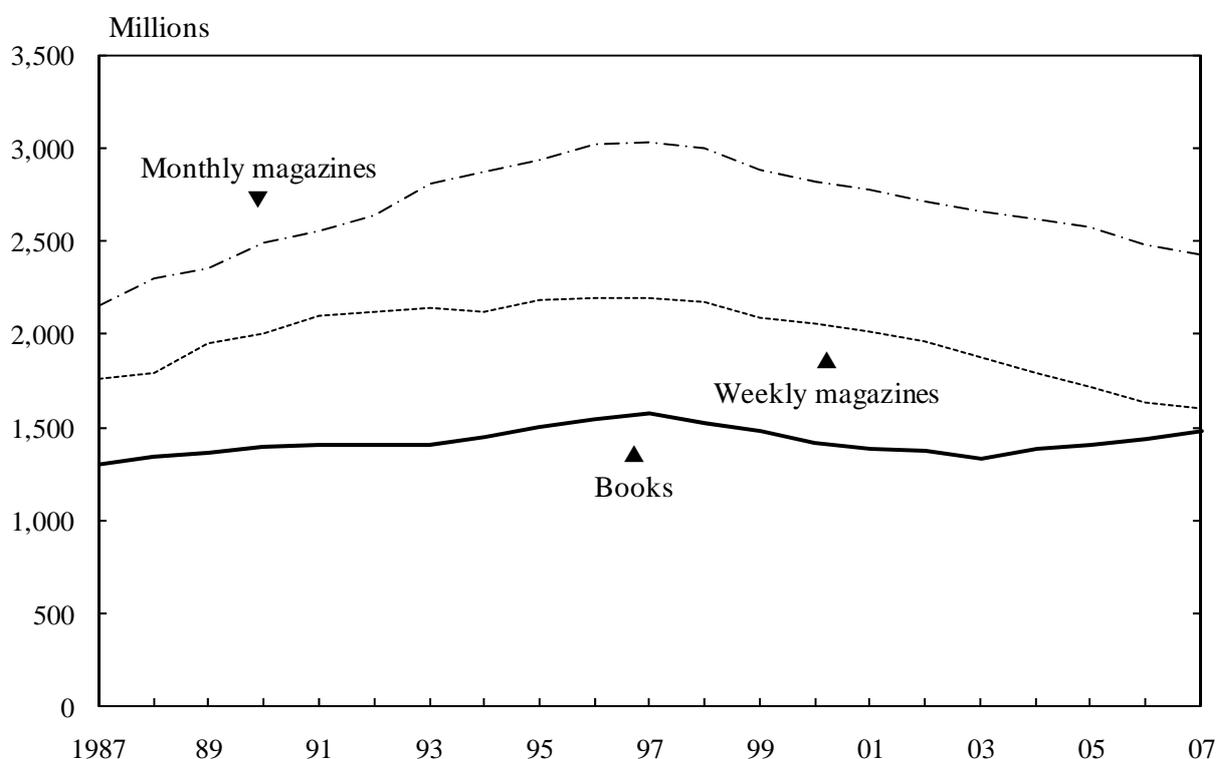
4. Publishing and Mass Media

The total number of books and magazines published in Japan during 2007 was 1.47 billion and 4.03 billion, respectively, of which 2.43 billion were monthlies and 1.60 billion were weeklies. It is estimated that 11.5 books and 31.6 magazines (19.0 monthlies and 12.6 weeklies) were printed per Japanese citizen in 2007.

Thousands of fresh titles of books and magazines are published each month in Japan. In 2007, 76,908 books and 4,511 magazines (including 2,629 monthlies and 133 weeklies) were newly released.

A total of 121 daily newspapers were in circulation, and the penetration was 1.0 newspaper per household as of October 2008.

Figure 16.5
Trends in Number of Publications



Source: Shuppan News Co., Ltd.

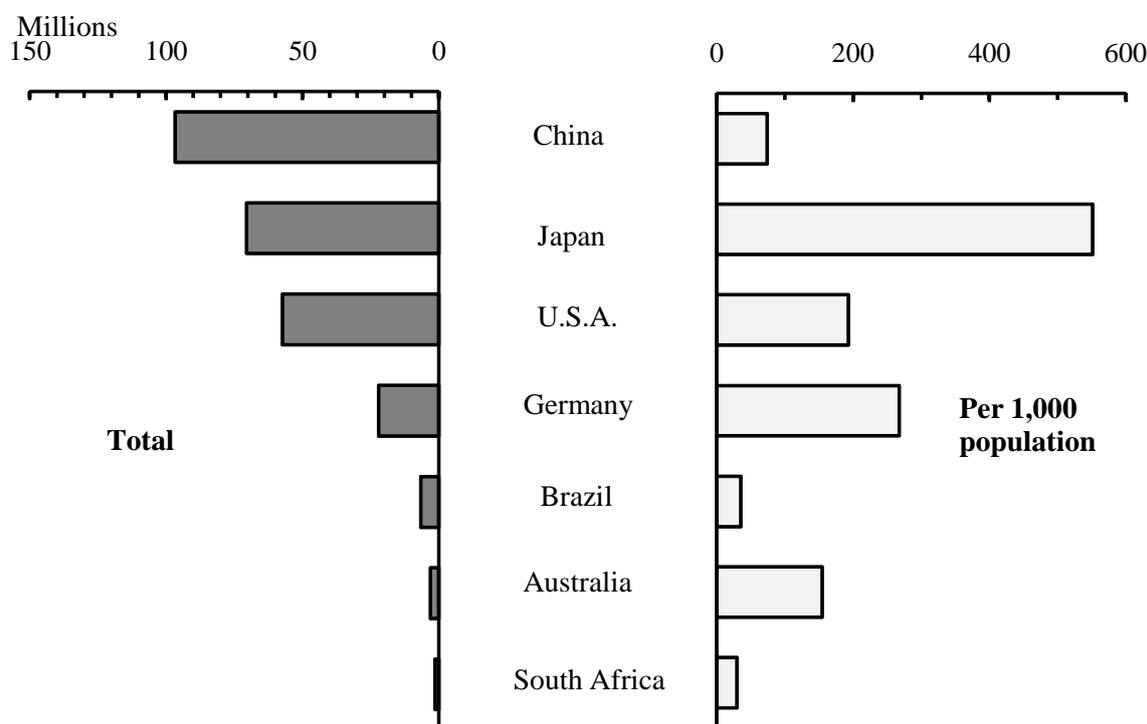
Table 16.6
New Publications

Subject	1990	1995	2000	2005	2007
Total	40,576	58,310	65,065	78,304	76,978
General works	1,780	2,794	2,587	2,551	2,540
Philosophy	1,762	2,731	2,997	3,763	3,805
General history	2,481	3,917	4,634	5,102	5,059
Social sciences	9,798	12,578	14,099	16,201	16,354
Natural sciences	2,970	4,460	5,218	6,226	6,441
Technology and engineering ...	3,446	4,774	6,105	8,104	8,397
Industry and commerce	1,698	2,160	3,000	3,337	3,278
Art	3,348	7,540	8,895	10,884	10,775
Languages	826	1,391	1,766	2,063	2,009
Literature	8,792	11,427	11,484	13,595	12,220
Others ¹⁾	3,675	4,538	4,280	6,478	6,100

1) Children's books and school textbooks.

Source: Shuppan News Co., Ltd.

Figure 16.6
Newspaper Circulation by Country (2004)

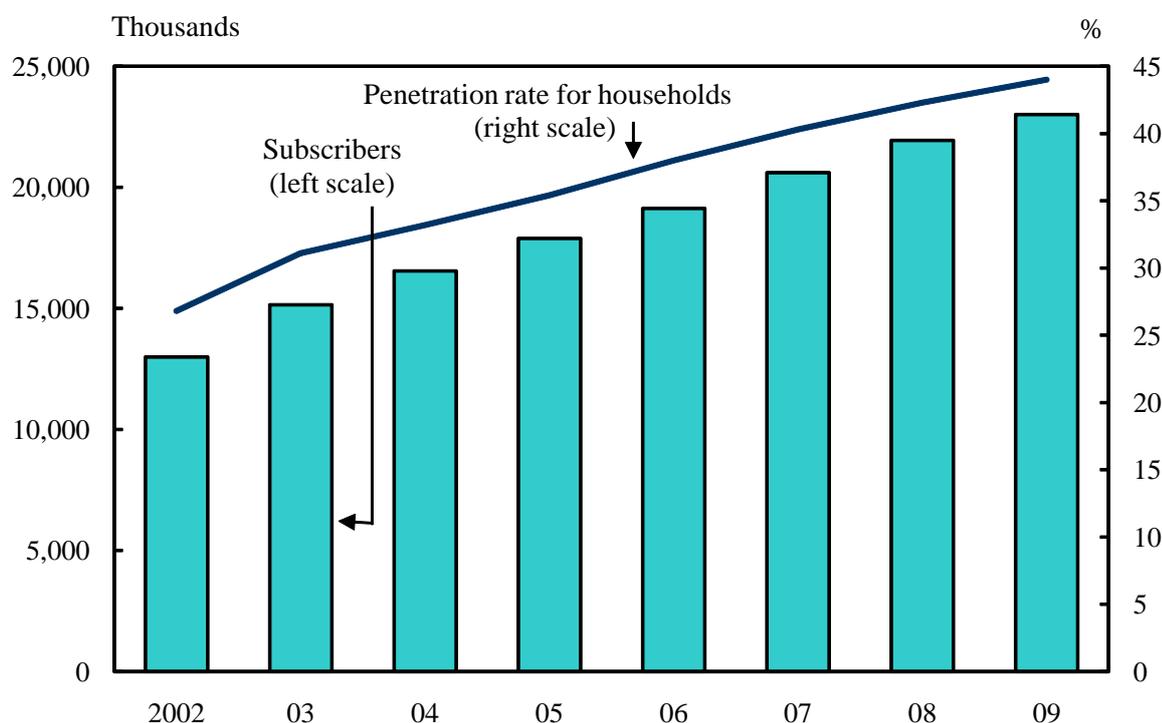


Source: UNESCO; World Association of Newspapers.

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) ¹⁾



1) As of March each year.

Source: Ministry of Internal Affairs and Communications.

Subscribers of cable TV services (self-originating broadcasting using licensed facilities) have steadily increased to 23.0 million households, or 44.0 percent of all households in March 2009.

In 2008, advertising expenditures on the four major media types in Japan (newspapers, magazines, radio and television) totaled 3.3 trillion yen, marking a drop from the previous year. This accounted for 49.3 percent of total 2008 advertising expenditures, which were 6.7 trillion yen. Advertisement on the Internet, a new advertising medium, was 10.4 percent, up 16.3 percent from the previous year.

Table 16.7
Advertising Expenditures by Medium

Year	Total	News- papers	Maga- zines	Radio	TV	Satellite media- related	Internet	Others
Advertising expenditures (billion 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
2007	7,019.1	946.2	458.5	167.1	1,998.1	60.3	600.3	2,788.6
2008	6,692.6	827.6	407.8	154.9	1,909.2	67.6	698.3	2,627.2
Percentage distribution (%)								
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
2007	100.0	13.5	6.5	2.4	28.5	0.8	8.6	39.7
2008	100.0	12.4	6.1	2.3	28.5	1.0	10.4	39.3

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
 (As of April 1, 2009)

Type of cultural and natural heritage	Number	
Designated important cultural properties ¹⁾	12,655	(1,076)
Fine and applied arts ¹⁾	10,311	(862)
Buildings ¹⁾	2,344	(214)
Historic sites, places of scenic beauty and natural monuments ²⁾	2,866	(161)
Historic sites ²⁾	1,614	(60)
Places of scenic beauty ²⁾	313	(29)
Natural monuments ²⁾	939	(72)
Important tangible folk cultural properties	207	
Important intangible folk cultural properties	264	
Important intangible cultural properties		
Recognized individuals	80	
Performing arts	36	
Craft techniques	44	
Recognized holding groups	25	
Performing arts	11	
Craft techniques	14	
Traditional building preservation areas	83	

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 April 1, 2009, 12,655 items were assigned as designated important cultural properties, of which 1,076 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).

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

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

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

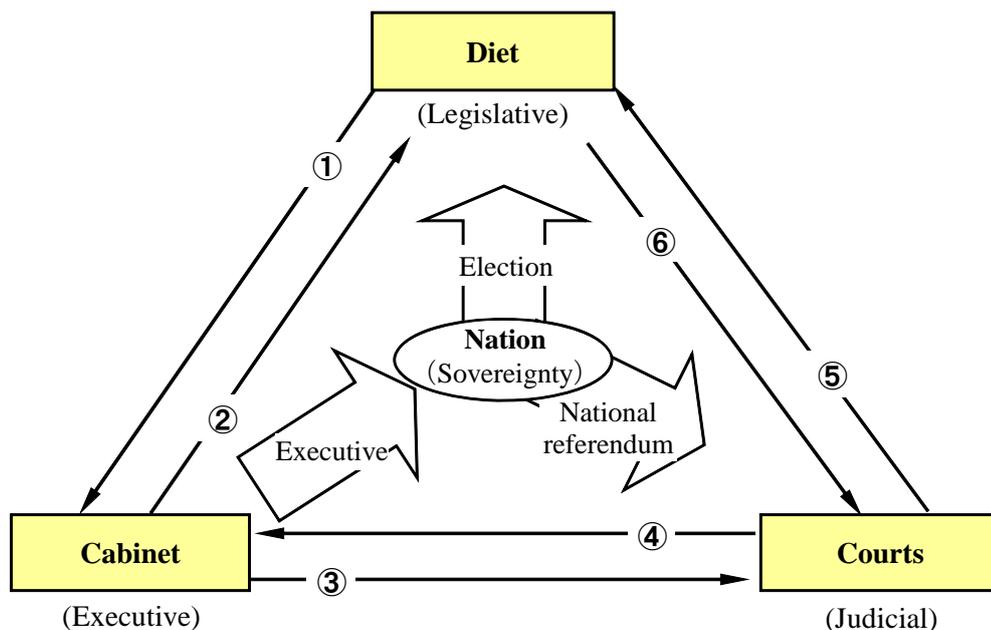
Chapter 17

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.

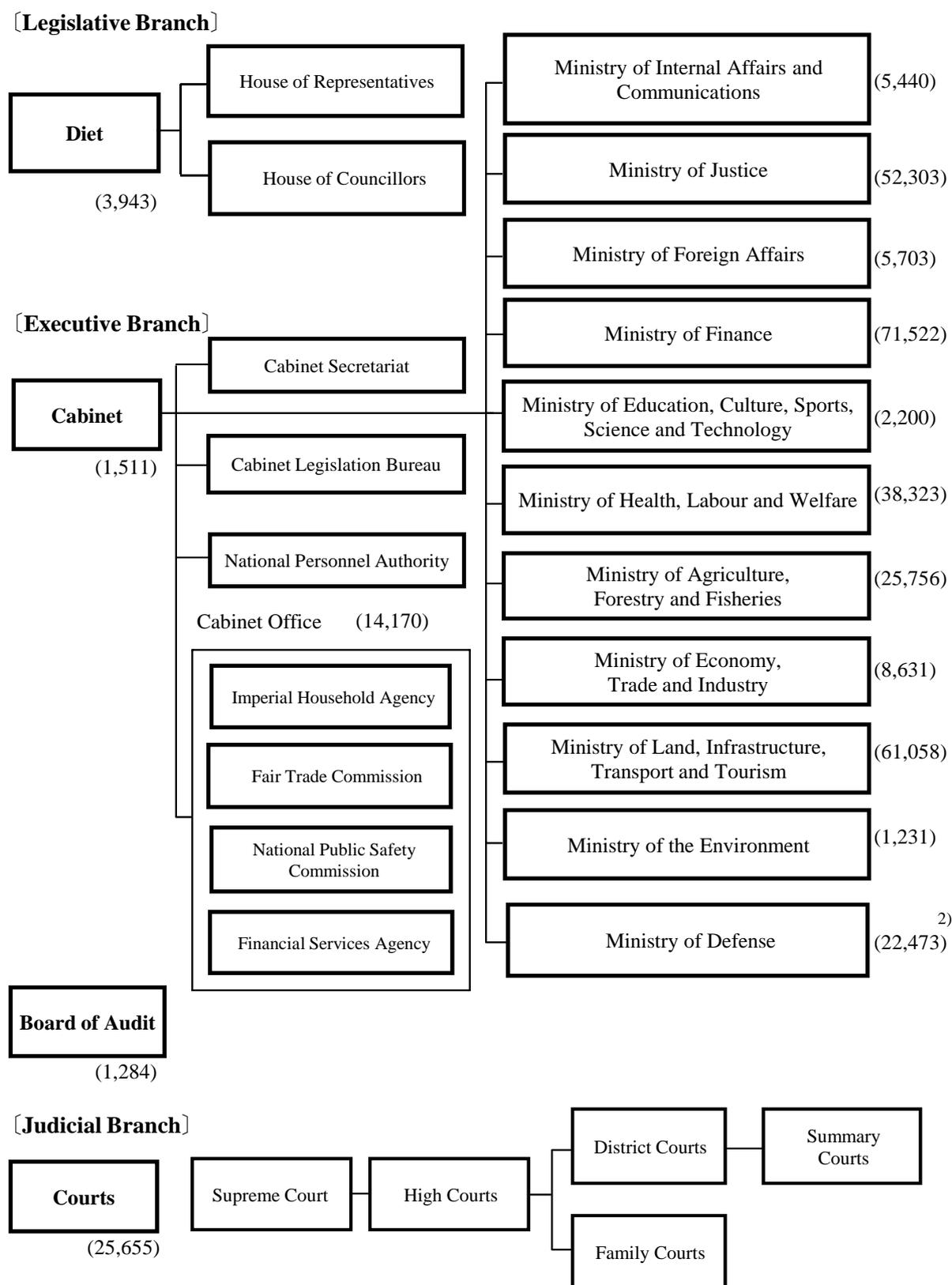
Figure 17.1
Separation of the Three Branches of Government
under the Japanese Constitution



- 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.

Figure 17.2
Government Organization of Japan ¹⁾ (FY2009)



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 establish and 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 ratification of treaties and conventions, 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, 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 fought for 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 September 2005. 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 2007.

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 May 21, 2009)		House of Councillors (As of June 17, 2009)	
Name	Number ¹⁾	Name	Number ¹⁾
Membership	480	Membership	242
Incumbents	478 (44)	Incumbents	242 (44)
Liberal Democratic Party	303 (26)	The Democratic Party, The Shin-Ryokufukai, The People's New Party and The Nippon	118 (23)
Democratic Party of Japan and Club of Independents	112 (10)	Liberal Democratic Party	81 (11)
New Komeito	31 (4)	New Komeito	21 (5)
Japanese Communist Party	9 (2)	Japanese Communist Party	7 (1)
Social Democratic Party	7 (2)	Social Democratic Party	5 (1)
The People's New Party, Daichi and Group of Independents	7 (0)	Japan Renaissance Party	4 (0)
Independents	9 (0)	Independents	5 (2)
Vacancies	2	Vacancies	1

1) Figures in parentheses refer to women only.

Source: The National Diet of Japan.

3. The Executive Branch

The Cabinet exercises its executive power on the basis of the laws and budgets adopted by the Diet. The Cabinet is composed of the Prime Minister and other Ministers of State, who are jointly 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 17.2
Successive Prime Ministers

Date ¹⁾	Name	Date ¹⁾	Name
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
Jul. 30, 1998	Obuchi, Keizo	Jun. 3, 1989	Uno, Sosuke
Jan. 11, 1996	Hashimoto, Ryutaro	Nov. 6, 1987	Takeshita, Noboru

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 any litigant 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 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.

Table 17.3
Judicial Cases Newly Accepted, Settled and Pending (All courts)

Year	(Thousands)					
	Civil and administrative cases			Criminal cases ¹⁾		
	Accepted	Settled	Pending	Accepted	Settled	Pending
1990	1,715	1,779	463	1,694	1,699	30
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

Year	Domestic cases			Juvenile cases ¹⁾		
	Accepted	Settled	Pending	Accepted	Settled	Pending
	1990	343	340	58	483	494	88
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

1) Persons involved.

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 June 1, 2009, Japan has 47 prefectures, within which there are 1,775 municipalities, plus the 23 wards (*ku*) in metropolitan Tokyo. In order to strengthen the administrative foundation of the municipalities, municipal mergers were promoted by law. As a result, the number of municipalities was reduced to 1,775 in June 2009, from 3,232 at the end of March 1999.

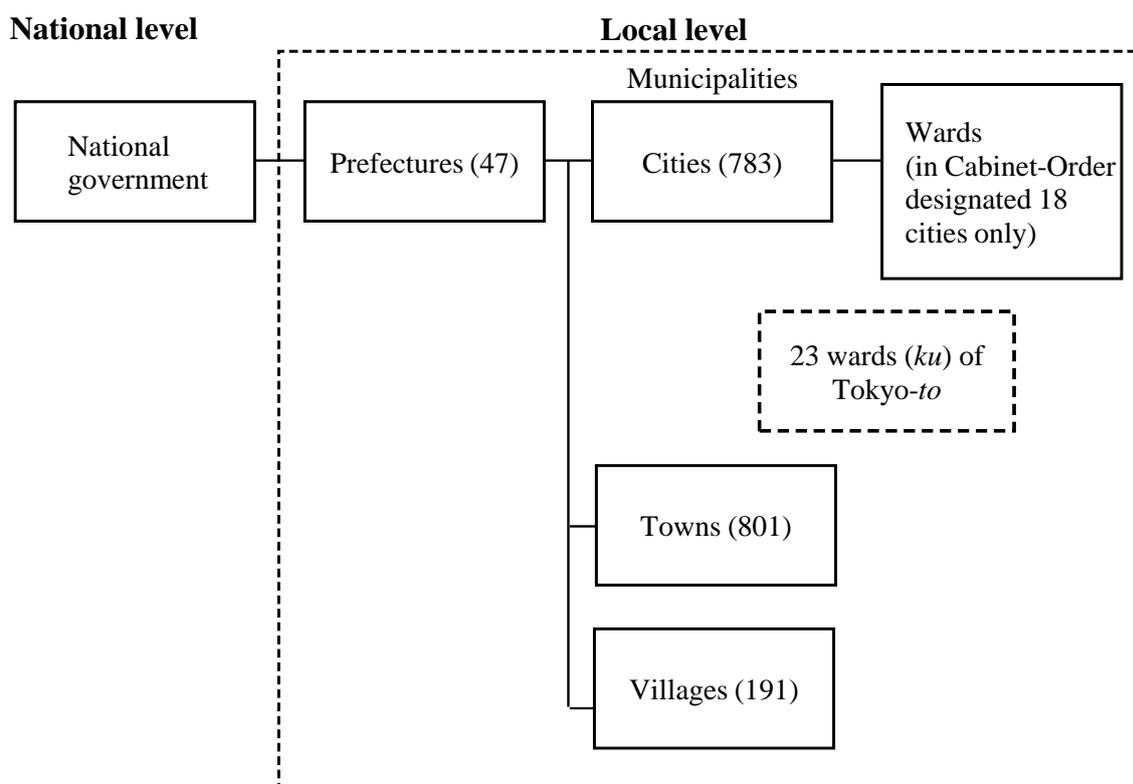
Municipalities that satisfy certain population criteria (i.e., 500,000 people or more) are eligible for designation as "Cabinet-Order designated cities." This designation gives them administrative and fiscal authority equivalent to those of prefectures. With the addition of five cities (Shizuoka-*shi* in April 2005, Sakai-*shi* in April 2006, Niigata-*shi*, Hamamatsu-*shi* both in April 2007, and Okayama-*shi* in April 2009), there are presently 18 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, 2008)

Type of Services	Number
Total	2,899,378
Education	1,090,713
General administrative services	584,230
Social welfare and public hygiene	391,784
Police	281,181
Fire protection	157,102
Public enterprise account sector	394,368
Hospitals	214,231
Water and sewerage	85,870
Transportation	28,918

Source: Ministry of Internal Affairs and Communications.

Figure 17.3
Government System by Level ¹⁾ (As of June 1, 2009)



1) Figures in parentheses indicate number.

Source: Ministry of Internal Affairs and Communications.

Appendix 1 Population, Surface Area and Population Density by Prefecture

Prefectures	Prefectural capital cities	Population (1,000)		Surface area (km ²)		Population density (per km ²)	
		2005 ¹⁾	2008 ²⁾	Total area	Inhabitable	Total area	Inhabitable
				2008	2007	2007	2007
Japan		127,768	127,692	377,944	121,372	343	1,053
Hokkaido	Sapporo-shi	5,628	5,535	83,457	21,901	71	254
Aomori-ken	Aomori-shi	1,437	1,392	9,607	3,204	146	439
Iwate-ken	Morioka-shi	1,385	1,352	15,279	3,710	89	368
Miyagi-ken	Sendai-shi	2,360	2,340	7,286	3,130	322	750
Akita-ken	Akita-shi	1,146	1,108	11,612	3,155	97	355
Yamagata-ken	Yamagata-shi	1,216	1,188	9,323	2,850	129	450
Fukushima-ken ...	Fukushima-shi	2,091	2,052	13,783	4,218	150	490
Ibaraki-ken	Mito-shi	2,975	2,964	6,096	3,976	487	747
Tochigi-ken	Utsunomiya-shi	2,017	2,011	6,408	2,946	314	684
Gumma-ken	Maebashi-shi	2,024	2,012	6,363	2,295	317	879
Saitama-ken	Saitama-shi	7,054	7,113	3,797	2,566	1,867	2,764
Chiba-ken	Chiba-shi	6,056	6,122	5,157	3,488	1,183	1,748
Tokyo-to	Tokyo (ku-area)	12,577	12,838	2,188	1,396	5,833	9,137
Kanagawa-ken ...	Yokohama-shi	8,792	8,917	2,416	1,460	3,676	6,083
Niigata-ken	Niigata-shi	2,431	2,391	12,583	4,482	191	537
Toyama-ken	Toyama-shi	1,112	1,101	4,248	1,851	260	598
Ishikawa-ken	Kanazawa-shi	1,174	1,168	4,186	1,383	280	846
Fukui-ken	Fukui-shi	822	812	4,190	1,067	195	765
Yamanashi-ken ..	Kofu-shi	885	871	4,465	950	196	923
Nagano-ken	Nagano-shi	2,196	2,171	13,562	3,311	161	659
Gifu-ken	Gifu-shi	2,107	2,100	10,621	2,168	198	971
Shizuoka-ken	Shizuoka-shi	3,792	3,800	7,780	2,732	489	1,391
Aichi-ken	Nagoya-shi	7,255	7,403	5,165	2,960	1,425	2,486
Mie-ken	Tsu-shi	1,867	1,875	5,777	2,023	325	928
Shiga-ken	Otsu-shi	1,380	1,402	4,017	1,262	350	1,107
Kyoto-fu	Kyoto-shi	2,648	2,629	4,613	1,155	571	2,281
Osaka-fu	Osaka-shi	8,817	8,806	1,898	1,319	4,643	6,682
Hyogo-ken	Kobe-shi	5,591	5,586	8,396	2,759	666	2,026
Nara-ken	Nara-shi	1,421	1,404	3,691	851	382	1,658
Wakayama-ken ..	Wakayama-shi	1,036	1,012	4,726	1,099	216	927
Tottori-ken	Tottori-shi	607	595	3,507	912	171	658
Shimane-ken	Matsue-shi	742	725	6,708	1,256	109	582
Okayama-ken	Okayama-shi	1,957	1,948	7,113	2,212	275	883
Hiroshima-ken ...	Hiroshima-shi	2,877	2,869	8,479	2,257	339	1,273
Yamaguchi-ken ..	Yamaguchi-shi	1,493	1,463	6,114	1,751	241	841
Tokushima-ken ..	Tokushima-shi	810	794	4,147	1,022	193	783
Kagawa-ken	Takamatsu-shi	1,012	1,003	1,877	992	536	1,014
Ehime-ken	Matsuyama-shi	1,468	1,444	5,678	1,671	256	869
Kochi-ken	Kochi-shi	796	773	7,105	1,169	110	669
Fukuoka-ken	Fukuoka-shi	5,050	5,054	4,977	2,743	1,016	1,843
Saga-ken	Saga-shi	866	856	2,440	1,340	352	641
Nagasaki-ken	Nagasaki-shi	1,479	1,440	4,104	1,620	355	897
Kumamoto-ken ..	Kumamoto-shi	1,842	1,821	7,406	2,748	247	665
Oita-ken	Oita-shi	1,210	1,200	6,340	1,771	190	680
Miyazaki-ken	Miyazaki-shi	1,153	1,136	7,735	1,835	148	623
Kagoshima-ken ..	Kagoshima-shi	1,753	1,717	9,189	3,244	188	533
Okinawa-ken	Naha-shi	1,362	1,376	2,276	1,163	604	1,180

1) Population census. 2) Population estimates.

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

Appendix 2 Main Economic Indicators of Selected Countries

Item	Year	Japan	Australia	Brazil	Canada	China ¹⁾	
Population (millions)	2006	127.77	20.63	188.16	32.63	1,320.7	
	2007	127.77	20.85	190.12	32.95	1,329.1	
	2008	127.69	21.07	191.97	33.26	1,337.4	
	Projection (medium variant) 2050	95.15	28.72	218.51	44.41	1,417.0	
Employed persons (1,000)	2007	64,120	10,444	a 89,318	16,866	769,900	
Unemployed persons (1,000)	2007	2,570	484	a 8,210	1,079	8,300	
Unemployment rates (%)	2007	3.9	4.4	a 8.4	6.0	4.0	
Hours worked per week (manufacturing)	2007	43.3	37.9	a 43.9	38.5	49.4	
Industrial production index (2005=100)	2007	107.2	101.0	108.9	105.4	...	
	2008	103.8	103.4	112.1	106.1	...	
Gross domestic product (US\$ billion)	2006	4,362	788	1,072	1,275	2,774	
	2007	4,385	946	1,314	1,426	3,400	
Wholesale price index (2005=100)	2007	104.0	b 110.5	106.4	c 104.0	...	
	2008	108.8	b 119.6	112.7	c 108.5	...	
Consumer price index (2005=100)	2007	100.3	106.0	108.0	104.2	...	
	2008	101.7	110.6	118.6	106.7	...	
Money stock		M ₂	Money+ quasi-money	Money+ quasi-money	Money+ quasi-money	Money+ quasi-money	
Percent changes from the previous year (%)	End of 2007	d 1.6	29.9	18.6	-25.3	16.7	
	End of 2008	d 2.1	...	...	...	...
Imports, CIF (US\$ million)	2008	762,575	200,562	182,568	e 407,170	1,131,620	
Exports, FOB (US\$ million)	2008	786,434	187,222	197,942	452,164	1,428,660	
Gold and foreign exchange reserves (US\$ million)	End of 2007	954,145	24,911	179,493	40,998	1,531,349	
	End of 2008	1,010,691	30,829	192,902	43,784	...	
Foreign exchange rates (national currency per U.S. dollar)		Yen	Australian dollars	Reais	Canadian dollars	Yuan	
	Average	2008	103.37	1.1692	1.8340	1.0670	6.9487
	End of year	2008	90.28	1.4434	2.3360	1.2246	6.8346

1) Excluding Hong Kong SAR, Macao SAR and Taiwan. a) 2006. b) Manufacturing output. c) Industry selling. d) Average outstanding. e) Imports, FOB.

France	Germany	India	Indonesia	Italy	Korea, Rep. of	Malaysia	Philippines
61.37	82.39	1,147.7	221.95	58.98	47.77	26.10	87.10
61.71	82.34	1,164.7	224.67	59.31	47.96	26.56	88.72
62.04	82.26	1,181.4	227.35	59.60	48.15	27.01	90.35
67.67	70.50	1,613.8	288.11	57.07	44.08	39.66	146.16
25,628	38,163	a 368,966	99,930	23,222	23,433	10,538	33,672
2,215	3,608	b 39,974	10,011	1,506	783	351	2,246
8.0	8.6	...	9.1	6.1	3.2	3.2	7.3
36.5	38.4	47.2	43.0	36.3	45.5	49.1	44.9
102.4	113.6	121.7	c 103.8	105.8	115.9	106.9	c 98.2
100.1	113.9	126.4	...	102.3	119.4	106.8	c 102.3
2,248	2,913	911	365	1,851	888	156	118
2,546	3,317	1,141	433	2,095	957	187	144
d 106.0	d 106.8	109.8	130.4	d 109.3	d 102.4	d 111.6	d 110.4
d 111.4	d 112.7	119.7	164.6	d 115.8	d 111.1	d 121.1	d 114.8
103.1	103.9	112.5	120.3	104.0	104.9	105.7	109.2
106.1	106.6	121.9	132.4	107.4	109.7	111.5	119.4
M ₃	M ₃	Money+ quasi-money	Money+ quasi-money	M ₃	Money+ quasi-money	Money+ quasi-money	Money+ quasi-money
11.9	11.9	...	19.3	11.9	0.3	10.5	5.4
8.6	8.6	...	...	8.6	...	...	...
696,957	1,205,522	276,441	129,767	558,543	435,275	163,900	60,282
596,081	1,467,244	175,516	147,640	548,955	422,007	208,986	49,025
50,339	50,404	267,625	55,106	32,744	262,176	101,084	30,445
37,937	49,051	248,039	49,723	41,338	201,170	91,212	33,459
Euros	Euros	Rupees	Rupiah	Euros	Won	Ringgit	Pesos
0.6827	0.6827	43.505	9,699.0	0.6827	1,102.05	3.3358	44.475
0.7185	0.7185	48.455	10,950.0	0.7185	1,259.50	3.4640	47.785

a) 2000. b) Work applicants. c) Manufacturing production. d) Producer prices.

Appendix 2

Main Economic Indicators of Selected Countries (Continued)

Item	Year	Russia	Singapore	Thailand	U.K.	U.S.A.	
Population (millions)	2006	142.53	4.36	66.51	60.58	305.70	
	2007	141.94	4.49	66.98	60.90	308.67	
	2008	141.39	4.62	67.39	61.23	311.67	
	Projection (medium variant)	2050	116.10	5.22	73.36	72.37	403.93
Employed persons (1,000)	2007	70,570	1,842	37,122	29,100	146,047	
Unemployed persons (1,000)	2007	4,588	76	442	1,621	7,078	
Unemployment rates (%)	2007	6.1	4.0	1.2	5.3	4.6	
Hours worked per week (manufacturing)	2007	a 7.0	50.6	b 50.5	40.9	41.2	
Industrial production index (2005=100)	2007	...	c 118.4	...	100.8	103.8	
	2008	...	c 113.5	...	98.0	103.8	
Gross domestic product (US\$ billion)	2006	985	137	207	2,395	13,133	
	2007	1,290	161	245	2,768	13,776	
Wholesale price index (2005=100)	2007	...	105.3	d 110.5	e 104.8	d 109.7	
	2008	...	113.3	d 124.2	e 112.5	d 120.5	
Consumer price index (2005=100)	2007	119.6	103.1	107.0	107.6	106.2	
	2008	136.4	109.9	112.8	111.9	110.2	
Money stock		Money+ quasi-money	Money+ quasi-money	Money+ quasi-money	M ₄	M ₂	
Percent changes from the previous year (%)	End of 2007	44.2	13.4	1.3	11.9	f 5.7	
	End of 2008	...	...	...	* 16.7	f 6.7
Imports, CIF (US\$ million)	2008	267,084	319,781	178,776	631,765	2,165,980	
Exports, FOB (US\$ million)	2008	467,907	338,201	172,821	458,843	1,301,110	
Gold and foreign exchange reserves (US\$ million)	End of 2007	467,552	162,957	85,371	49,509	73,987	
	End of 2008	413,449	174,192	108,806	44,887	80,704	
Foreign exchange rates (national currency per U.S. dollar)		Rubles	Singapore dollars	Baht	Pounds	U.S. dollars	
	Average	2008	24.8529	1.4149	33.313	0.5396	1.0000
	End of year	2008	29.3804	1.4392	34.898	0.6860	1.0000

a) Per day. b) 2003. c) Manufacturing production. d) Producer prices. e) Manufacturing output.
f) Average outstanding.

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

Appendix 3 Foreign Exchange Rates ¹⁾

(Yen against U.S. dollar)

Year	Average	End of year
1992	126.62	124.65
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

1) 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)	0.3937008 inches
	1 meter (m)	{ 3.280840 feet 1.093613 yards
	1 kilometer (km)	0.6213712 miles
Area:	1 square meter (m ²)	{ 10.763910 square feet 1.195990 square yards
	1 square kilometer (km ²)	0.3861022 square miles
	1 hectare (ha) 10,000 square meters (m ²) }	2.471054 acres
Volume:	1 cubic meter (m ³)	{ 35.31467 cubic feet 1.307951 cubic yards
Weight:	1 kilogram (kg)	{ 35.27396 ounces 2.204623 pounds
	1 ton (t)	{ 0.9842065 long tons 1.1023113 short tons
Capacity:	1 liter (ℓ)	{ 0.8798766 imp. quarts 1.056688 U.S. liq. quarts
Temperature:	centigrade (°C)	5/9 (Fahrenheit-32)