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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.

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.

September 2013

Masahiko SUE
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, 2013.
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. Unless otherwise indicated, amounts shown are in Japanese yen. Refer to Appendix 3 for exchange rates of JPY per U.S. dollar.
5. Statistical figures may not add up to the totals due to rounding.
6. "Billion" means a thousand million; "trillion" means a thousand billion.
7. The following symbols are used in the tables:

•••	Data not available
―	Magnitude zero or figures not applicable
0 or 0.0	Less than half of unit employed
#	Marked break in series
*	Provisional or estimate

8. Data relating to "China" generally exclude those for Hong Kong SAR, Macao SAR and Taiwan.
9. All contents of the present issue, including tables, figures, and maps, are also available on the website:

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

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

    Source: Statistical Handbook of Japan 2013, Statistics Bureau, Ministry of Internal Affairs and Communications, Japan.

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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 physiographical phenomena. Therefore, the number of earthquake occurrences is quite high there, and so is the proportion of active volcanoes. 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 (2012)
(Square kilometers)

District	Area
Japan	377,960
Honshu	a) 231,121
Hokkaido	83,457
Kyushu	42,194
Shikoku	a) 18,793
Okinawa	2,277

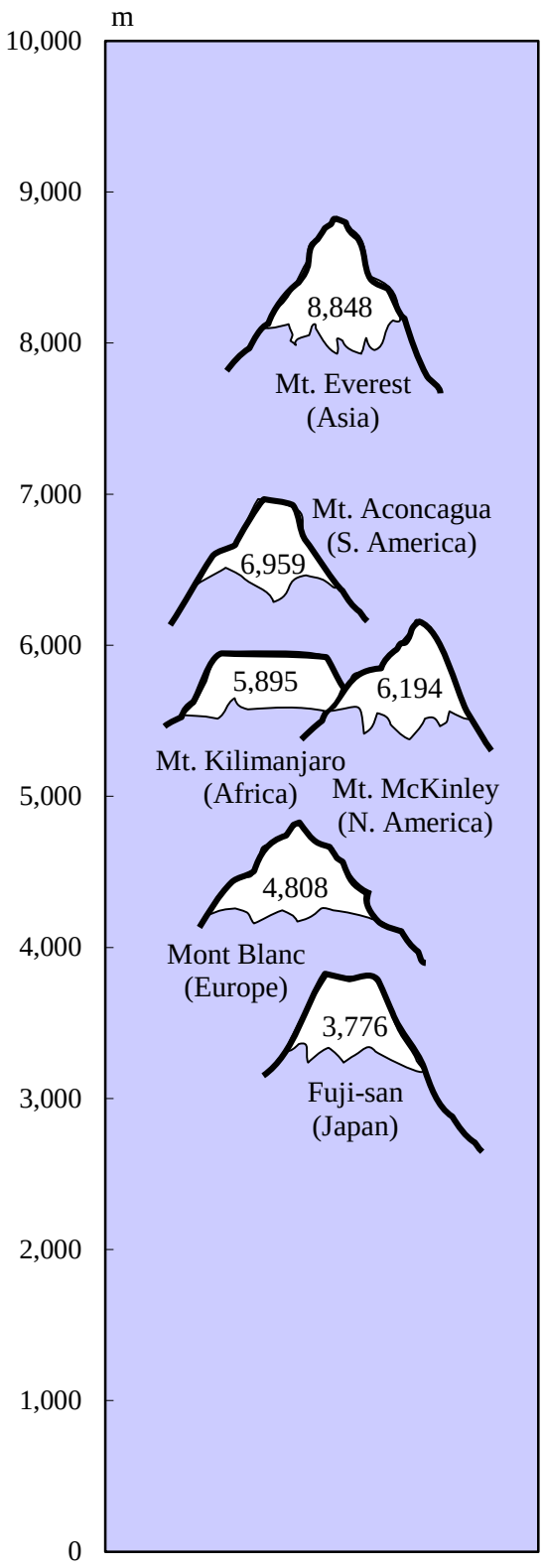
a) Excluding some areas of which boundaries are not yet fixed.
Source: Ministry of Land, Infrastructure, Transport and Tourism.

Table 1.2
Top 10 Countries According to Surface Area (2011) [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
Algeria	2,382

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 (2012)

(Meters)

Name	Height
Fuji-san	3,776
Kita-dake	3,193
Okuhotaka-dake	3,190
Aino-dake	3,189
Yari-ga-take	3,180
Higashi-dake	3,141
Akaishi-dake	3,120
Karasawa-dake	3,110
Kitahotaka-dake	3,106
Obami-dake	3,101

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

Table 1.4
Rivers (2012)

(Kilometers)

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

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

Table 1.5
Lakes (2012)

(Square kilometers)

Name	Area
Biwa-ko	670.3
Kasumi-ga-ura	167.6
Saroma-ko	151.8
Inawashiro-ko	103.3
Naka-umi	86.1
Kussharo-ko	79.6
Shinji-ko	79.1
Shikotsu-ko	78.4
Toya-ko	70.7
Hamana-ko	65.0

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

Forests account for the largest portion of the nation's surface area. There are approximately 250,000 square kilometers (which equates to 66 percent of the nation's surface area) of forests, followed by approximately 50,000 square kilometers of farmland (12 percent). Together, forests and farmland thus cover approximately 80 percent of the nation. There are approximately 20,000 square kilometers of building land (5 percent).

Table 1.6
Surface Area by Use

(1,000 square kilometers)

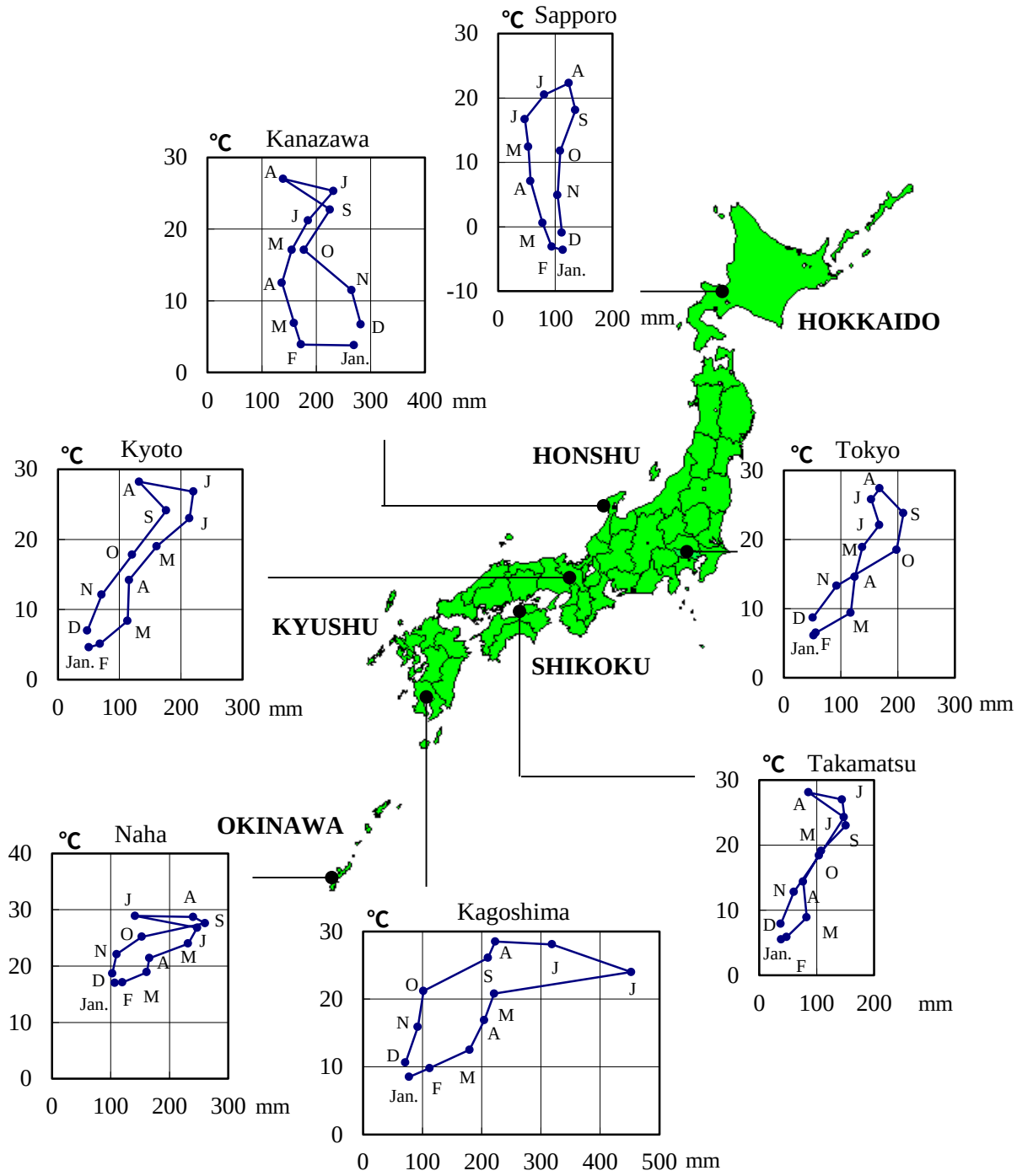
Year	Total	Forests	Farmland	Inland water	Roads [1)]	Building land [2)]	Others
1980	377.7	252.6	56.1	11.5	10.4	14.0	33.1
1990	377.7	252.4	53.3	13.1	11.4	16.0	31.5
2000	377.9	251.1	49.1	13.5	12.7	17.9	33.6
2010	377.9	250.7	46.7	13.3	13.6	19.0	34.7
(%)	100.0	66.3	12.4	3.5	3.6	5.0	9.2

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 Sea of Japan 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)
(1981-2010 average)



Source: Japan Meteorological Agency.

Table 1.7
Temperature and Precipitation (Normal value) (1981-2010 average)

Temperature (℃) Precipitation (mm)

Observing station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Annual [1)]
Sapporo	Temp. High	-0.6	0.1	4.0	11.5	17.3	21.5	24.9	26.4	22.4	16.2	8.5	2.1	12.9
	Temp. Low	-7.0	-6.6	-2.9	3.2	8.3	12.9	17.3	19.1	14.2	7.5	1.3	-4.1	5.3
	Prec.	114	94	78	57	53	47	81	124	135	109	104	112	1,107
Tokyo	Temp. High	9.9	10.4	13.3	18.8	22.8	25.5	29.4	31.1	27.2	21.8	16.9	12.4	20.0
	Temp. Low	2.5	2.9	5.6	10.7	15.4	19.1	23.0	24.5	21.1	15.4	9.9	5.1	13.0
	Prec.	52	56	118	125	138	168	154	168	210	198	93	51	1,529
Kanazawa	Temp. High	6.8	7.3	11.0	16.9	21.6	25.0	28.8	30.9	26.6	21.3	15.5	10.2	18.5
	Temp. Low	0.9	0.7	3.0	8.2	13.1	18.0	22.3	23.7	19.5	13.3	7.7	3.4	11.2
	Prec.	270	172	159	137	155	185	232	139	226	177	265	282	2,399
Kyoto	Temp. High	8.9	9.7	13.4	19.9	24.6	27.8	31.5	33.3	28.8	22.9	17.0	11.6	20.8
	Temp. Low	1.2	1.4	4.0	9.0	14.0	18.8	23.2	24.3	20.3	13.6	7.8	3.2	11.7
	Prec.	50	68	113	116	161	214	220	132	176	121	71	48	1,491
Takamatsu	Temp. High	9.4	10.1	13.4	19.5	24.1	27.3	31.2	32.4	28.4	22.8	17.2	12.1	20.7
	Temp. Low	1.6	1.8	4.4	9.4	14.4	19.3	23.6	24.4	20.7	14.2	8.5	3.7	12.2
	Prec.	38	48	83	76	108	151	144	86	148	104	60	37	1,082
Kagoshima	Temp. High	12.8	14.3	17.0	21.6	25.2	27.6	31.9	32.5	30.1	25.4	20.3	15.3	22.8
	Temp. Low	4.6	5.7	8.4	12.7	17.1	21.0	25.3	25.6	22.8	17.5	11.9	6.7	14.9
	Prec.	78	112	180	205	221	452	319	223	211	102	92	71	2,266
Naha	Temp. High	19.5	19.8	21.7	24.1	26.7	29.4	31.8	31.5	30.4	27.9	24.6	21.2	25.7
	Temp. Low	14.6	14.8	16.5	19.0	21.8	24.8	26.8	26.6	25.5	23.1	19.9	16.3	20.8
	Prec.	107	120	161	166	232	247	141	241	261	153	110	103	2,041

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

The Great East Japan Earthquake

1. Overview

At 2:46 p.m. on March 11, 2011, a strong earthquake of magnitude 9.0 occurred in the Pacific Ocean near the coast of northeastern Japan. The tsunami that followed was measured as high as 8.5 meters in Miyako, Iwate Prefecture. It devastated cities, towns, and villages along a broad swath of the Pacific coast of the Tohoku Region in northeastern Japan, causing vast human and material damage. In Tokyo, the intensity of the quake was measured at level 5-upper on the Japanese scale, but there was only minor damage. The magnitude of 9.0 made it the largest earthquake ever measured in Japan, and the fourth largest in the world since 1900.

2. Damage

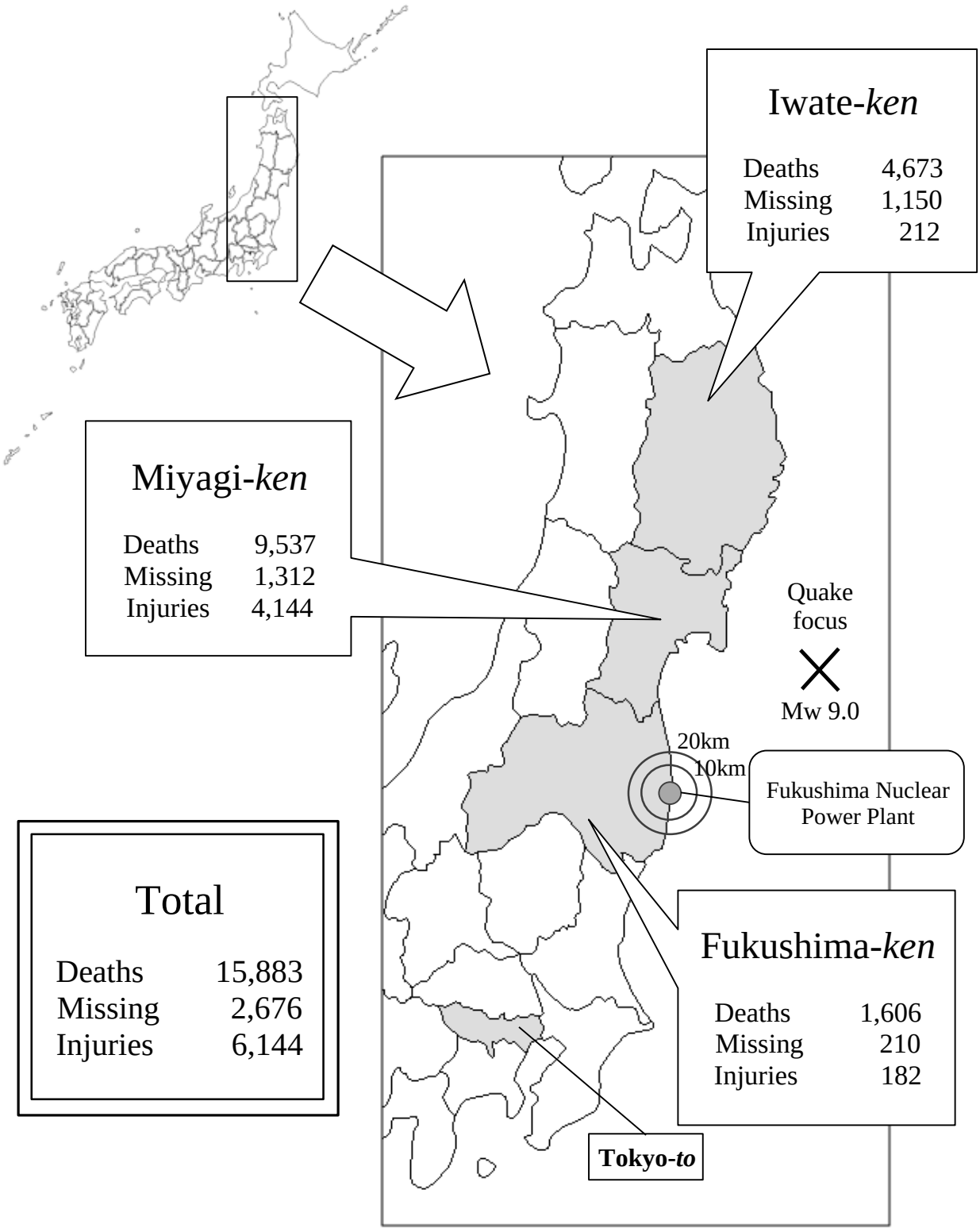
The earthquakes and the huge tsunami that followed caused heavy casualties and enormous damage in the northeastern area and its vicinity, such as the Kanto Region. As of May 2013, the confirmed number of deaths had reached 15,883 persons, with 2,676 missing and 6,144 injured. There were 303,571 displaced persons living in evacuation centers nearby.

Damage (as of May 10, 2013) [1)]

Prefectures	Human damage			Building damage		
	Deaths	Missing	Injuries	Total collapse	Half collapse	Partially damaged
Total	15,883	2,676	6,144	126,419	272,017	740,552
Hokkaido	1	-	3	-	4	7
Aomori-*ken*	3	1	111	308	701	1,006
Iwate-*ken*	4,673	1,150	212	18,370	6,558	14,141
Miyagi-*ken*	9,537	1,312	4,144	82,855	154,979	222,601
Akita-*ken*	-	-	11	-	-	3
Yamagata-*ken*	2	-	29	-	-	21
Fukushima-*ken*	1,606	210	182	21,165	72,935	166,410
Ibaraki-*ken*	24	1	712	2,620	24,168	184,115
Tochigi-*ken*	4	-	133	261	2,112	73,017
Gunma-*ken*	1	-	39	-	7	17,246
Saitama-*ken*	-	-	45	24	199	1,800
Chiba-*ken*	21	2	258	801	10,117	54,850
Tokyo-*to*	7	-	117	15	198	4,847
Kanagawa-*ken*	4	-	137	-	39	454
Niigata-*ken*	-	-	3	-	-	17
Yamanashi-*ken*	-	-	2	-	-	4
Nagano-*ken*	-	-	1	-	-	-
Shizuoka-*ken*	-	-	3	-	-	13
Mie-*ken*	-	-	1	-	-	-
Kochi-*ken*	-	-	1	-	-	-

1) Including 18 earthquakes that occurred throughout the country between April 7, 2011 and January 31, 2013.
Source: National Police Agency.

Devastated area (as of May 10, 2013) [1)]
Main disaster zone



1) Including 18 earthquakes that occurred throughout the country between April 7, 2011 and January 31, 2013.
Source: National Police Agency.

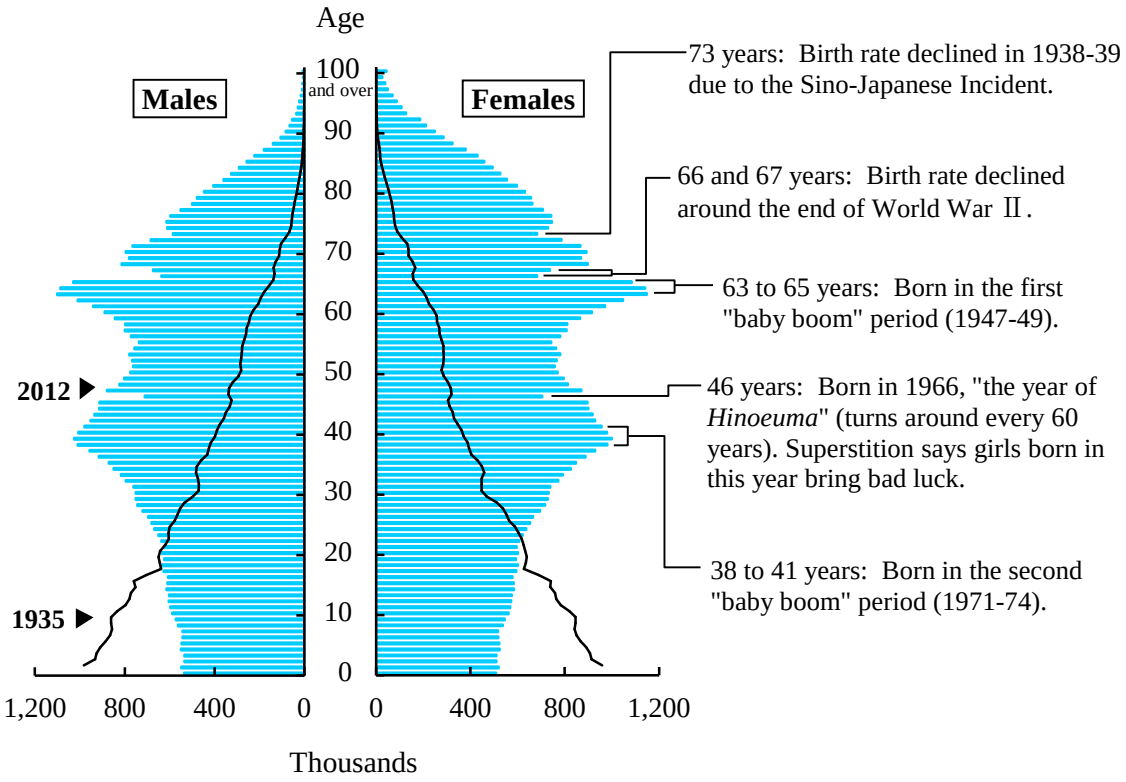
Chapter 2

Population

1. Total Population

Japan's total population in 2012 was 127.52 million. This ranked tenth in the world and made up 1.8 percent of the world's total. Japan's population density measured 343.4 persons per square kilometer in 2010, ranking seventh among countries with a population of 10 million or more.

Figure 2.1
Population Pyramid



Source: Statistics Bureau, MIC.

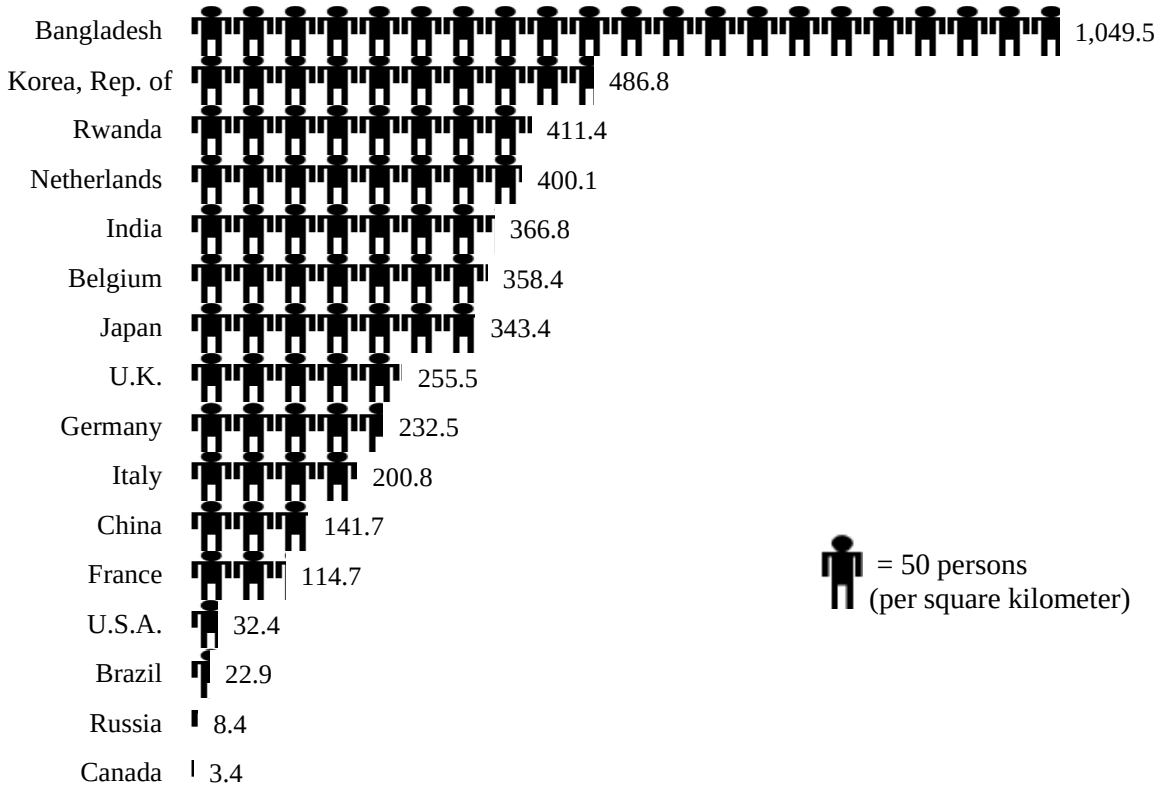
Table 2.1
Countries with a Large Population (2012)

(Millions)

Country	Population	Country	Population
World	7,080		
China	1,377	Pakistan	179
India	1,237	Nigeria	169
U.S.A.	318	Bangladesh	155
Indonesia	247	Russia	143
Brazil	199	Japan	128

Source: Statistics Bureau, MIC; United Nations.

Figure 2.2
Population Density by Country (2010)



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. 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 2005 total population was 127.77 million, declining from the previous year (127.79 million) for the first time after World War II. In 2012, it was 127.52 million, down by 284,000 from the year before.

Table 2.2
Trends in Population (as of October 1)

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		
1872 [1)]	34,806	17,666	...	...	...	...	91
1900 [1)]	43,847	22,051	33.9	60.7	5.4	0.83	115
1910 [1)]	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	254
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	301
1980	117,060	57,594	23.5	67.4	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	69.7	12.1	0.42	332
1995	125,570	61,574	16.0	69.5	14.6	0.31	337
2000	126,926	62,111	14.6	68.1	17.4	0.21	340
2005	127,768	62,349	13.8	66.1	20.2	0.13	343
2010	128,057	62,328	13.2	63.8	23.0	0.05	343
2011	127,799	62,184	13.1	63.6	23.3	-0.20	343
2012	127,515	62,029	13.0	62.9	24.1	-0.22	342
(Projection, January 2012)							
2020	124,100	60,146	11.7	59.2	29.1	-0.34	333
2030	116,618	56,253	10.3	58.1	31.6	-0.62	313
2040	107,276	51,583	10.0	53.9	36.1	-0.83	288
2050	97,076	46,657	9.7	51.5	38.8	-0.99	260

1) As of January 1.
Source: Statistics Bureau, MIC; Ministry of Health, Labour and Welfare; Ministry of Land, Infrastructure, Transport and Tourism.

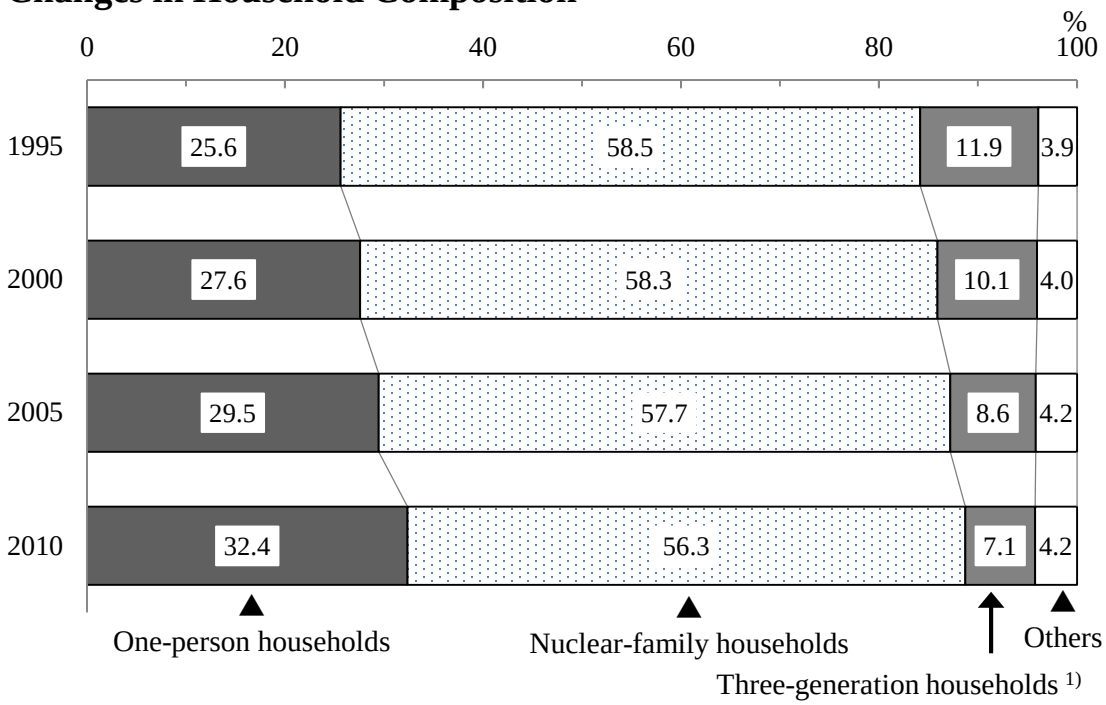
2. Households

(1) Household Size and Household Composition

The Population Census shows that Japan had 51.84 million private households (excluding "institutional households" such as students in school dormitories) in 2010, going over 50 million for the first time since

the Census began. Of that total, 56.3 percent were nuclear-family households, and 32.4 percent were one-person households.

Figure 2.3
Changes in Household Composition



1) A household in which at least three generations out of five generations in a direct line live together, regardless of the presence of other household members.
Source: Statistics Bureau, MIC.

Table 2.3
Households and Household Members

Year	Private house-holds (1,000)	Average annual rate of increase (%)	Private 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
2010	51,842	1.11	125,546	2.42	128,057	0.05

a) Annual rate of increase between 1960-1970.
Source: Statistics Bureau, MIC.

From the 1920s to the mid-1950s, the average number of household members remained at about five. However, due to the increase in one-person households and nuclear families since 1960s, the size of household was down significantly in 1970, to 3.41 members. The size of household members continued to decline to 2.42 in 2010. 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 2019 and then decrease thereafter.

(2) Elderly Households

The number of elderly households (private households with household members 65 years of age or over) in 2010 was 19.34 million. They accounted for 37.3 percent of private households. There were 4.79 million one-person elderly households. Among these, there were 2.5 times as many women as men. There were 5.25 million aged-couple households.

Table 2.4
Trends in Elderly Households

(Thousands)

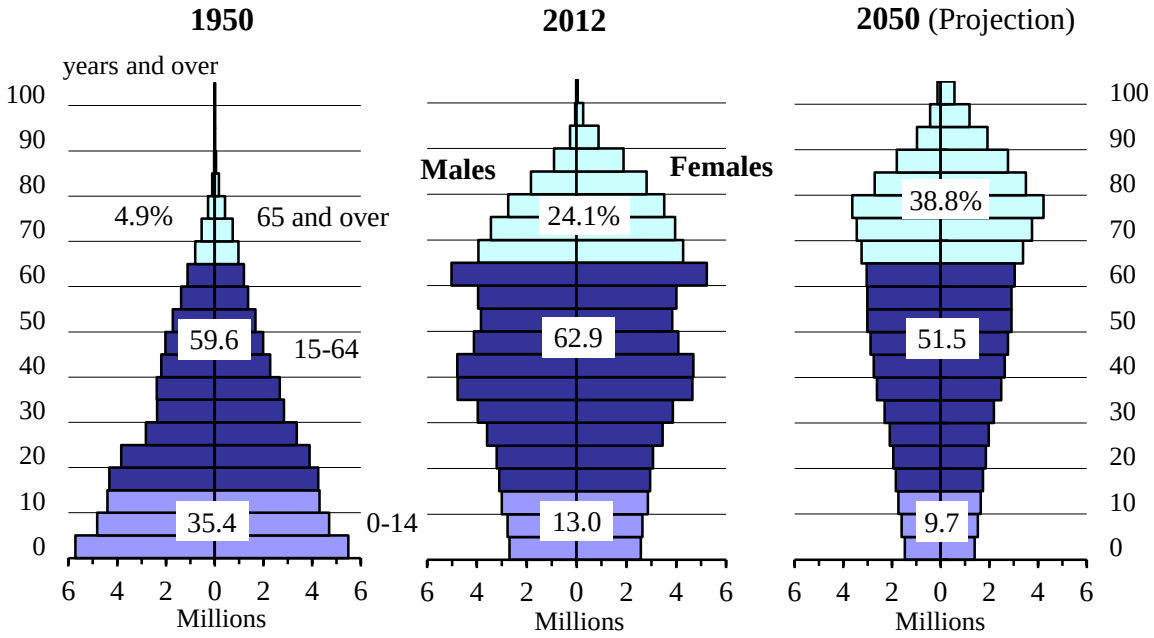
Type of households	1980	1985	1990	1995	2000	2005	2010
Private households	35,824	37,980	40,670	43,900	46,782	49,063	51,842
Elderly households [1]	8,124	9,284	10,729	12,790	15,057	17,220	19,338
(percentage)	22.7	24.4	26.4	29.1	32.2	35.1	37.3
One-person households	881	1,181	1,623	2,202	3,032	3,865	4,791
Males	193	233	310	460	742	1,051	1,386
Females	688	948	1,313	1,742	2,290	2,814	3,405
Aged-couple households [2]	1,026	1,415	1,967	2,763	3,661	4,487	5,251

1) For 1980–1990, private households with related members 65 years of age or over; from 1995 on, private households with household members 65 years of age or over. 2) Consisting of a husband 65 years of age and over and his wife 60 years of age and over.
Source: Statistics Bureau, MIC.

3. 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 2012, aged population (65 years and over) was 30.79 million, constituting 24.1 percent of the total population and marking a record high. This percentage of elderly in the population is the highest in the world.

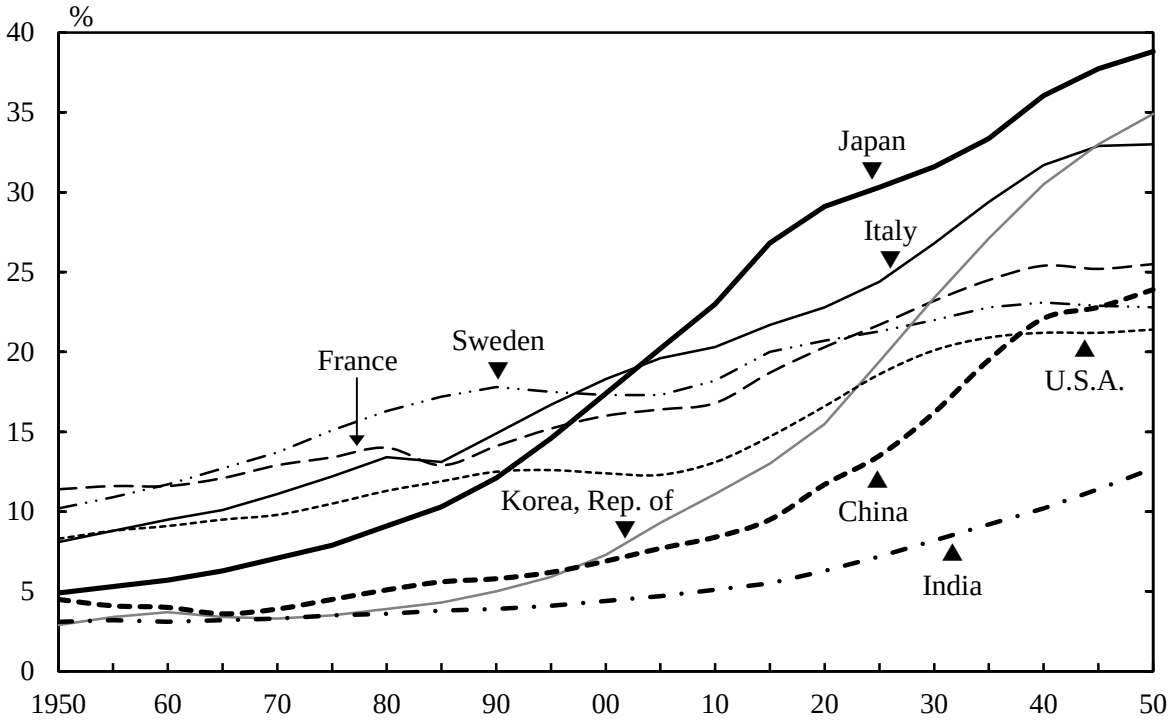
Figure 2.4
Changes in the Population Pyramid



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

The speed of aging of Japan's population is much faster than in advanced Western European countries or the U.S.A. Although aged population 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 2.5
Proportion of Elderly Population by Country (Aged 65 years and over)



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

Table 2.5
Age Structure of Population by Country

(%)

Country	2010			2050 (projection)		
	0-14 years	15-64	65 and over	0-14 years	15-64	65 and over
Japan	13.2	63.8	23.0	9.7	51.5	38.8
Korea, Rep. of	16.2	72.7	11.1	12.0	53.1	34.9
Italy	14.0	65.7	20.3	13.9	53.1	33.0
Germany	13.4	65.8	20.8	12.6	54.7	32.7
France	18.4	64.8	16.8	17.0	57.6	25.5
U.K.	17.6	65.9	16.6	16.6	58.7	24.7
Canada	16.5	69.4	14.2	16.5	58.8	24.7
China	18.1	73.5	8.4	14.7	61.3	23.9
Sweden	16.5	65.3	18.2	18.0	59.2	22.8
Brazil	25.5	67.6	6.9	15.3	62.2	22.5
U.S.A.	19.8	67.1	13.1	18.2	60.4	21.4
Russia	14.9	72.0	13.1	17.1	62.4	20.5
India	30.2	64.8	5.1	19.5	67.8	12.7

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

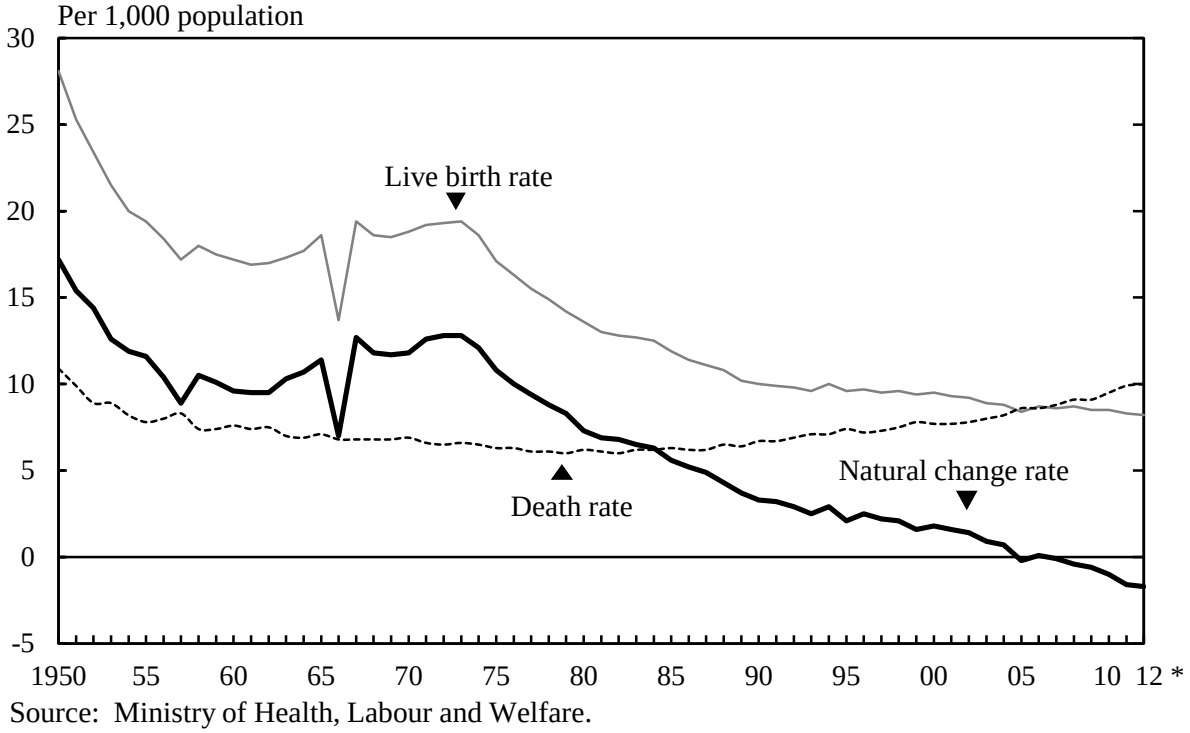
On the other hand, in 2012, the child population in Japan (0-14 years) amounted to 16.55 million, accounting for 13.0 percent of the total population, the lowest level on record since the survey began. In terms of their proportion of the total population, the aged have surpassed the child group since 1997. The production-age population (15-64 years) totaled 80.18 million. In share terms, it accounted for 62.9 percent of the entire population, continuing its decline since 1993. As a result, the ratio of the dependent population (the sum of aged and child population divided by the production-age population) was 59.0 percent.

4. Births and Deaths

Population growth in Japan had primarily been driven by natural increase, while social increase played only a minor part. In 2005, however, the natural change rate (per 1,000 population) turned negative for the first time since 1899; the figure was -1.7 in 2012.

During the second baby boom, the birth rate was at a level of 19 (per 1,000 population) between 1971 and 1973. Since the late 1970s, it has continued to drop. The rate for 2012 was 8.2.

Figure 2.6
Natural Population Change



Source: Ministry of Health, Labour and Welfare.

Table 2.6
Vital Statistics

Year	Rates per 1,000 population [1]				Total fertility rate [2]	Life expectancy at birth (years)	
	Live births	Deaths	Infant mortality	Natural change		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
2010	8.5	9.5	2.3	-1.0	1.39	79.55	86.30
2011	8.3	9.9	2.3	-1.6	1.39	79.44	85.90
2012	* 8.2	* 10.0	* 2.2	* -1.7	* 1.41	79.94	86.41

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) 1950-1952 period.

Source: Ministry of Health, Labour and Welfare.

The decline in the 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 30.3 in 2012. The total fertility rate was on a downward trend after dipping below 2.00 in 1975. It marked a record low of 1.26 in 2005 and started to increase after that. The total fertility rate reached 1.41 in 2012.

Table 2.7
Changes of Mothers' Age at Childbirth

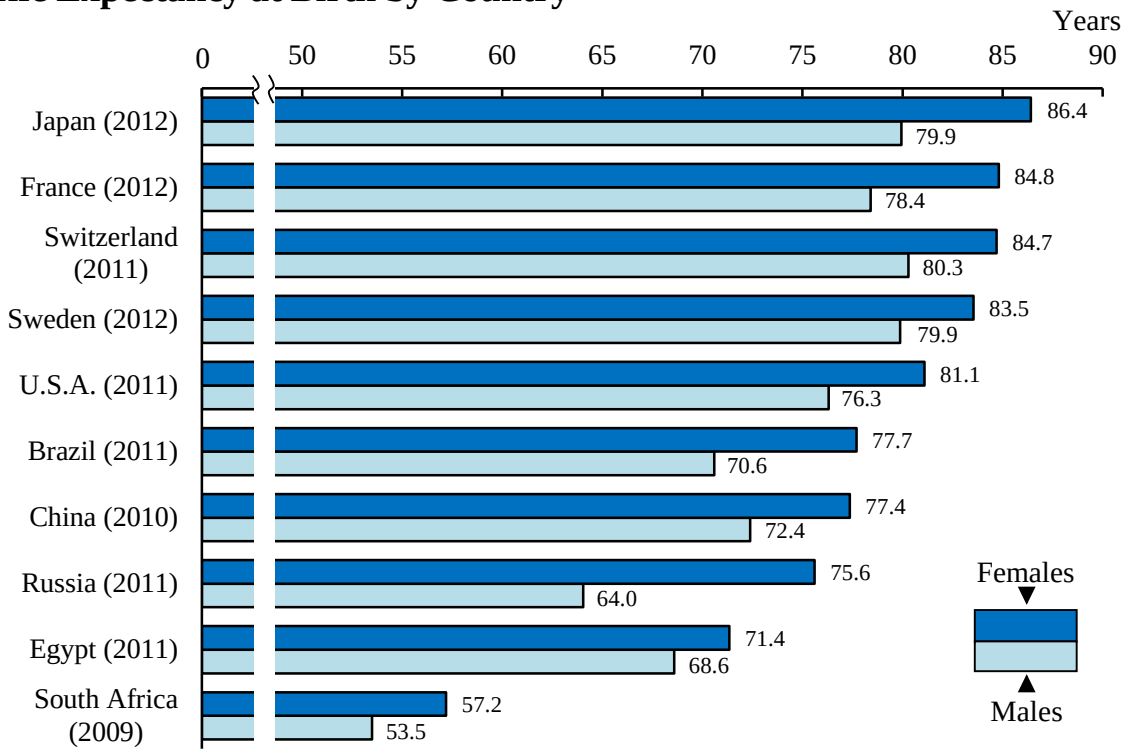
Year	Number of babies (1,000)	Distribution of mothers' age (%)						Mean age bearing first child
		-19	20-24	25-29	30-34	35-39	40 and over	
1970	1,934	1.0	26.5	49.2	18.5	4.2	0.5	25.6
1975	1,901	0.8	25.2	53.4	16.8	3.3	0.5	25.7
1980	1,577	0.9	18.8	51.4	24.7	3.7	0.5	26.4
1985	1,432	1.2	17.3	47.7	26.6	6.5	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
2010	1,071	1.3	10.4	28.6	35.9	20.5	3.3	29.9
2011	1,051	1.3	9.9	28.6	35.5	21.1	3.6	30.1
2012 *	1,037	1.2	9.2	28.2	35.4	21.7	4.1	30.3

Source: Ministry of Health, Labour and Welfare.

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 10.0 in 2012.

Average life expectancy in Japan climbed sharply after World War II, and is today at the highest level in the world. In 2012, life expectancy at birth was 86.4 years for women and 79.9 years for men.

Figure 2.7
Life Expectancy at Birth by Country



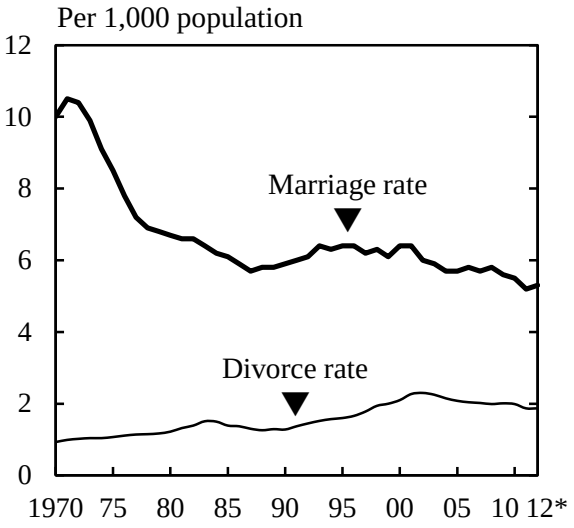
Source: Ministry of Health, Labour and Welfare.

5. Marriages and Divorces

The annual number of marriages in Japan exceeded one million couples 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. In 2012, 669,000 couples married, and the marriage rate was 5.3, the first increase in four years.

The mean age of first marriage was 30.8 for men and 29.2 for women in 2012, a rise by 2.4 years and 3.1 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 2.8
Changes in Marriage Rate and Divorce Rate



Source: Ministry of Health, Labour and Welfare.

Table 2.8
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
2010	30.5	28.8
2011	30.7	29.0
2012 *	30.8	29.2

Source: Ministry of Health, Labour and Welfare.

In contrast, divorces have shown an upward trend since the late 1960s, hitting a peak of 290,000 in 2002. Subsequently, both the number of divorces and the divorce rate have been declining since 2003. In 2012, the number of divorces totaled 235,000, and the divorce rate (per 1,000 population) was 1.87, the same rate as that of the previous year.

6. Population Density and Regional Distribution

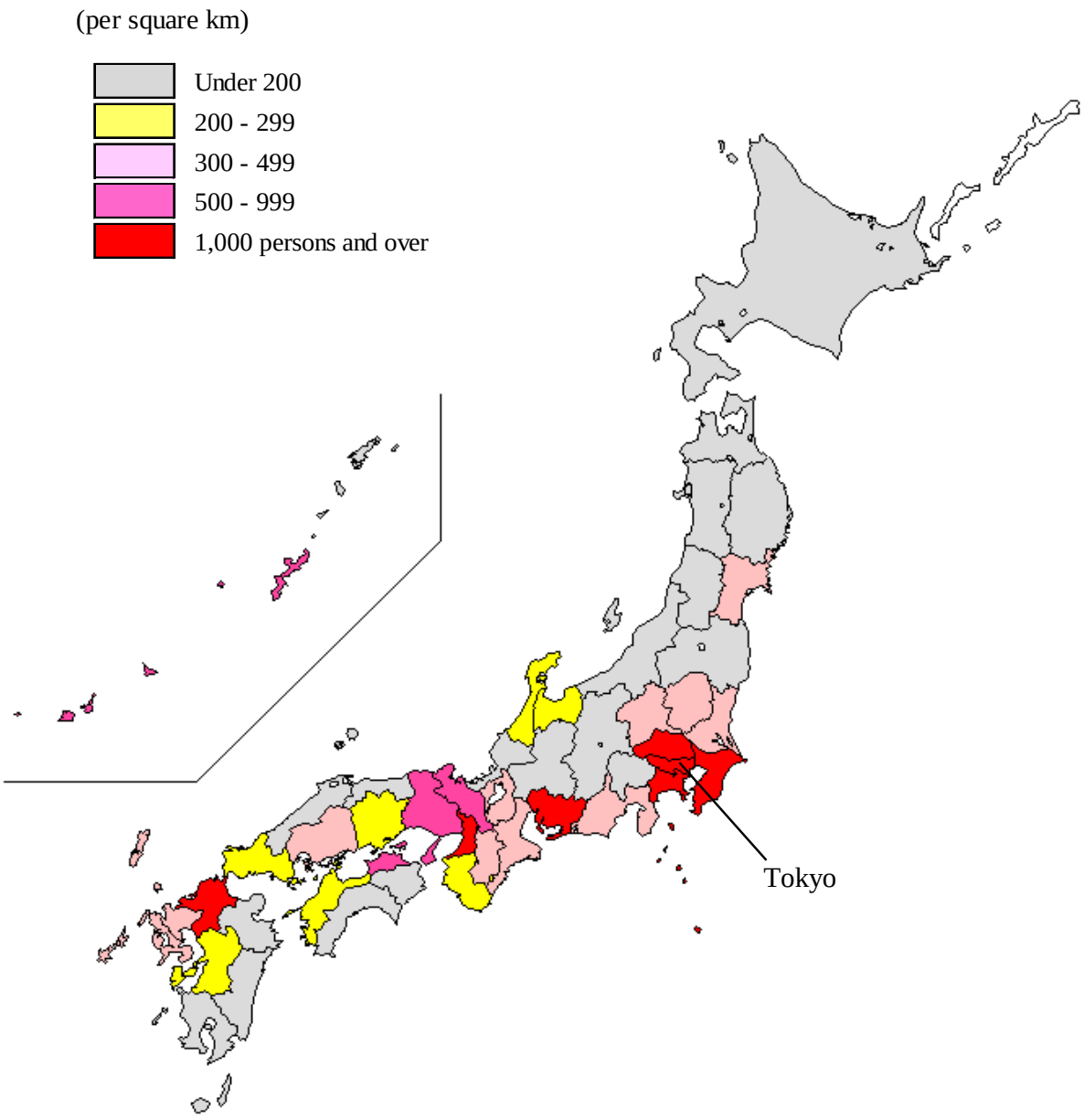
(1) Population Density

In 2010, Tokyo had the largest population of 13.16 million among Japan's 47 prefectures, followed in decreasing order by the prefectures of Kanagawa, Osaka, Aichi, and Saitama. These five prefectures each had a population of seven million or more, and together accounted for 35.7 percent of the total population.

The population density in Tokyo was the highest among Japan's prefectures, at 6,016 persons per square kilometer. This was almost 18 times the national average (343 persons per square kilometer).

In 2010, there were 12 cities in Japan with a population of one million or more. Their total population topped 28 million, a figure equivalent to 22.5 percent of the national total. The largest single city was the 23 wards (*ku*) of central Tokyo, with 8.95 million citizens. It was followed in decreasing order by Yokohama-*shi* (3.69 million), Osaka-*shi* (2.67 million), and Nagoya-*shi* (2.26 million).

Figure 2.9
Population Density by Prefecture (2010)



Source: Statistics Bureau, MIC.

Table 2.9
Population of Major Cities

(Thousands)

Cities	Population		Cities	Population	
	2005	2010		2005	2010
Tokyo, 23 wards (*ku*)	8,490	8,946	Kyoto-*shi*	1,475	1,474
Yokohama-*shi*	3,580	3,689	Fukuoka-*shi*	1,401	1,464
Osaka-*shi*	2,629	2,665	Kawasaki-*shi*	1,327	1,426
Nagoya-*shi*	2,215	2,264	Saitama-*shi*	1,176	1,222
Sapporo-*shi*	1,881	1,914	Hiroshima-*shi*	1,154	1,174
Kobe-*shi*	1,525	1,544	Sendai-*shi*	1,025	1,046

Source: Statistics Bureau, MIC.

(2) Population Distribution

The percentage accounted for by the urban population started increasing in the late 1950s. In 2010, 51.0 percent of the total population was concentrated in the three major metropolitan areas, the Kanto major metropolitan area, the Chukyo major metropolitan area, and the Kinki major metropolitan area. Population density in the Kanto major metropolitan area was 2,631 persons per square kilometer. In the Chukyo major metropolitan area it was 1,288 persons per square kilometer, and in the Kinki major metropolitan area it was 1,484 persons per square kilometer.

Table 2.10
Population of Three Major Metropolitan Areas [1)]

Areas	Population (1,000)	Percentage of the total (%)	Surface Area (km^2)	Population density (per km^2)
Kanto major metropolitan area	36,923	28.8	14,034	2,631
Chukyo major metropolitan area	9,107	7.1	7,072	1,288
Kinki major metropolitan area	19,342	15.1	13,033	1,484
Total of three major metropolitan areas	65,373	51.0	34,138	1,915

1) Major metropolitan areas consist of central cities (Kanto: *Ku* -area of Tokyo, Yokohama-*shi* , Kawasaki-*shi* , Sagamihara-*shi* , Saitama-*shi*, and Chiba-*shi* ; Chukyo: Nagoya-*shi* ; Kinki: Osaka-*shi* , Sakai-*shi* , Kyoto-*shi* , and Kobe-*shi*) and surrounding areas (cities, towns and villages).
Source: Statistics Bureau, MIC.

Chapter 3

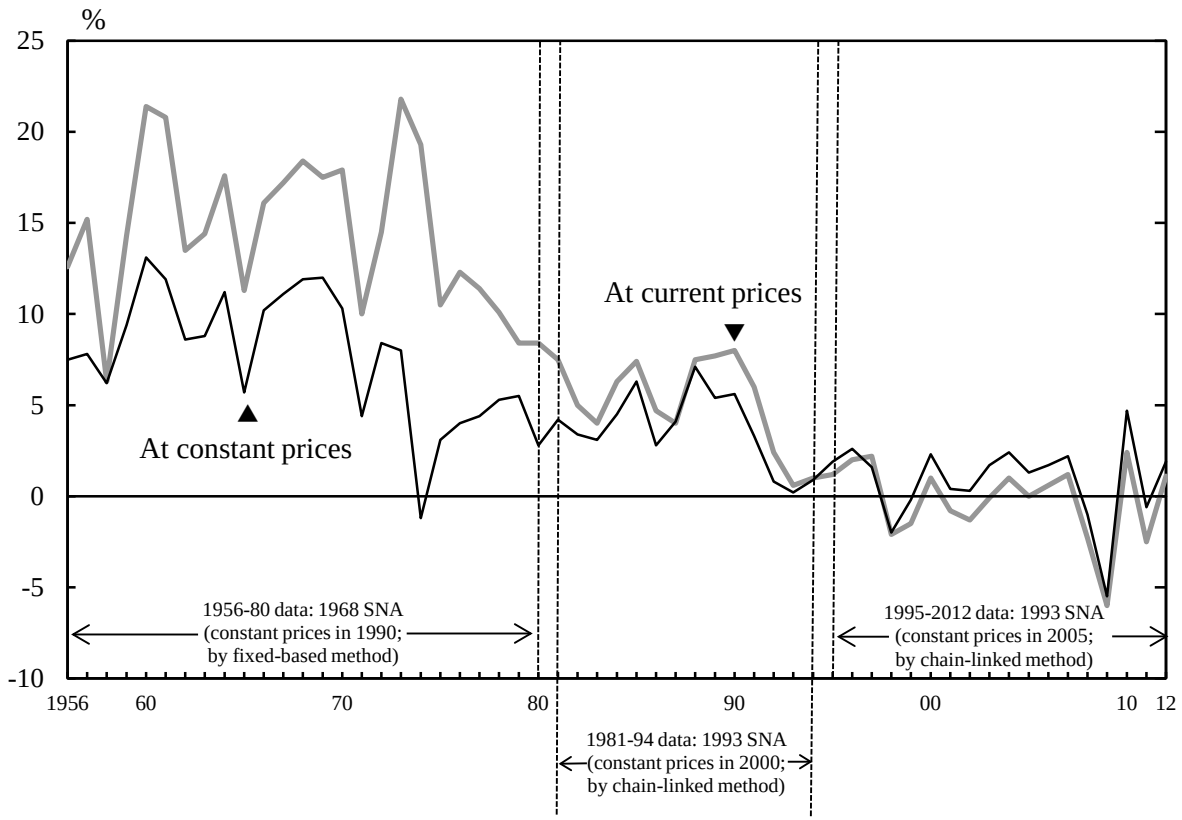
Economy

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.

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 "an abundant labor force supplied by a high rate of population growth"; and (iii) an increase in productivity brought about by adopting and improving foreign technologies.

Figure 3.1
Economic Growth Rates 1)



1) Data was estimated using a different method beginning in 1995.
Source: Cabinet Office.

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.

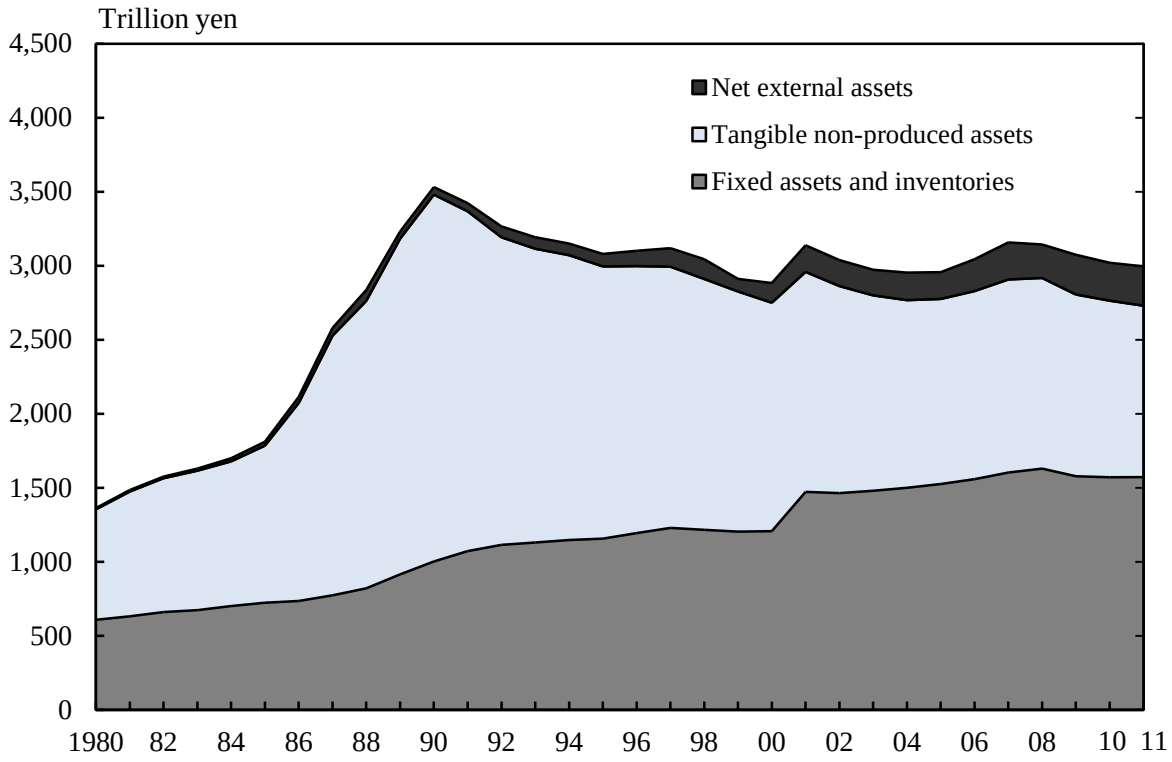
In October 1973, the fourth Middle East War led to the first oil crisis, triggering high inflation. Accordingly, Japan recorded negative economic growth in 1974 for the first time in the post-war period. Following the second oil crisis in 1978, efforts were made to change Japan's industrial structure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

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.

2. Bubble Economy and Its Collapse

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, 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 3.2
National Wealth [1)]



1) Data was estimated using a different method beginning in 2001.
Source: Cabinet Office.

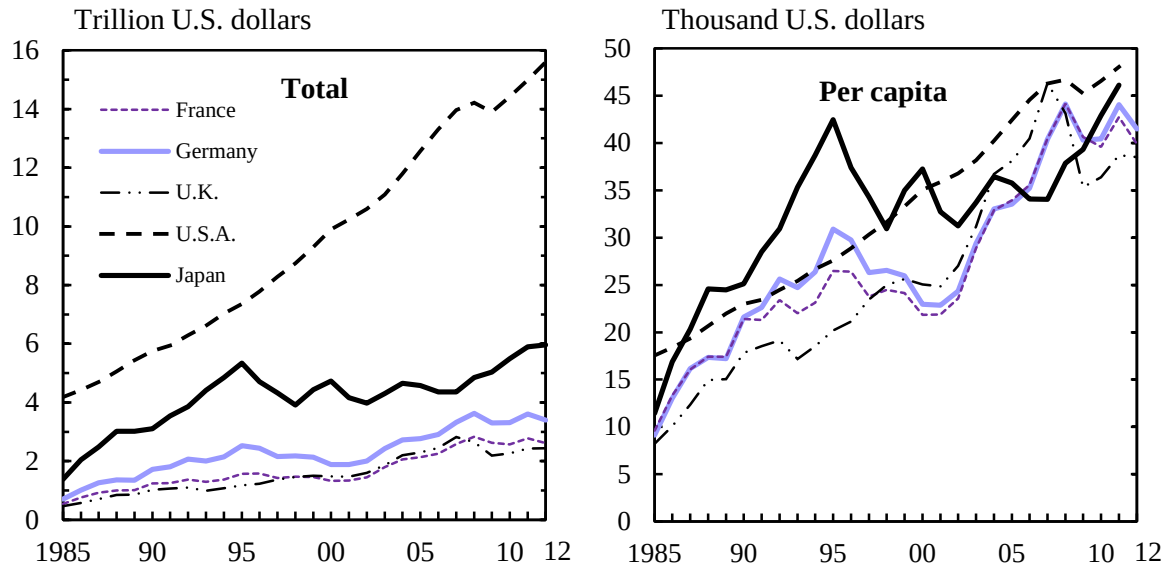
At the end of 1980, Japan's net worth (national wealth) stood at 1,363 trillion yen, 5.6 times the GDP. It then increased, reaching 3,531 trillion yen, 8.0 times the GDP, at the end of 1990, owing to increasing land and stock prices. Since then, Japan's national wealth changed to decreasing by the collapse of the bubble economy. At the end of 2011, it was 2,996 trillion yen.

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.

Figure 3.3
Gross Domestic Product (Current prices, converted into U.S. dollars)



Source: OECD.

The Japanese economy began to make a moderate recovery in February 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 causes for this long-term slump in the Japanese economy. Among them, the following two factors likely had the biggest impacts. First, Japanese banks were saddled with large nonperforming loans. A vicious circle developed, in which the long-term economic stagnation exacerbated the bad loan situation, while the bad

loans hindered economic growth. Second, there was another vicious circle, in which the continuing economic slump led to pessimism about the future on the part of corporations and consumers, and their hesitation generated further recession.

Subsequently, the Japanese economy maintained a long-lasting recovery beginning in early 2002. However, the path has not always been smooth, given two "soft patches" (temporary softening in the market) and weakness in some parts of the economy.

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.

3. Recent Economic Trends

At the start of 2008, the Japanese economy was faced with a standstill in its path to recovery as private consumption and investments in plant and equipment fell flat and so did production. This occurred against the backdrop of soaring crude oil and raw material prices and repercussions from the American subprime mortgage loan problems that, since mid-2007, rapidly clouded future prospects for the world economy further. In addition, the bankruptcy of the major American securities firm Lehman Brothers in September 2008 (the "Lehman shock") led to a serious financial crisis in Europe and the U.S.A. Japan was also affected by the yen's rise and the sudden economic contraction in the U.S.A. and other countries. Declining exports contributed to a large drop in production and a sharp rise in unemployment. As the economy continued to recover with foreign demand and economic measures after April 2009, the government defined March 2009 as the trough of the economic cycle. On the other hand, in November

2009, the government summed up the price movements of goods and services to conclude that they were "in a state of moderate deflation."

Table 3.1

Gross Domestic Product (Expenditure approach) [1)]

(Billion yen)

Item	2009	2010	2011	2012
Gross domestic product (GDP)	489,588.4	512,364.2	509,369.4	519,277.3
Domestic demand	480,471.5	494,573.7	496,057.7	510,016.8
Private demand	363,506.0	375,726.2	377,477.3	386,409.7
Private final consumption expenditure	292,341.7	300,435.6	301,766.8	308,725.0
Private Residential Investment	12,903.6	12,325.5	13,002.4	13,388.7
Private plant and equipment	63,853.6	64,075.3	66,202.4	67,560.3
Changes in inventories of private sector	-4,927.6	-552.1	-2,855.7	-2,641.8
Public demand	116,871.7	118,781.6	118,533.7	123,494.8
Government final consumption expenditure	95,524.9	97,335.1	98,702.1	101,048.5
Gross capital formation by public sector	21,435.3	21,575.1	19,963.2	22,467.7
Changes in inventories of public sector	-36.7	-63.7	9.2	16.3
Net exports of goods and services	7,428.0	17,060.7	12,898.6	9,021.9
Exports of goods and services	66,256.9	82,398.9	82,097.6	81,989.3
(less) Imports of goods and services	58,828.9	65,338.2	69,199.0	72,967.3
(Reference)				
Trading gains/losses	-5,638.3	-11,006.5	-17,296.0	-18,837.3
Gross domestic income	483,950.1	501,357.7	492,073.4	500,440.0
Net income from the rest of the world	13,416.6	13,499.4	15,375.8	15,899.8
Incomes from the rest of the world	19,356.2	18,941.5	21,321.2	22,353.8
(less) Incomes to the rest of the world	5,939.6	5,442.2	5,945.4	6,454.0
Gross national income (GNI)	497,366.7	514,857.1	507,449.2	516,339.8

1) Constant prices in 2005; by chain-linked method.

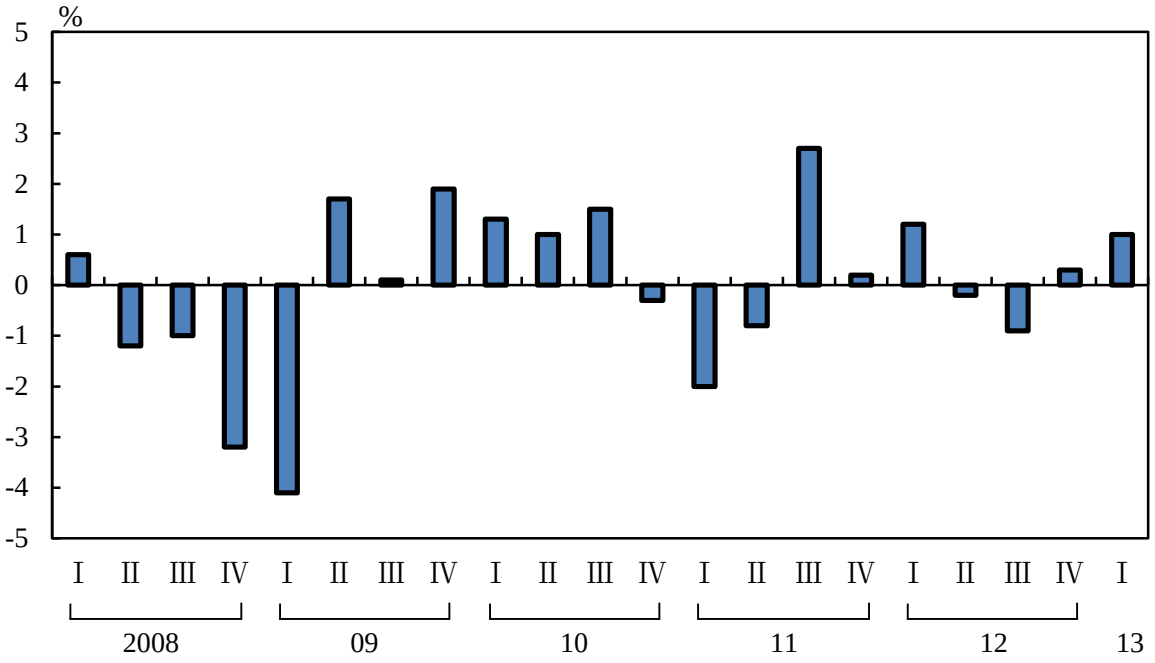
Source: Cabinet Office.

Subsequently, the Japanese economy came to a standstill starting around October 2010. In early 2011, however, it began to rally. The Great East Japan Earthquake that took place on March 11, 2011, and the nuclear power plant accident it caused weakened the economic recovery.

In order to achieve an early end to deflation and break free of economic stagnation, in January 2013, the Government of Japan set forth its "*three-arrows*" strategy (also known as "*Abenomics*"). The first "arrow" is "aggressive monetary policy." In more detail, the Bank of Japan (BOJ) made it clear that it would set a consumer price index annual growth rate of two percent as a "price stabilization target." At the April Monetary Policy Meeting, the BOJ also decided to adopt "quantitative and

qualitative monetary easing" to double the monetary base over two years. The second "arrow" is "flexible fiscal policy." In the sector of recovery from the Great East Japan Earthquake, a supplemental budget was established for fiscal 2012. Additionally, the budget for fiscal 2013 was passed with an emphasis on polices connected with the vitalization of the Japanese economy and security in national life. The third "arrow" is "growth strategy that promotes private investment." Japan is strongly committed to tackling stable growth strategy over the long term.

Figure 3.4
Economic Growth Rates (Quarterly changes) [1)]



1) 1993 SNA (2005 constant prices; chain-linked method; seasonally adjusted figures).
Source: Cabinet Office.

4. Industrial Structure

Japan's industrial structure has undergone a major transformation over the half century since the end of World War II. The chronological changes in the industrial structure during this period by industry share of employed persons and GDP show that shares in the primary industry in particular have fallen dramatically since 1970, when Japan experienced a 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 34.1 percent, and the tertiary industry for 46.6 percent. In 2010, the corresponding shares of these three sectors were 4.2 percent, 25.2 percent and 70.6 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 2010, these figures for the primary, secondary and tertiary industries were 1.2 percent, 25.2 percent and 73.6 percent, respectively.

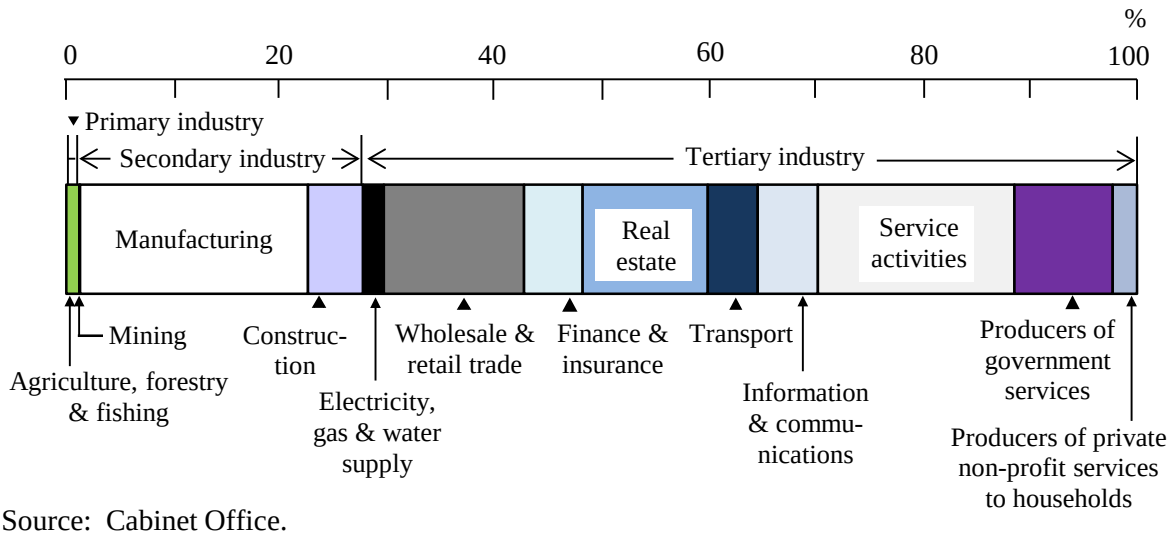
Table 3.2
Changes in Industrial Structure

(%)

Year	Employed persons [1]			Gross domestic product (GDP) [2]		
	Primary industry	Secondary industry	Tertiary industry	Primary industry	Secondary industry	Tertiary industry
1950	48.6	21.8	29.7	-	-	-
1955	41.2	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	34.1	46.6	5.9	43.1	50.9
1975	13.9	34.2	52.0	5.3	38.8	55.9
1980	10.9	33.6	55.4	# 3.5	# 36.2	# 60.3
1985	9.3	33.2	57.5	3.0	34.9	62.0
1990	7.2	33.5	59.4	2.4	35.4	62.2
1995	# 6.0	# 31.3	# 62.7	1.8	30.4	67.8
2000	5.2	29.5	65.3	1.7	28.5	69.8
2005	4.9	26.4	68.6	# 1.2	# 25.8	# 73.0
2010	4.2	25.2	70.6	1.2	25.2	73.6

1) Due to the revision of the Japan Standard Industrial Classification, the figures from 1995 onward are not strictly consistent with those for 1990 or earlier. 2) Data from 1955 to 1979 are based on the 1968 SNA. Data from 1980 onward are based on the 1993 SNA. Data in 2005 and afterwards differs in the estimation method.
Source: Statistics Bureau, MIC; Cabinet Office.

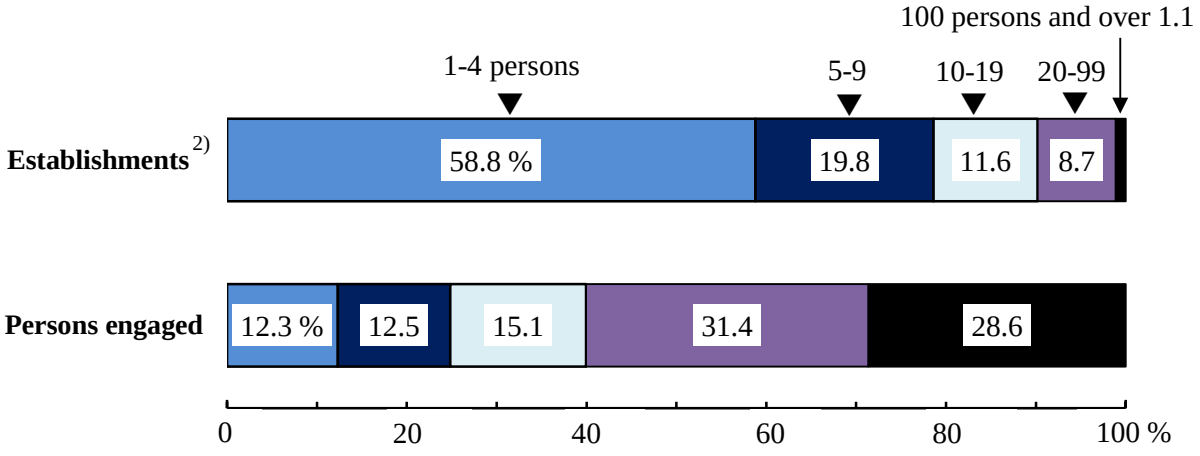
Figure 3.5
Gross Domestic Product by Type of Economic Activity (2011)
(Constant prices in 2005)



Source: Cabinet Office.

According to the 2012 Economic Census for Business Activity (preliminary tabulation), there were 5.47 million establishments (excluding businesses whose operational details are unknown, national government services, or local government services) in Japan, at which a total of 56.32 million persons were employed. The average number of persons engaged per establishment was 10.3. Establishments with less than 10 persons accounted for 78.6 percent of the total.

Figure 3.6
Shares of Establishments and Persons Engaged by Scale of Operation
(2012) [1)]



1) Preliminary figures. 2) Excluding establishments consisting of only loaned or dispatched employees.
Source: Statistics Bureau, MIC; Ministry of Economy, Trade and Industry.

The number of establishments by the major groupings of the Japan Standard Industrial Classification was the most numerous in the "wholesale and retail trade" category, numbering 1.42 million, followed by "accommodations, eating and drinking services" and "construction." In terms of the number of persons engaged, establishments in the "wholesale and retail trade" ranked first as they employed 11.98 million persons, followed by "manufacturing" and "medical, health care and welfare."

Table 3.3

Number of Establishments and Persons Engaged (2012) [1)]

Item	Number of establishments	Number of persons engaged
Total	5,465,578	56,324,082
By industry		
Primary industry		
Agriculture, forestry and fisheries	29,374	350,347
Secondary industry		
Mining and quarrying of stone and gravel	2,441	23,518
Construction	526,793	3,926,854
Manufacturing	501,580	9,421,840
Tertiary industry		
Electricity, gas, heat supply and water	4,163	203,980
Information and communications	68,282	1,677,253
Transport and postal activities	135,180	3,311,071
Wholesale and retail trade	1,420,680	11,983,742
Finance and insurance	88,495	1,561,953
Real estate and goods rental and leasing	380,512	1,475,150
Scientific research, professional and technical services	213,158	1,587,833
Accommodations, eating and drinking services	711,428	5,419,088
Living-related and personal services and amusement services	476,823	2,509,998
Education, learning support	160,406	1,723,614
Medical, health care and welfare	352,237	6,254,178
Compound services	32,469	349,380
Services, n.e.c.	361,557	4,544,283
By type of legal organizations		
Individual proprietorship	2,212,029	6,407,561
Corporations	3,221,858	49,771,687
Companies	2,844,649	42,315,258
Organizations other than corporations	31,691	144,834

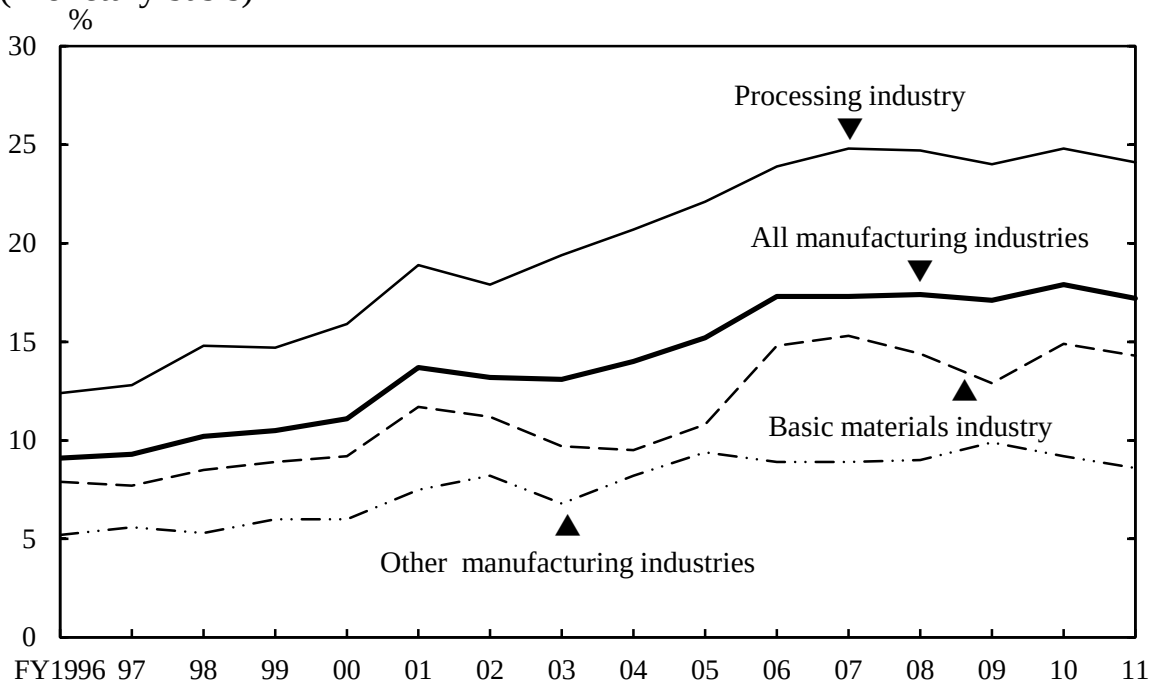
1) Preliminary figures. Excluding businesses whose operational details are unknown, national government services, or local government services.

Source: Statistics Bureau, MIC; Ministry of Economy, Trade and Industry.

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, the structure has surfaced where Japanese companies manufacture products in China and other Asian countries and import these products into Japan to push down domestic prices.

According to the Cabinet Office's "FY2012 Annual Survey of Corporate Behavior," the percentage of firms in manufacturing industries that perform production overseas was 67.7 percent in fiscal 2011. That figure has been at a similar level since fiscal 2007. As for why Japanese companies carry out production at overseas locations, the most common reason (45.8 percent) firms cited was in order to respond to product demand in those areas and their vicinities. The next most common reason (23.1 percent) was that labor costs are low.

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



Source: Cabinet Office.

The percentage of production overseas (in terms of sales) for Japanese companies with foreign subsidiaries was 18.0 percent in fiscal 2011. That represented a year-on-year decrease of 0.1 percentage points. By category, the percentage of overseas production was the highest in transport equipment, which was 38.6 percent, followed by 26.7 percent in information and communication electronics equipment, and 24.8 percent in general-purpose machinery.

Other areas increasingly drawing the attention of Japanese manufacturing companies as capable operation locations are China, as well as India and Indonesia. Interest in the new markets of Mexico and Myanmar is also growing.

Chapter 4

Finance

1. National and Local Government Finance

(1) National Government Finance

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

Japan's national budget consists of the general account, special accounts, and the budget for government-affiliated agencies. Using revenues from general sources such as taxes, the general account covers core national expenditures such as social security, public works, 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 2013, a total of 17 special accounts have been established, including the national debt consolidation fund, the grants of allocation tax and transferred tax and the Great East Japan Earthquake recovery fund. Government-affiliated agencies are entities established by special laws and are entirely funded by the government. Currently, the Japan Finance Corporation, the Okinawa Development Finance Corporation, Japan Bank of International Cooperation, and the Japan International Cooperation Agency (Loan Aid Section) are operated as government-affiliated agencies.

Table 4.1
Revenue and Expenditure of National Government Finance

(Million yen)

Fiscal year	General account	Special accounts	Net total [1)]	Government-affiliated agencies
Revenue				
1995	80,557,216	267,813,630	193,857,594	7,656,940
2000	93,361,027	341,146,379	234,669,754	7,019,433
2005	89,000,271	452,141,039	283,201,972	4,710,476
2009	107,114,243	377,893,116	246,279,870	1,277,197
2010	100,534,563	386,984,918	245,704,270	1,204,493
2011	109,979,528	409,923,670	263,616,197	1,171,167
2012 [2)]	107,829,072	422,651,136	270,117,933	a) 1,913,219
2013 [3)]	92,611,539	408,483,086	242,892,370	1,710,227
Expenditure				
1995	75,938,516	232,465,893	155,325,150	7,535,769
2000	89,321,050	305,775,944	199,466,439	6,987,740
2005	85,519,592	401,183,566	230,182,819	4,102,846
2009	100,973,424	348,060,035	212,710,083	1,530,100
2010	95,312,342	345,074,005	201,228,355	1,406,314
2011	100,715,409	376,463,171	223,614,993	1,273,618
2012 [2)]	107,507,482	393,203,701	242,372,755	a) 2,703,327
2013 [3)]	92,611,539	386,629,989	223,001,953	2,509,882

1) Net total deducting duplications of the general account and special accounts. 2) Final estimates as of the end of January 2013. 3), a) Initial budget.
Source: Ministry of Finance.

In national government finance, expenditure has continued to surpass revenue. Since fiscal 2008 in particular, the worsening economy has decreased tax revenues, contributing to an increasing gap between revenue and expenditure. Since fiscal 2009, bonds issued exceeded tax revenues in most years, but in fiscal 2013, tax revenue exceeded borrowing (on an initial budget basis) for the first time in four years.

The size of the general account budget for fiscal 2013 was 92.61 trillion yen, an increase of 2.28 trillion yen (2.5 percent) from the initial budget of fiscal 2012. This is equivalent to 19.0 percent of the fiscal 2013 GDP, forecasted by the government at 487.7 trillion yen.

Table 4.2
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
2005	85,520	49,343	20,603	5,701	1,065	4,878	8,391
2009	100,973	65,955	28,716	6,158	781	4,811	8,353
2010	95,312	56,978	28,249	6,051	709	4,670	5,803
2011	100,715	61,637	29,778	6,036	639	4,818	5,915
2012 1)	100,537	62,107	29,450	6,416	570	4,826	6,998
2013 2)	92,612	53,977	29,122	5,369	504	4,754	5,285

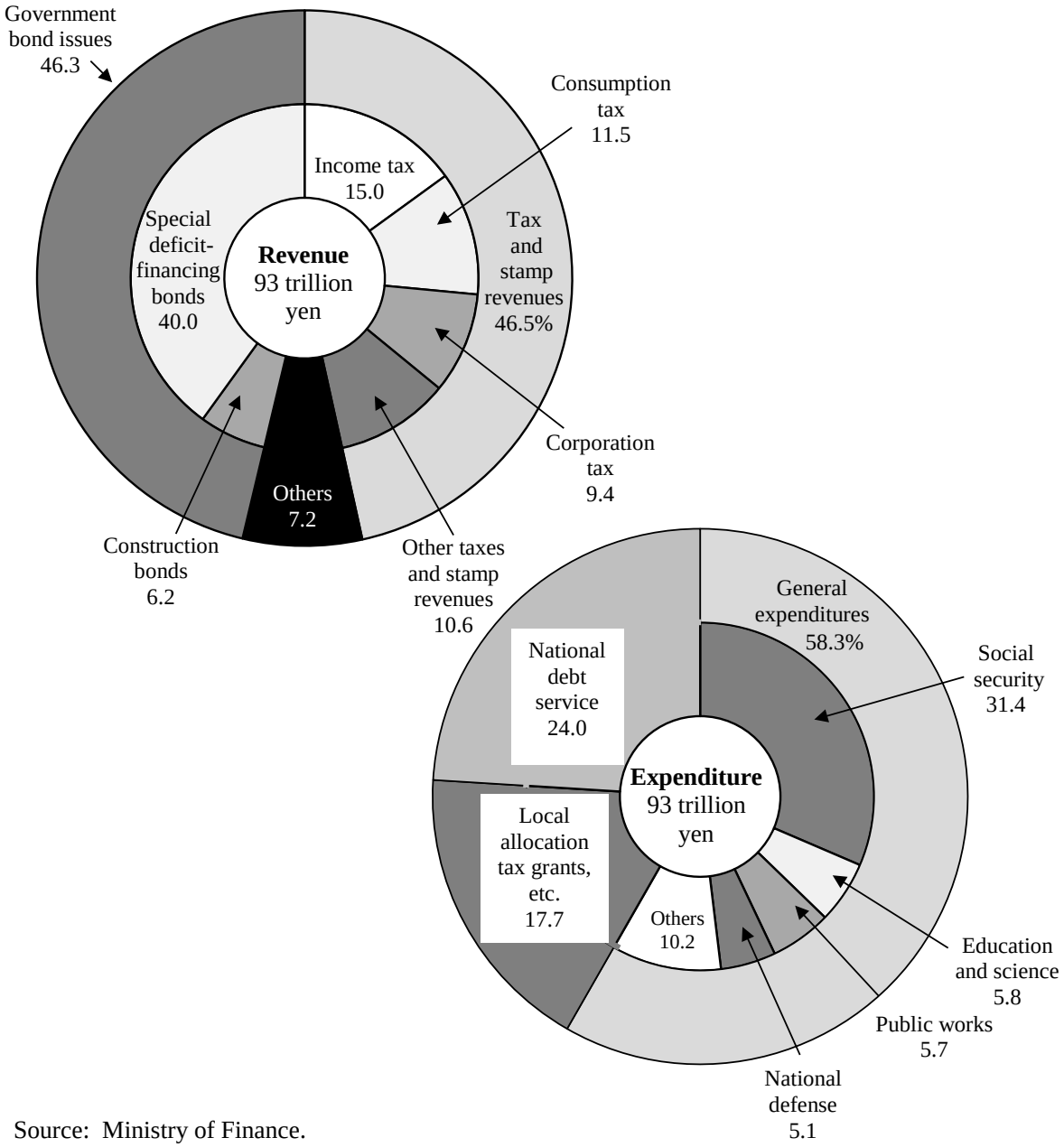
Fiscal year	Economic cooperation	Small- and medium-sized business promotion	Energy measures	Food stable supply	Others	National debt service (B)	Local allocation tax grants, etc. (C)
1995	1,034	623	708	269	7,751	12,820	12,302
2000	1,012	933	677	247	6,434	21,446	15,829
2005	784	237	493	657	6,536	18,736	17,441
2009	801	2,915	994	1,036	11,391	18,445	16,573
2010	746	830	845	1,122	7,953	19,544	18,790
2011	620	2,191	954	1,438	9,249	19,628	19,451
2012 1)	663	644	856	1,304	10,379	21,545	16,885
2013 2)	515	181	850	1,054	6,343	22,241	16,393

1) Revised budget. 2) Initial budget.
Source: Ministry of Finance.

In fiscal 2013, major expenditures from the initial general account budget include social security (31.4 percent), national debt service (24.0 percent), local allocation tax grants, etc. (17.7 percent), education and science (5.8 percent), public works (5.7 percent) and national defense (5.1 percent).

With regard to revenue sources for the fiscal 2013 initial general account budget, income tax, consumption tax and corporation tax account for 35.9 percent. Even with the addition of other taxes and stamp revenues, these revenue sources only amount to 46.5 percent of the total revenue.

Figure 4.1
Composition of Revenue and Expenditure of General Account Budget
(Initial budget, FY2013)



Source: Ministry of Finance.

(2) Local Government Finance

There are two budget categories in the local government finance: the ordinary accounts 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 accounts and the latter-stage elderly medical care accounts.

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

The revenue composition of local governments usually remains almost the same each fiscal year, while their budget scale and structure vary from year to year. The largest portion of fiscal 2011 (net) revenues came from local taxes, accounting for 34.1 percent of the total. The second-largest source, 18.7 percent, was local allocation tax grants.

Table 4.3

Local Government Finance [1] (Ordinary accounts)

(Million yen)

Item	FY2007	FY2008	FY2009	FY2010	FY2011
Revenues	91,181,397	92,213,459	98,365,695	97,511,501	100,069,646
Local taxes	40,266,817	39,558,526	35,182,954	34,316,330	34,171,416
Local allocation tax grants	15,202,745	15,406,082	15,820,237	17,193,551	18,752,268
Treasury disbursements	10,221,573	11,582,745	16,732,772	14,201,018	15,961,503
Local government bonds	9,584,445	9,922,067	12,396,036	12,969,520	11,760,270
Expenditures	89,147,615	89,691,477	96,106,449	94,775,014	97,002,646
General administration	8,905,803	8,919,649	10,718,365	9,999,758	9,345,975
Public welfare	16,976,069	17,821,099	19,767,874	21,316,337	23,182,534
Labor	275,910	663,040	918,764	808,224	993,750
Sanitation	5,435,815	5,390,177	5,971,517	5,812,417	6,743,245
Civil engineering work	13,390,730	12,871,235	13,292,043	11,959,157	11,284,876
Education	16,431,769	16,146,676	16,438,041	16,446,685	16,176,813

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

Source: Ministry of Internal Affairs and Communications.

(3) National and Local Government Finance

The net total indicates the actual amount of governmental expenditures after eliminating duplications such as the transfer of funds between different accounts in the national budget, the local allocation tax grants and other subsidies from the national government to local governments. In the initial budget for fiscal 2012, the gross total of national government expenditure was 487 trillion yen, the net total was 231 trillion yen after eliminating duplications. 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 84 trillion yen. Therefore, after eliminating duplications between national and local accounts (34 trillion yen), the net total of both national and local government expenditures combined was 281 trillion yen.

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

(Billion yen)

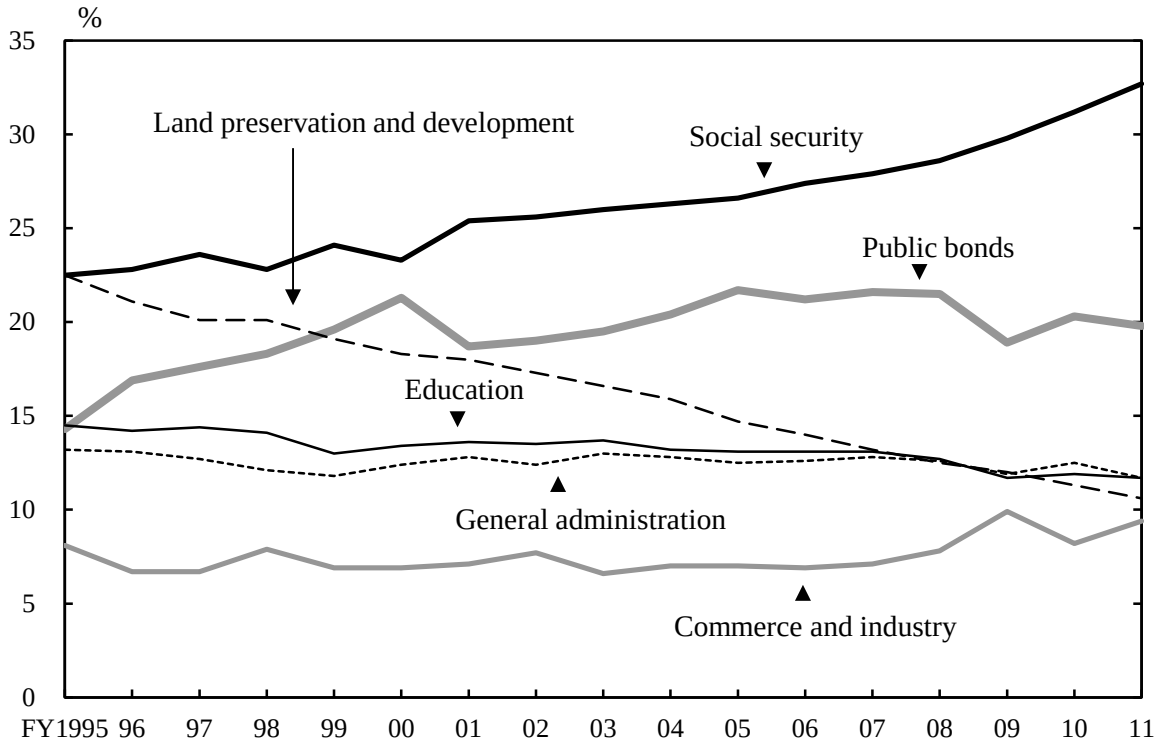
Item	Expenditures					
	FY1995	FY2000	FY2005	FY2010	FY2011	FY2012
General account	70,987	84,987	82,183	92,299	92,412	90,334
Special accounts	241,718	318,689	411,944	367,074	384,885	394,095
Government-affiliated agencies	8,086	7,661	4,678	3,135	2,613	2,703
Gross total (national)	320,792	411,337	498,805	462,508	479,910	487,132
Duplications	160,054	200,435	257,490	244,744	257,389	256,050
Net total (national)	160,738	210,902	241,316	217,764	222,521	231,082
Local public finance program	82,509	88,930	83,769	82,127	82,505	84,276
Gross total (national + local)	243,247	299,832	325,084	299,891	305,026	315,358
Duplications	32,035	37,216	32,689	31,563	32,848	34,327
Net total (national + local)	211,213	262,616	292,395	268,328	272,178	281,031

Source: Ministry of Finance.

In fiscal 2011, the net total of national and local government expenditures was 272 trillion yen, approximately 60 percent of which, net of overlaps,

were expenditures "directly related to people's lives." The national government disbursed 42 percent of this amount, while the local governments disbursed 58 percent.

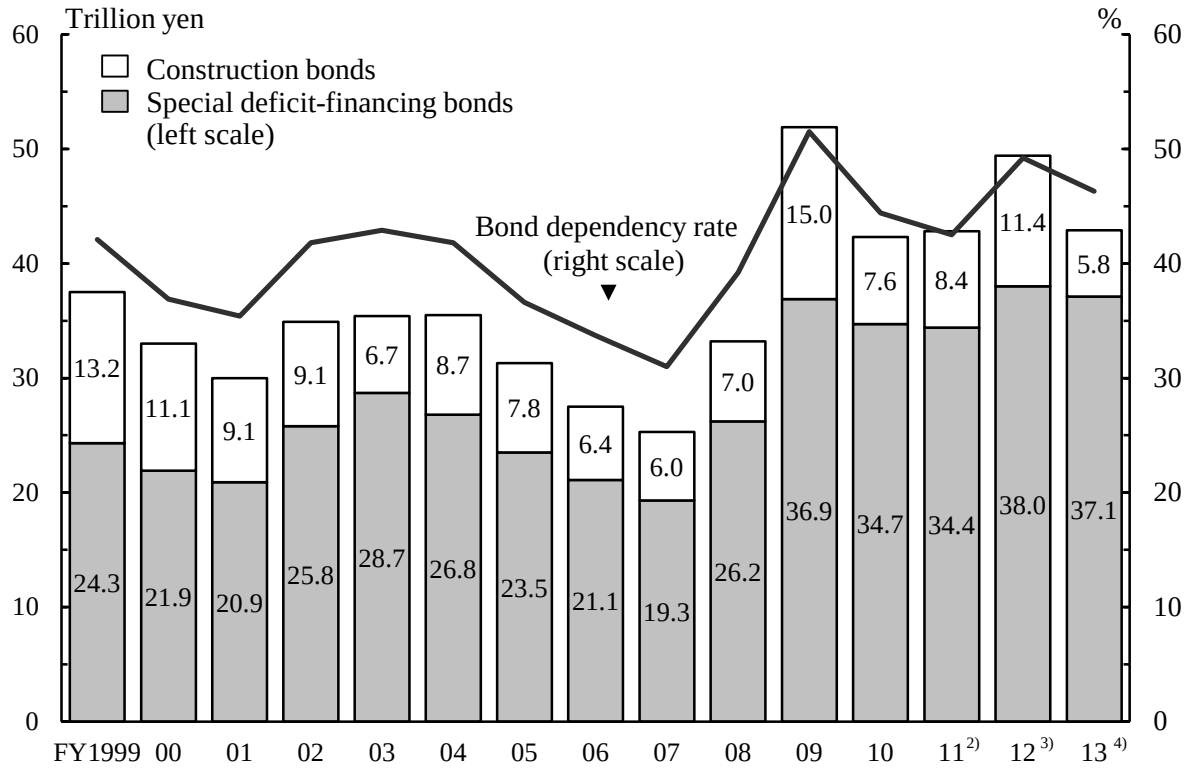
Figure 4.2
Trends in Ratio of Net Total National and Local Expenditures by Function



Source: Ministry of Internal Affairs and Communications.

A function-by-function breakdown of expenditures "directly related to people's lives" showed that social security expenditure accounted for the largest portion (32.7 percent), followed by public bonds (19.8 percent), education (11.7 percent), general administration (11.7 percent), and then land preservation and development (10.6 percent). Public bonds are issued to compensate for shortages of national and local revenues. Their issue volumes have increased mainly due to, for example, economic stimulus measures and decreasing tax revenues since 1992. A rising amount of public bond redemptions, among other factors, has resulted in public bonds making up a high percentage of government expenditures net of overlaps.

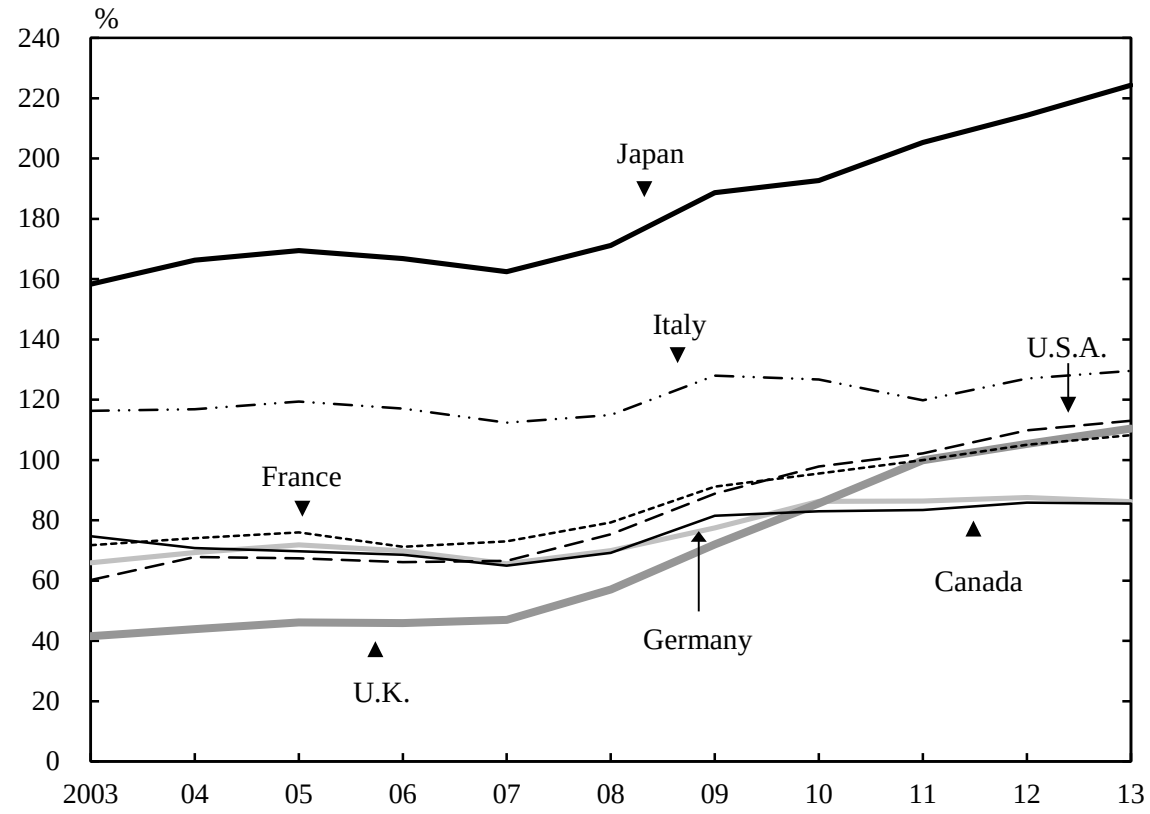
Figure 4.3
Trends in National Government Bond Issue [1)]



1) Settlement basis. 2) Bond dependency rate was calculated by the revenues including special account for reconstruction from the Great East Japan Earthquake. 3) Based on the revised budget. 4) Based on the initial budget.
Source: Ministry of Finance.

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

Figure 4.4
Ratio of General Government Gross Debt to GDP

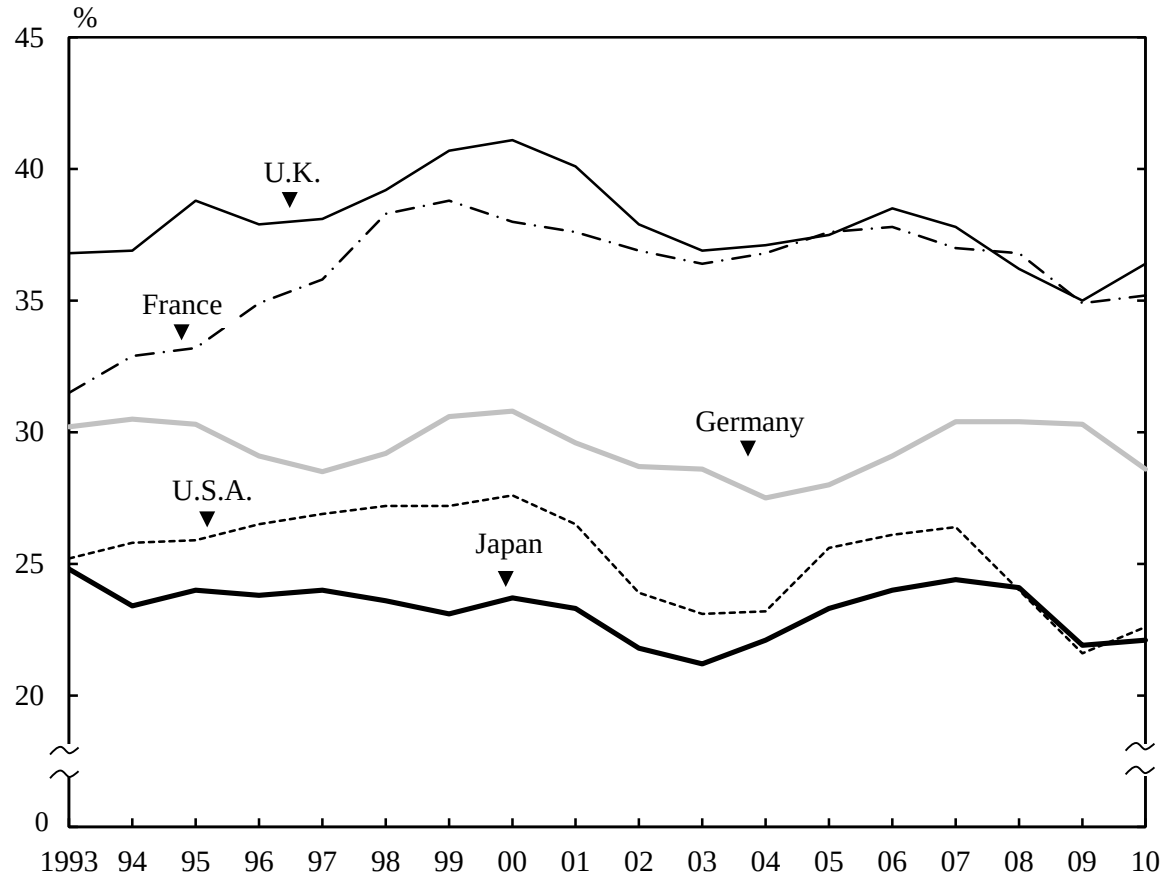


Source: Ministry of Finance.

(4) Tax

Taxes consist of national tax (income tax, corporation tax, etc.), which is paid to the national government, and local tax, which is paid to the local government of the place of residence. The ratio of taxation burden, which is the ratio of national and local taxes to national income, was 18.3 percent in fiscal 1975. This ratio gradually increased thereafter, reaching 27.7 percent in fiscal 1989. 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 21.2 percent in fiscal 2003. In fiscal 2013, it was 22.7 percent in terms of national and local taxes combined (13.0 percent for national tax and 9.6 percent for local tax). Japan's ratio is lower in comparison with other major industrial countries. Nevertheless, there is a possibility that the taxation burden will become heavier due to an increase in welfare and pension-related spending as the population ages.

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



1) Actual basis.
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 2012, currency in circulation totaled 91.23 trillion yen (86.65 trillion yen in Bank of Japan notes and 4.58 trillion yen in coins), up 3.0 percent from the year before.

Table 4.5

Currency in Circulation (Outstanding at year-end)

(Billion yen)

Item	2008	2009	2010	2011	2012
Total	86,069	85,511	86,856	88,547	91,231
Bank of Japan notes	81,478	80,954	82,314	83,997	86,653
Coins	4,590	4,556	4,541	4,550	4,578

Source: Bank of Japan.

The Bank of Japan compiles and publishes statistics on the following indicators: (i) M1, or cash currency in circulation plus deposit money; (ii) M2, or cash currency in circulation plus deposits in banks, etc. in Japan; (iii) M3, or M1 plus quasi-money plus CDs (certificates of deposit); and (iv) broadly-defined liquidity, which covers a broad range of liquidity, including government securities. The average outstanding money stock as of December 2012 was 546 trillion yen in M1 and 828 trillion yen in M2.

Table 4.6

Money Stock [1] (Average outstanding)

(Billion yen)

End of year	M2	M3	M1	Quasi-money	CDs	Broadly-defined liquidity
2008	741,733	1,040,645	481,755	536,253	22,636	1,434,568
2009	764,435	1,063,518	486,668	551,162	25,688	1,453,282
2010	782,288	1,082,937	501,479	550,529	30,929	1,452,732
2011	806,988	1,111,527	528,018	552,697	30,812	1,455,050
2012	827,825	1,135,987	545,729	557,274	32,983	1,466,133

1) "Money stock" indicates the balance of currency held by corporations, individuals, local governments, etc.
Source: Bank of Japan.

In January 2013, the Government and the Bank of Japan decided to strengthen policy coordination in order to overcome deflation and achieve sustainable economic growth with stable prices. In order to achieve price stability targets at the earliest possible time, in April 2013, the Bank of Japan changed the operating target for money market operations from the

uncollateralized overnight call rate to a monetary base to facilitate quantitative easing. Japan's monetary base is the amount of currency supplied by the Bank of Japan. It is the combined total of banknotes in circulation, coins in circulation, and current account balances. Under the new policy of monetary easing, the monetary base was 155.28 trillion yen as of the end of April 2013 (26.2 percent higher than one year earlier). It was the second consecutive month with a record high.

Table 4.7
Financial Markets (Interest rates, etc.)

(% per annum)

End of year	Basic discount rate and basic loan rate	Call rates [1)]	Prime lending rates [2)]	Loan contract rates [3)]	10 years' Govt. bonds yields to subscribers
2003	0.10	0.001	1.375	1.464	1.380
2004	0.10	0.002	1.375	1.399	1.445
2005	0.10	0.004	1.375	1.270	1.456
2006	0.40	0.275	1.625	1.450	1.634
2007	0.75	0.459	1.875	1.673	1.478
2008	0.30	0.103	1.675	1.494	1.382
2009	0.30	0.094	1.475	1.256	1.246
2010	0.30	0.079	1.475	1.187	1.189
2011	0.30	0.075	1.475	1.102	1.085
2012	0.30	0.076	1.475	1.034	0.730

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 24,230 offices. This was followed by domestically

licensed banks, including city banks and regional banks, with a combined total of 13,389 offices and branches. Securities companies operated at 2,139 offices including branches. In the course of the financial system reform, mergers and restructuring progressed among major banks, resulting in their being reorganized into three major financial groups. Regional banks and credit depositories operating in their respective regions have been making their efforts to expand operations base through corporate mergers, but there were no major mergers recently.

Table 4.8
Number of Financial Institutions

Institutions	Reference date	Total	Head offices	Branches	Overseas offices
Domestically licensed banks					
City banks	Sep. 2012	2,523	6	2,397	120
Regional banks	Sep. 2012	7,513	64	7,434	15
Regional banks II	Sep. 2012	3,072	41	3,030	1
Trust banks	Sep. 2012	281	4	268	9
Financial institutions for small business					
Credit depositories	Feb. 2013	7,508	270	7,238	-
Credit cooperatives	Feb. 2013	1,723	157	1,566	-
Securities companies [1)]	Feb. 2013	2,139	263	1,876	-
Agricultural cooperatives	Mar. 2012	8,587	-	-	-
Post offices	Mar. 2013	24,230	-	-	-

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

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

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 produced dramatic changes, eventually causing significant alterations in the 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. This prompted legislative enactments in 1998 that were intended to stabilize the financial system, which accelerated the implementation of measures to deal with

bankrupt financial institutions, including temporary nationalization. As a result, the overdue task of addressing bad debts was finally laid to rest.

In order to lead a revival of the nation's economy by solving the bad debt problems of major banks, the government launched the Program for Financial Revival in October 2002, demanding that major banks reduce their ratio of bad debts from 8.4 percent in March 2002 to approximately half that level by March 2005. As a result, the ratio of the major banks' bad debts decreased to 2.9 percent in March 2005, meeting the government's target, and the bad debt problems have thus been settled. The ratio recorded in March 2013 was 1.8 percent.

4. Financial Assets

The Flow of Funds Accounts Statistics, which is a comprehensive set of records of financial transactions, assets and liabilities, indicates that financial assets in the domestic sectors totaled 6,118 trillion yen according to preliminary figures at the end of March 2013. Of these assets, those of the domestic nonfinancial sector were 3,014 trillion yen. The household sector (including the business funds of individual proprietorships) had assets of 1,571 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

(Billion yen)

Sectors	March 2012	March 2013 *	Annual growth (%)
Financial assets			
Domestic sectors	5,825,242	6,117,786	5.0
Financial institutions	2,917,589	3,103,595	6.4
Domestic nonfinancial sector	2,907,653	3,014,192	3.7
Nonfinancial corporations	860,549	891,449	3.6
General government	484,563	503,219	3.9
Households (incl. individual proprietorships)	1,516,602	1,570,599	3.6
Private nonprofit institutions serving households	45,939	48,925	6.5
Overseas	366,281	435,746	19.0
Financial liabilities			
Domestic sectors	5,540,857	5,809,277	4.8
Financial institutions	2,867,202	3,008,740	4.9
Domestic nonfinancial sector	2,673,654	2,800,538	4.7
Nonfinancial corporations	1,210,129	1,286,543	6.3
General government	1,071,403	1,121,200	4.6
Households (incl. individual proprietorships)	364,052	363,670	-0.1
Private nonprofit institutions serving households	28,070	29,124	3.8
Overseas	644,277	737,480	14.5

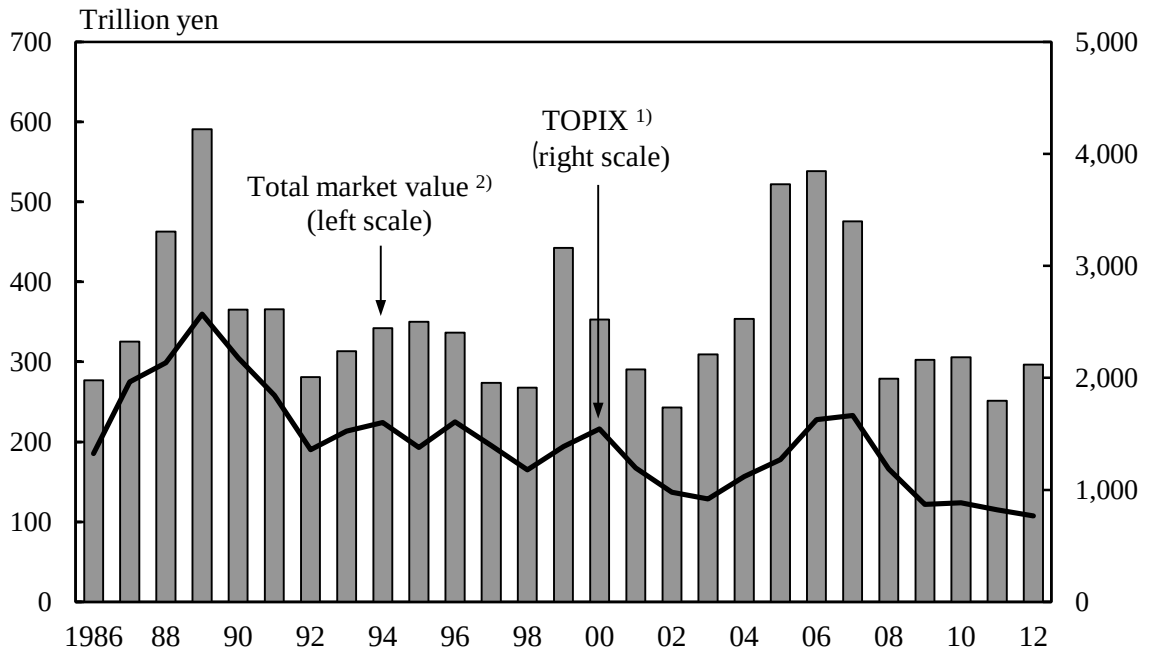
Source: Bank of Japan.

5. Stock Market

Stock prices in Japan rose sharply in the second half of the 1980s, spearheading the bubble economy. However, the stock market started to fall in 1990 ahead of land prices. At the end of 1989, the total market value of the first section of the Tokyo Stock Exchange was 591 trillion yen, but only three years later, at the end of 1992, it dropped by more than 50 percent to 281 trillion yen. The market recovered to reach 442 trillion yen at the end of 1999, later dipped again, and increased to 539 trillion yen at the end of 2006. The subprime mortgage problem surfaced after August 2007 and the September 2008 Lehman shock led to a fall in the total market value, which amounted to 251 trillion yen at the end of 2011. In 2012, the Japanese economy appeared to be entering a period of slowdown, but towards the end of the year, confidence inspired by the new Government's anti-deflationary economic and fiscal policies led to a correction of the high yen, and share prices soared. The Bank of Japan's

policy changes announced in April 2013 were seen as an ingredient leading to the stock market's recovery, with the Nikkei Stock Average climbing to 13, 860.86 yen as of the end of April.

Figure 4.6
Trends in Stock Price Index and Total Market Value
(Tokyo Stock Exchange, first section)



1) 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 2013, 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 46.0 million. In value terms, the ratio of stocks they possessed was 20.2 percent. The ratio of Japanese stocks held by foreign investors (total of corporations and individuals) was 28.0 percent in value terms, the highest ever recorded. Records also show that Internet trading remained on a strong growth path.

A survey conducted of 254 securities firms by the Japan Securities Dealers Association (JSDA) showed that 22.4 percent of those companies offered Internet trading at the end of March 2013. Internet trading thus accounted for 31.7 percent of the total value of stock brokerage transactions from the period of October 2012 to March 2013.

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

Year		Number of listed companies [1)]	Total market value [1)] (million yen)	Total trading value (million yen)	TOPIX [2)] Tokyo stock price index, average	Nikkei Stock Average (225 issues) [1)] (yen)
1998		1,340	267,783,547	96,001,269	1,178.14	13,842.17
1999		1,364	442,443,338	178,041,139	1,388.63	18,934.34
2000		1,447	352,784,685	242,632,346	1,545.22	13,785.69
2001		1,491	290,668,537	199,844,292	1,195.10	10,542.62
2002		1,495	242,939,136	190,869,955	979.49	8,578.95
2003		1,533	309,290,031	237,905,753	918.86	10,676.64
2004		1,595	353,558,256	323,918,214	1,120.07	11,488.76
2005		1,667	522,068,129	459,136,406	1,270.09	16,111.43
2006		1,715	538,629,548	644,308,788	1,625.92	17,225.83
2007		1,727	475,629,039	735,333,528	1,663.69	15,307.78
2008		1,715	278,988,813	568,538,950	1,187.82	8,859.56
2009		1,684	302,712,168	368,679,737	869.33	10,546.44
2010		1,670	305,693,030	354,598,763	885.43	10,228.92
2011		1,672	251,395,748	341,587,524	820.80	8,455.35
2012		1,695	296,442,945	306,702,280	768.64	10,395.18
2013	Jan.	1,697	324,714,528	41,843,108	901.20	11,138.66
	Feb.	1,699	337,490,278	45,867,257	961.02	11,559.36
	Mar.	1,709	359,766,497	50,788,121	1,028.55	12,397.91
	Apr.	1,712	404,650,096	71,229,092	1,110.41	13,860.86

1) End of year or month. 2) 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 2.38 million in 2010 (4.2 percent), and the GDP share of the industries fell from 12.8 percent in 1960 to 1.2 percent in 2010.

Table 5.1
Agricultural, Forestry and Fisheries Output

(Billion yen)

Item	2007	2008	2009	2010	2011
Total	10,353	10,539	10,073	10,026	10,084
Agriculture	8,259	8,466	8,190	8,121	8,246
Crops	5,720	5,820	5,590	5,513	5,639
Rice	1,790	1,901	1,795	1,552	1,850
Vegetables	2,089	2,111	2,085	2,249	2,134
Fruits and nuts	756	741	698	750	743
Livestock and its products	2,479	2,585	2,547	2,553	2,551
Beef cattle	485	459	482	464	463
Dairy cattle	731	748	791	773	751
Pigs	523	579	512	529	536
Chickens	676	744	709	735	753
Forestry	441	445	412	422	417
Fisheries	1,653	1,628	1,470	1,483	1,421

Source: Ministry of Agriculture, Forestry and Fisheries.

2. Agriculture

(1) Agricultural Production

Japan's total agricultural output in 2011 was 8.25 trillion yen, up 1.5 percent from the previous year. Crops yielded 5.64 trillion yen, up 2.3 percent from the previous year. This was because of higher rice output due to rising prices, notwithstanding a decline in the output of vegetables, fruits and nuts due to falling prices.

Table 5.2
Agricultural Production

(Thousand tons)

Products	1995	2000	2005	2010	2011
Cereal grains					
Rice	10,748	9,490	9,074	8,483	8,402
Wheat	444	688	875	571	746
Vegetables, potatoes and legumes					
Potatoes	3,365	2,898	2,752	2,290	2,387
Sweet potatoes	1,181	1,073	1,053	864	886
Soybeans, dried	119	235	225	223	219
Cucumbers	827	767	675	588	585
Tomatoes	753	806	759	691	703
Cabbages	1,544	1,449	1,364	1,360	1,375
Chinese cabbages	1,163	1,036	924	889	897
Onions	1,278	1,247	1,087	1,042	1,070
Lettuces	537	537	552	538	542
Japanese radishes	2,148	1,876	1,627	1,496	1,493
Carrots	725	682	615	596	617
Fruits					
Mandarin oranges	1,378	1,143	1,132	786	928
Apples	963	800	819	787	655
Grapes	250	238	220	185	173
Japanese pears	383	393	362	259	286
Industrial crops					
Crude tea	a) 80	a) 85	100	85	a) 82
Sugar beets [1)]	3,813	3,673	4,201	3,090	3,547

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	2010	2011
Pork	1,322,065	1,270,685	1,244,963	1,292,451	1,267,378
Beef	600,099	529,674	498,428	514,078	499,615
Veal	806	629	1,042	881	755
Horse meat	8,433	7,215	7,129	5,880	4,868
Mutton and lamb	208	112	126	…	…
Goat meat	153	155	73	…	…
Broilers	1,631,060	1,551,101	1,702,001	1,835,091	1,783,393
Cow milk	8,382,162	8,497,278	8,285,215	7,720,456	7,474,309
Eggs	2,550,586	2,540,075	2,481,000	2,515,323	2,482,628

Source: Ministry of Agriculture, Forestry and Fisheries.

(2) Farmers and Farmland

In 2010, 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 1.63 million. Of these commercial farm households, 27.7 percent were full-time farm households, 13.8 percent were part-time farm households with farming income exceeding non-farming income, and 58.6 percent were part-time farm households with non-farming income exceeding farming income.

Of the commercial farm household members, 2.61 million people were actually engaged in farming (commercial farmers) in 2010, of whom 61.6 percent were aged 65 years and over.

In 2011, the total income per commercial farm household was 4.63 million yen, down 0.6 percent from the previous year. Of that amount, 1.20 million yen was from farming income, 1.60 million yen from non-farming income, and 1.83 million yen from pension benefits and other sources.

Table 5.4
Commercial Farm Households and Commercial Farmers

(Thousands)

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
2010	1,631	451	225	955	2,606	61.6

Source: Ministry of Agriculture, Forestry and Fisheries.

Japan's cultivated acreage shrank year after year from 6.09 million hectares in 1961 to 4.55 million hectares in 2012. In the one-year period of 2012, there were 5,620 hectares of new cultivation but also a 17,400-hectare decrease. The most common cause for the decrease was cultivation abandonment, accounting for approximately 40 percent of all

cases, followed by land-use conversion for residential and other lands, making up approximately 30 percent.

3. Forestry

Japan's forest land area is 25.08 million hectares (approximately 70 percent of its entire surface area). Of this, natural forests account for 55 percent while planted forests, most of which are conifer plantations, make up 45 percent. Meanwhile, Japan's forest growing stock is 4,901 million cubic meters, of which 3,192 million 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 (2012) [1)]

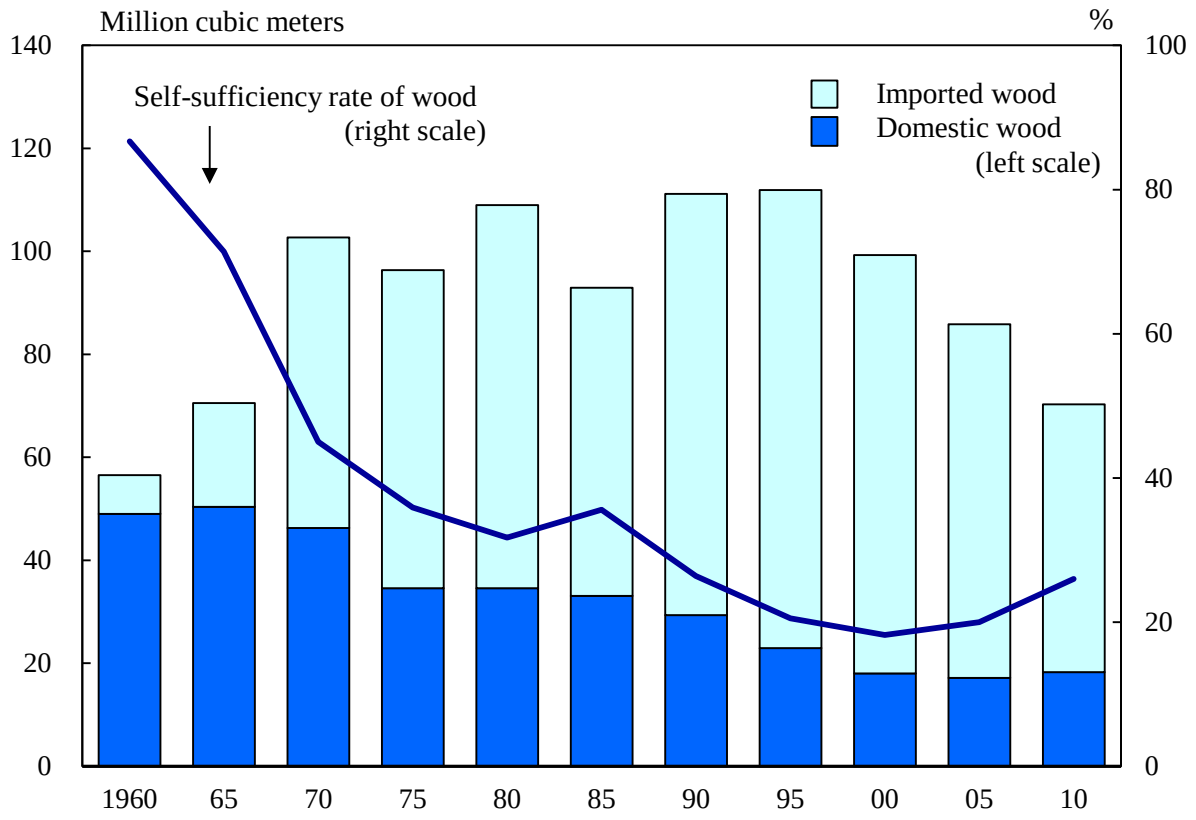
Item	Total	National forest	Non-national forest	
			Municipal	Private
Forest land area (million ha)	25.1	7.7	2.9	14.5
Forest growing stock (million m^3)	4,901	1,152	558	3,191
Planted forest				
Land area (million ha)	11.3	2.8	1.4	7.0
Growing stock (million m^3)	3,192	539	372	2,280
Natural forest				
Land area (million ha)	13.8	4.9	1.5	7.5
Growing stock (million m^3)	1,709	613	185	911

1) Preliminary figures.
Source: Ministry of Agriculture, Forestry and Fisheries.

Domestic wood supply (log conversion) totaled 19.7 million cubic meters in 2012, which is equivalent to 37.3 percent of the peak in 1967 (52.7 million cubic meters). In 2012, Japan's self-sufficiency rate for lumber was 27.9 percent. Currently, Japan depends mostly on imported lumber for pulp, woodchip and plywood material.

The slowdown in domestic lumber production activities has resulted in a decline in the number of workers engaged in forestry. In 2010, there were 69,000 workers engaged in forestry, a level that represented the same number recorded ten years before. However, approximately one out of six workers was aged 65 and over, highlighting the aging of the labor force.

Figure 5.1
Industrial Wood Supply and Self-Sufficiency Rate [1)]



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

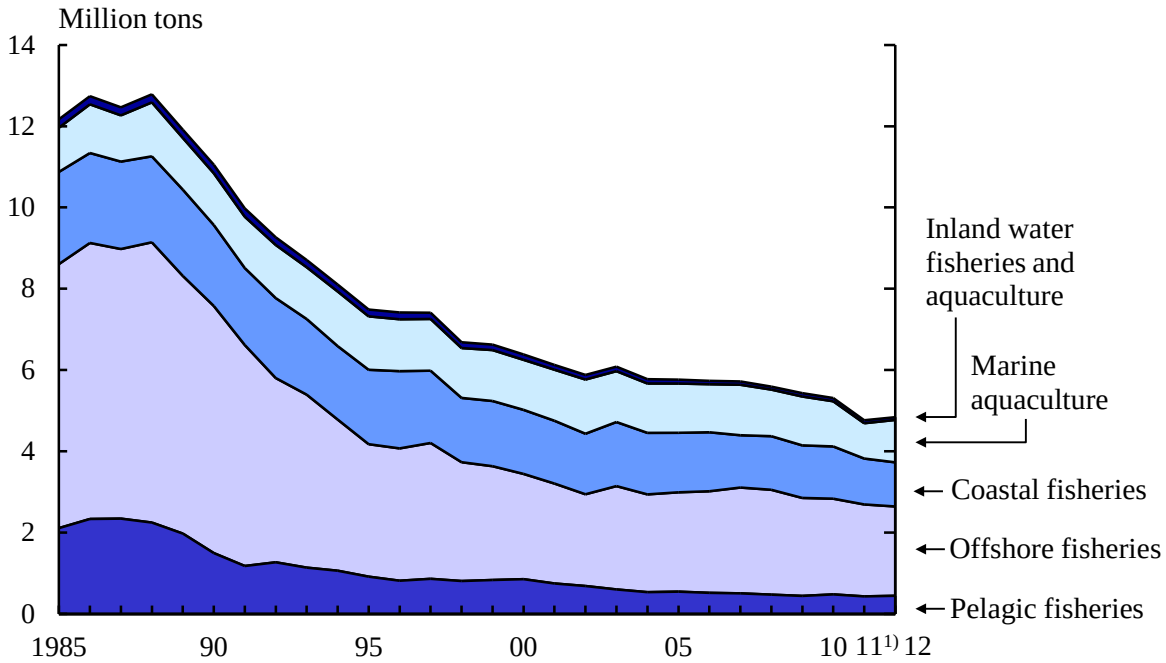
4. Fisheries

(1) Fishery Production

In Japan, a country surrounded by ocean, the fishing industry has played an important role in supplying animal protein and bringing a healthy and rich diet to the population. Recently, however, there has been a progressing "shift away from fish," particularly among the younger generations. On the other hand, aging of fishing boats and fishery workforce is bringing concern that fishery resources in surrounding waters in Japan are not fully utilized.

Japan's fishery output has been on the decline since 1989. Its 2012 fishery production totaled 4.84 million tons. Of this, marine fishery and aquaculture production amounted to 4.77 million tons.

Figure 5.2
Production by Type of Fishery



1) Excluding figures lost in Iwate, Miyagi and Fukushima prefectures because of the Great East Japan Earthquake.
Source: Ministry of Agriculture, Forestry and Fisheries.

Table 5.6
Production by Fishery Type and Species

(Thousand tons)

Fishery type and species	2000	2005	2010	2011 [1)]	2012 [*]
Total	6,384	5,765	5,312	4,765	4,841
Marine fisheries	5,022	4,457	4,121	3,823	3,731
Tunas	286	239	208	201	201
Bonito	341	370	303	262	280
Sardine	150	28	70	176	134
Mackerels	346	620	492	393	440
Alaska pollack	300	194	251	239	229
Crabs	42	34	32	30	30
Squids	624	330	267	298	214
Marine aquaculture	1,231	1,212	1,111	869	1,043
Yellowtails	137	160	139	146	159
Oysters	221	219	200	166	165
Laver	392	387	329	292	341
Wakame Sea weed	67	63	52	19	49
Pearl (tons)	30	29	21	20	19
Inland water fisheries	71	# 54	# 40	34	33
Salmons and trouts	17	19	# 14	12	14
Sweetfish	11	# 7	# 3	3	3
Shellfishes	20	# 14	# 14	13	11
Inland water aquaculture	61	# 42	39	39	34
Eel	24	19	21	22	17
Trouts	15	12	9	8	8
Common carp	11	4	4	3	3

1) Excluding figures lost in Iwate, Miyagi and Fukushima prefectures because of the Great East Japan Earthquake.

Source: Ministry of Agriculture, Forestry and Fisheries.

(2) Fishery Workers

The number of workers in the marine fishery industry (the workers who engage in work at sea for 30 days or more yearly) has been decreasing constantly. In 2012, there was a 2.4 percent decrease from the previous year, bringing the count to 174,000 workers (excluding Iwate, Miyagi and Fukushima prefectures). Among male workers, the ratio of those aged 65 years and over was 36.4 percent, showing the progressive trend of an aging workforce.

Table 5.7
Number of Enterprises and Workers Engaged in the Marine Fishery/ Aquaculture Industry

Year	Enterprises			Workers		
	Total	Individual households	Corporate entities	Total	Self-employed	Hired
2000	145,930	137,690	8,240	260,200	…	…
2005	126,020	118,930	7,090	222,170	…	…
2010	103,740	98,300	5,440	202,880	128,270	74,610
2011[1)]	91,170	86,150	5,020	177,870	111,960	65,910
2012[1)]	88,880	83,950	4,940	173,660	108,560	65,090

1) Excluding Iwate, Miyagi and Fukushima prefectures.
Source: Ministry of Agriculture, Forestry and Fisheries.

5. Self-Sufficiency in Food

Japan's food self-sufficiency rate, in terms of calories, was 39 percent in fiscal 2011, versus 73 percent in fiscal 1965. 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 livestock products and fats that domestic agricultural production alone cannot supply sufficiently.

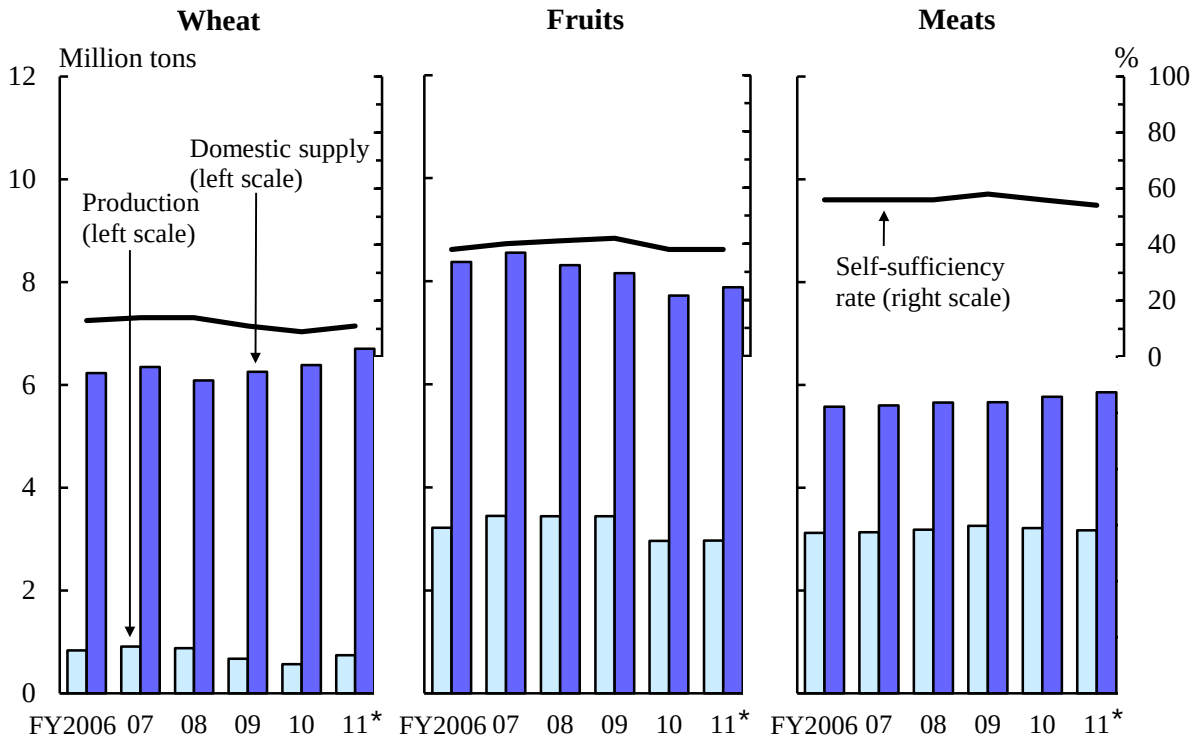
In fiscal 2011, the self-sufficiency rate (on an item-specific weight basis) was 100 percent in rice, 11 percent in wheat, 9 percent in beans, 79 percent in vegetables, 38 percent in fruits, 54 percent in meat and 58 percent in seafood. Although completely self-sufficient in rice, the staple food of its people, Japan relied almost entirely on imports for wheat and bean supply.

Table 5.8
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	8,998	5.27	978	9,222
2010	1,628	8,554	5.25	831	9,018
2011*	1,576	8,566	5.44	997	9,018
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
2010	207	571	2.76	5,473	6,384
2011*	212	746	3.53	6,480	6,701

Source: Ministry of Agriculture, Forestry and Fisheries.

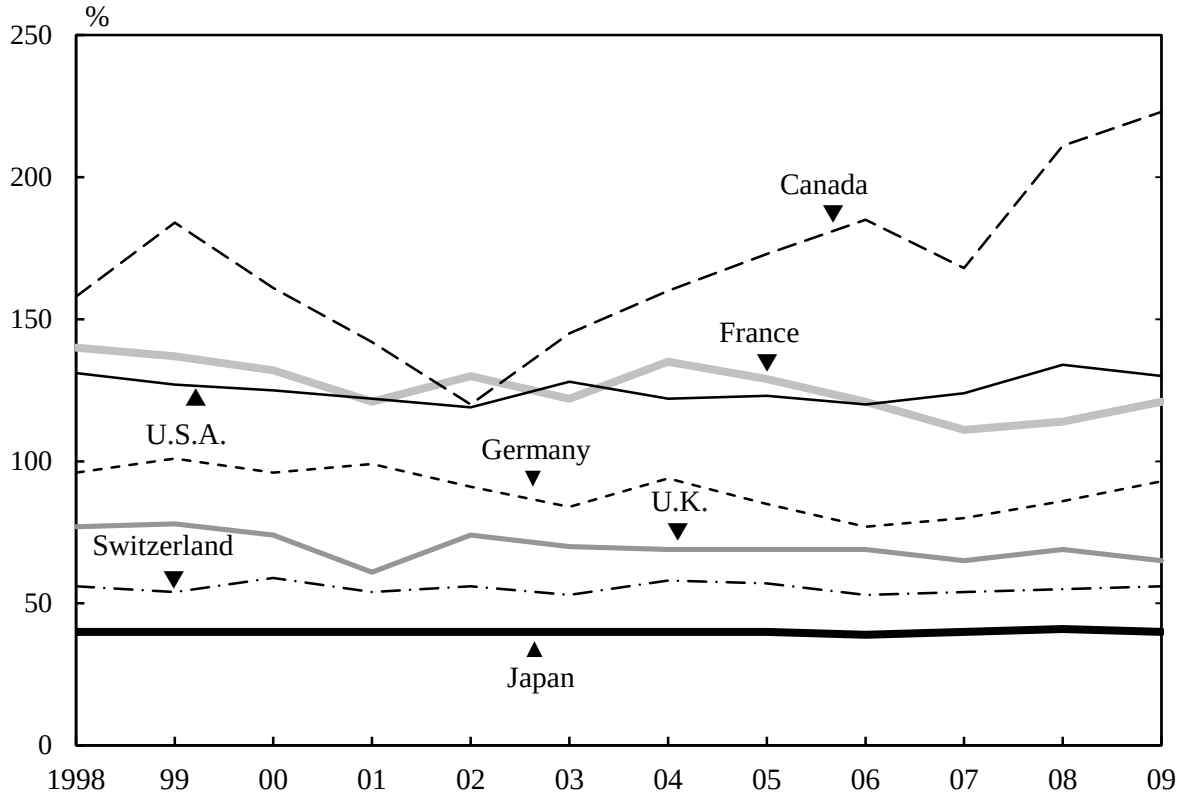
Figure 5.3
Self-Sufficiency Rates for Selected Categories of Agricultural Produce



Source: Ministry of Agriculture, Forestry and Fisheries.

Japan's present food self-sufficiency rate is the lowest among major industrialized countries, and Japan is thus the world's largest net importer of agricultural products since 1984.

Figure 5.4
Trends in Food Self-Sufficiency Rates of Major Countries [1)]
(In terms of calories)



1) Estimates.
Source: Ministry of Agriculture, Forestry and Fisheries.

Chapter 6

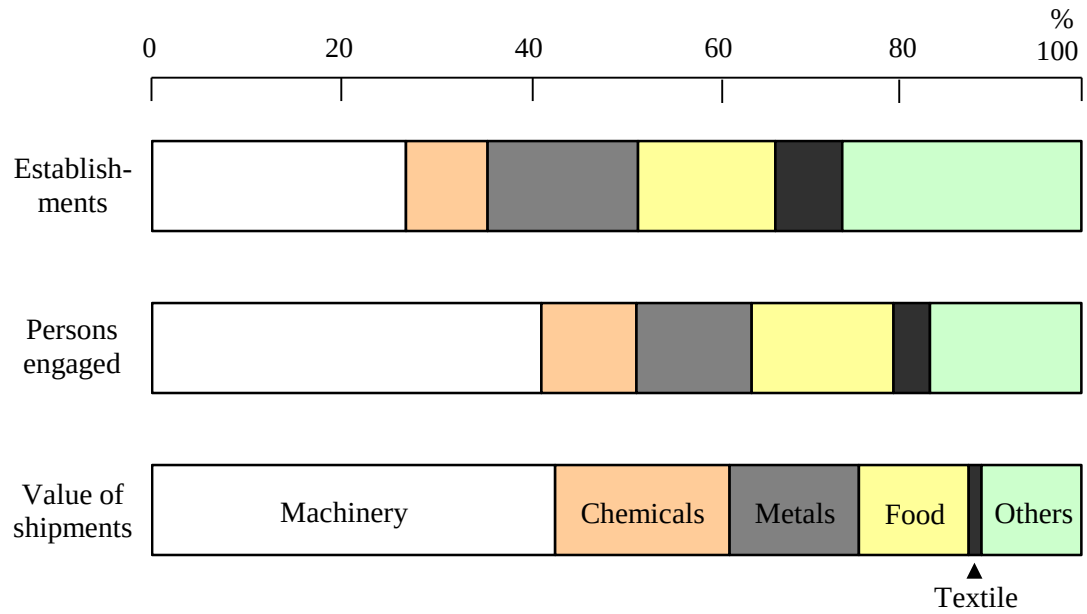
Manufacturing and Construction

1. Overview of the Manufacturing Sector

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.

In Japan, the September 2008 Lehman Brothers bankruptcy (the "Lehman Shock") led to a sharp drop in worldwide demand for the mainstays of Japan's manufacturing industries, namely, consumer durables such as automobiles and capital goods such as machine tools. Additionally, in 2011, the Great East Japan Earthquake, the historically high yen, and the slowing global economy contributed to sluggish domestic production. Anxiety about industrial hollowing out increased. A concern for the future is the declining competitiveness of Japanese manufacturing industries both in Japan and abroad.

Figure 6.1
Composition of Establishments, Persons Engaged and Value of Manufactured Goods Shipments by Sector (2011) [1)]



1) Preliminary figures. Establishments with four or more persons engaged.
Source: Statistics Bureau, MIC; Ministry of Economy, Trade and Industry.

Table 6.1
Number of Establishments, Persons Engaged and Value of Manufactured Goods Shipments of the Manufacturing Industry (2011) [1)]

Industries	Number of establish-ments	Number of persons engaged	Value of manu-factured goods shipments (billion yen)
Manufacturing	232,161	7,452,940	285,023
Food	29,630	1,038,545	24,198
Beverages, tobacco and feed	4,679	99,388	9,479
Textile mill products	16,752	293,110	3,947
Lumber and wood products [2)]	6,638	96,736	2,214
Furniture and fixtures	7,022	99,766	1,702
Pulp, paper and paper products	6,743	188,695	6,839
Printing and allied industries	14,099	287,177	5,589
Chemical and allied products	4,999	329,435	25,892
Petroleum and coal products	1,037	25,960	16,547
Plastic products [3)]	14,334	405,229	10,972
Rubber products	2,815	115,691	3,042
Leather tanning, leather products and fur skins	1,773	24,100	366
Ceramic, stone and clay products	11,206	244,131	7,198
Iron and steel	4,926	218,849	18,608
Non-ferrous metals and products	3,210	136,996	9,031
Fabricated metal products	29,469	568,652	12,058
General-purpose machinery	7,692	310,877	10,384
Production machinery	21,499	552,090	15,571
Business oriented machinery	4,814	201,577	6,634
Electronic parts, devices and electronic circuits	5,382	445,988	15,661
Electrical machinery, equipment and supplies	10,163	472,893	15,145
Information and communication electronics equipment	1,899	193,994	9,797
Transport equipment	11,961	945,050	50,465
Miscellaneous manufacturing industries	9,419	158,011	3,684

1) Preliminary figures. Establishments with four or more persons engaged. 2) Excluding furniture. 3) Excluding plastic furniture, plastic plate making for printing, etc., which are included in other industrial classification.
Source: Statistics Bureau, MIC; Ministry of Economy, Trade and Industry.

In 2011, there were 232,161 establishments (with four or more persons engaged) and a total of 7.45 million persons engaged in the manufacturing sector. These establishments shipped 285.0 trillion yen worth of manufactured products, with added value amounting to 91.4 trillion yen.

Based on the Indices on Mining and Manufacturing (2005 average = 100), the production index for 2012 was 91.9, down 0.3 percent from the previous year, while shipments stood at 92.5, an increase of 0.1 percent from the year before.

Table 6.2

Indices on Mining and Manufacturing (2012)

(2005 average = 100)

Industries	Production [1]	Annual growth (%)	Shipments	Annual growth (%)	Inventory [2]	Annual growth (%)	Inventory Ratio [3]	Annual growth (%)
Mining and manufacturing ..	91.9	-0.3	92.5	0.1	103.8	3.5	122.3	6.3
Manufacturing	91.9	-0.2	92.5	0.1	103.8	3.5	122.3	6.3
Food and tobacco	102.1	0.1	101.6	2.4	72.5	2.3	103.7	-7.3
Textile	66.2	-3.1	72.8	-1.4	82.2	2.6	112.2	6.6
Pulp, paper and paper products	84.2	-2.2	85.5	-2.3	97.0	9.2	127.8	21.4
Chemicals	104.1	-0.1	97.8	-0.7	100.9	0.1	119.1	5.4
Chemicals (excl. Drugs)	86.3	-3.7	84.5	-3.4	100.9	0.1	119.1	5.4
Petroleum and coal products	85.4	-0.6	86.0	-0.1	89.6	0.2	113.9	-0.9
Plastic products	88.6	1.1	87.5	1.6	94.6	-2.6	110.8	1.1
Ceramic, stone and clay products	86.4	2.9	85.0	3.7	93.8	-1.3	123.2	-2.7
Iron and steel	90.8	-0.3	91.4	-0.2	100.4	-3.6	111.1	-0.9
Non-ferrous metals	88.8	2.8	86.9	1.8	110.9	2.0	121.5	-1.4
Fabricated metals	81.6	0.1	81.0	-0.6	87.9	11.0	114.6	8.4
General machinery	86.4	-6.2	85.6	-5.0	106.0	7.6	121.0	13.8
Electronic parts and devices	106.6	-6.8	115.2	-1.4	233.2	0.9	233.1	4.9
Electrical machinery	90.6	-4.5	93.2	-4.1	161.2	21.5	129.3	16.2
Information and communication electronics equipment	61.9	-12.8	74.0	-25.3	104.9	-12.5	183.6	62.6
Transport equipment	95.5	12.0	96.0	11.4	83.4	19.0	96.2	4.8
Precision instruments	113.3	-1.6	109.6	-0.5	144.3	9.2	121.0	16.3
Other manufacturing	85.4	-0.6	84.4	0.1	88.5	2.5	119.5	0.2
Mining	92.1	1.4	103.8	-1.0	110.4	6.9	116.2	-2.3
(Reference)								
Electricity and gas	99.4	0.6	99.8	0.8	-	-	-	-

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

3) Inventory ratio = Inventory quantity / Shipments quantity

Source: Ministry of Economy, Trade and Industry.

Table 6.3
Indices of Industrial Production [1)]

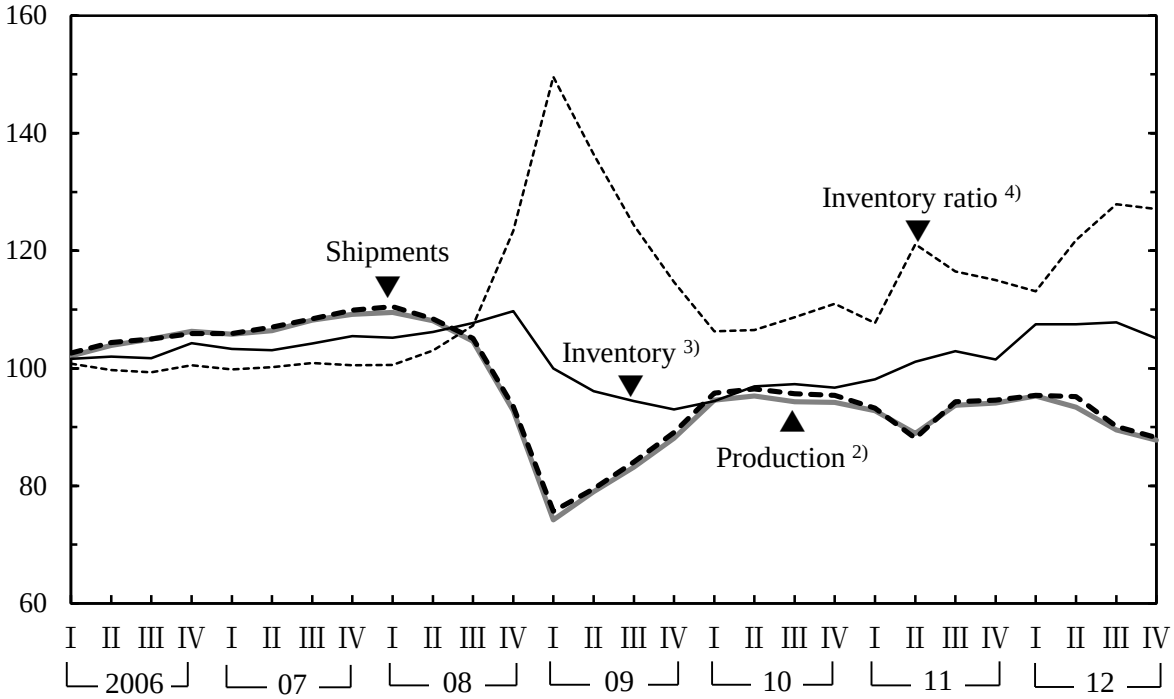
(2005 average = 100)

Industries	2009	2010	2011	2012	Annual growth (%)
Mining and manufacturing	81.1	94.4	92.2	91.9	-0.3
Manufacturing	81.0	94.5	92.1	91.9	-0.2
Food and tobacco	102.3	102.4	102.0	102.1	0.1
Textile	67.1	67.9	68.3	66.2	-3.1
Pulp, paper and paper products	85.8	89.1	86.1	84.2	-2.2
Chemicals	95.3	100.8	104.2	104.1	-0.1
Chemicals (excl. Drugs)	85.3	93.0	89.6	86.3	-3.7
Petroleum and coal products	90.2	91.1	85.9	85.4	-0.6
Plastic products	82.1	89.8	87.6	88.6	1.1
Ceramic, stone and clay products	76.8	85.2	84.0	86.4	2.9
Iron and steel	72.5	93.8	91.1	90.8	-0.3
Non-ferrous metals	77.4	90.5	86.4	88.8	2.8
Fabricated metals	77.9	83.1	81.5	81.6	0.1
General machinery	60.3	82.8	92.1	86.4	-6.2
Electronic parts and devices	100.0	126.3	114.4	106.6	-6.8
Electrical machinery	78.9	94.4	94.9	90.6	-4.5
Information and communication electronics equipment	83.4	91.6	71.0	61.9	-12.8
Transport equipment	74.6	94.5	85.3	95.5	12.0
Precision instruments	84.6	105.1	115.1	113.3	-1.6
Other manufacturing	80.8	86.9	85.9	85.4	-0.6
Mining	93.6	90.0	90.8	92.1	1.4
(Reference)					
Electricity and gas	96.9	103.0	98.8	99.4	0.6

1) Value added weights.

Source: Ministry of Economy, Trade and Industry.

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.

2. Principal Industries in the Manufacturing Sector

This section describes the major industries in the manufacturing sector. For each industry, (a) is described by the "2012 Economic Census for Business Activity (preliminary tabulation)" (with four or more persons engaged), and (b) is described by the "Indices on Mining and Manufacturing" (2005 average = 100).

(1) Machinery Industry

(A) Transport Equipment Industry

(a) In 2011, a total of 11,961 establishments employed 945,050 persons, and shipped 50.5 trillion yen worth of products.

(b) In 2012, production and shipments increased year-on-year by 12.0 percent and 11.4 percent, respectively. As a result, both production and shipments recorded their first increase in two years. This was due to the increase in the production and shipments of passenger cars, motor vehicle parts, etc.

(B) Production Machinery Industry

(a) In 2011, a total of 21,499 establishments employed 552,090 persons, and shipped 15.6 trillion yen worth of products.

(b) In 2012, production and shipments decreased year-on-year by 5.6 percent and 5.2 percent, respectively. As a result, both production and shipments recorded their first decrease in three years.

(C) Electrical Machinery, Equipment and Supplies Industry

(a) In 2011, a total of 10,163 establishments employed 472,893 persons, and shipped 15.1 trillion yen worth of products.

(b) In 2012, production and shipments decreased year-on-year by 4.5 percent and 4.1 percent, respectively. As a result, production recorded the first decrease in three years and shipments decreased for the second consecutive year. Decrease in the production of household electrical machinery resulted in the total production decrease in the industry. Decrease in the total shipments was caused by the decrease in switching devices.

(D) Electronic Parts and Devices Industry

(a) In 2011, a total of 5,382 establishments employed 445,988 persons, and shipped 15.7 trillion yen worth of products.

(b) In 2012, production and shipments decreased by 6.8 percent and 1.4 percent, respectively, from the previous year. As a result, both production and shipments recorded their second consecutive year of decrease.

(E) Information and Communication Electronics Equipment Industry

(a) In 2011, a total of 1,899 establishments employed 193,994 persons, and shipped 9.8 trillion yen worth of products.

(b) In 2012, production and shipments decreased by 12.8 percent and 25.3 percent, respectively, from the previous year. As a result, both production and shipments recorded their second consecutive year of decrease. Decrease in the production of communication equipment resulted in the total production decrease in the industry. Decrease in the total shipments was caused by the decrease in household electronic machinery.

(2) Chemical Industry

(a) In 2011, a total of 4,999 establishments employed 329,435 persons, and shipped 25.9 trillion yen worth of products.

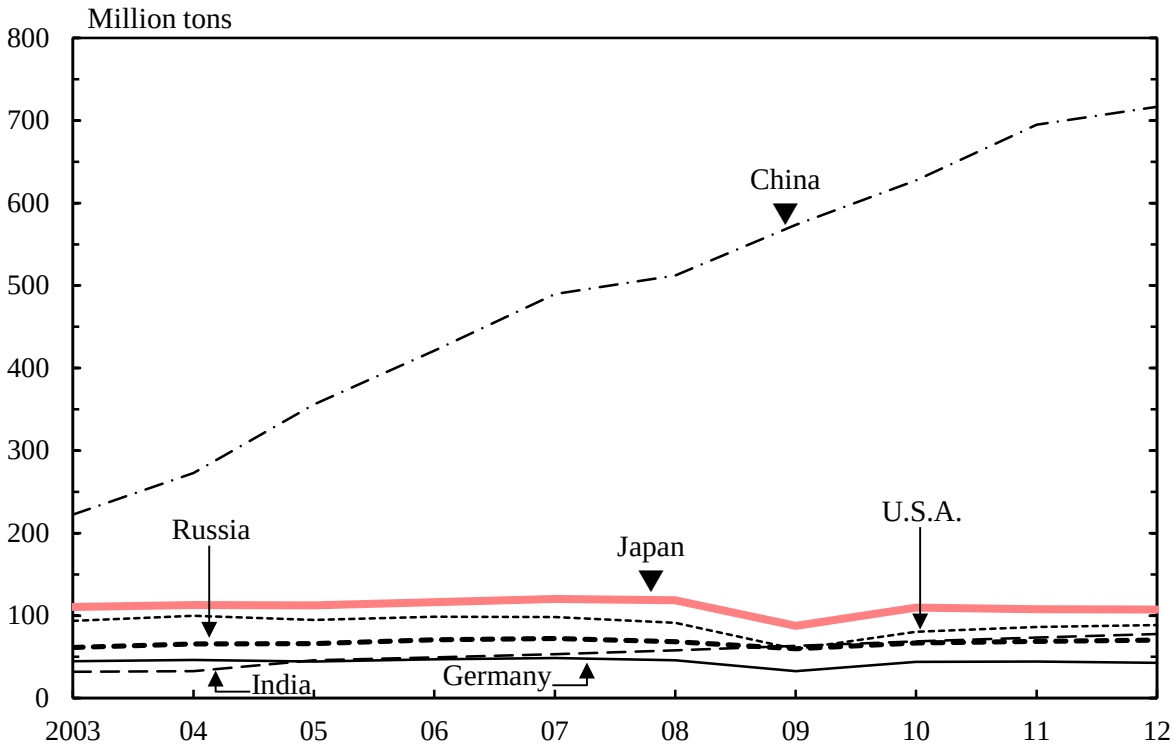
(b) In 2012, production and shipments decreased by 0.1 percent and 0.7 percent, respectively, from the previous year. As a result, both production and shipments recorded their first decrease in three years. In 2012, production and shipments in the chemical industry (excluding medical and pharmaceutical products) decreased by 3.7 percent and 3.4 percent, respectively, from 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 plastic, industrial organic chemicals, etc.

(3) Iron and Steel Industry

(a) In 2011, a total of 4,926 establishments employed 218,849 persons, and shipped 18.6 trillion yen worth of products.

(b) In 2012, production and shipments decreased by 0.3 and by 0.2 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 cold finished steel, metallic coated steel, etc.

Figure 6.3
Crude Steel Production in Selected Countries



Source: The Japan Iron and Steel Federation; World Steel Association.

Table 6.4
Steel Production

(Thousand tons)

Products	2008	2009	2010	2011	2012
Pig iron	86,171	66,943	82,283	81,028	81,405
Ferroalloys	828	722	893	834	908
Crude steel	118,739	87,534	109,599	107,601	107,232
Semi-finished steel	115,358	85,359	106,960	104,594	104,571
Ordinary hot-rolled steel	84,299	63,417	77,260	74,492	74,911
Special hot-rolled steel	21,782	13,269	20,505	20,340	19,896
Steel pipes and tubes	9,722	6,172	7,690	7,804	7,877
Finished steel	103,297	74,415	94,937	92,019	92,006
Ordinary steel products	82,703	62,024	75,610	72,816	73,238
Special steel products	20,594	12,391	19,327	19,203	18,768

Source: Ministry of Economy, Trade and Industry.

(4) Fabricated Metal Products Industry

(a) In 2011, a total of 29,469 establishments employed 568,652 persons, and shipped 12.1 trillion yen worth of products.

(b) In 2012, production increased by 0.1 percent and shipments decreased by 0.6 percent compared to the previous year. Consequently, production recorded its first increase in two years, while shipments decreased for the second consecutive year. A rise in the production of metal products for building contributed to the total production increase in the industry. The decrease in total shipments was caused by a decline in 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 core industries in Japan. However, it faces a series of challenges, including rapidly shrinking construction investment and increasingly fierce price wars. The business environment surrounding the industry is now harsher than ever before. In fiscal 2012, the industry employed 5.05 million persons, and investment in construction stood at approximately 44.9 trillion yen.

Table 6.5
Construction Investment (Current prices)

(Billion yen)

Item	FY2009	FY2010	FY2011*	FY2012*
Total	42,965	41,928	41,890	44,900
Building construction	22,690	22,099	22,480	23,420
Dwellings	13,402	13,493	13,840	14,400
Public sector	562	515	460	420
Private sector	12,840	12,978	13,380	13,980
Non-dwellings	9,288	8,606	8,640	9,020
Public sector	1,650	1,694	1,680	1,910
Private sector	7,638	6,912	6,960	7,110
Mining and manufacturing	1,287	1,067	…	…
Others	6,351	5,845	…	…
Civil engineering works	20,275	19,829	19,410	21,480
Public sector	15,723	15,772	15,070	16,530
Public works	13,914	13,020	12,450	13,860
Others	1,809	2,753	2,620	2,670
Private sector	4,552	4,057	4,340	4,950
Total				
Public investment	17,935	17,982	17,210	18,860
Private investment	25,030	23,946	24,680	26,040
Building construction				
Public investment	2,212	2,210	2,140	2,330
Private investment	20,479	19,890	20,340	21,090
Civil engineering works				
Public investment	15,723	15,772	15,070	16,530
Private investment	4,552	4,057	4,340	4,950

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

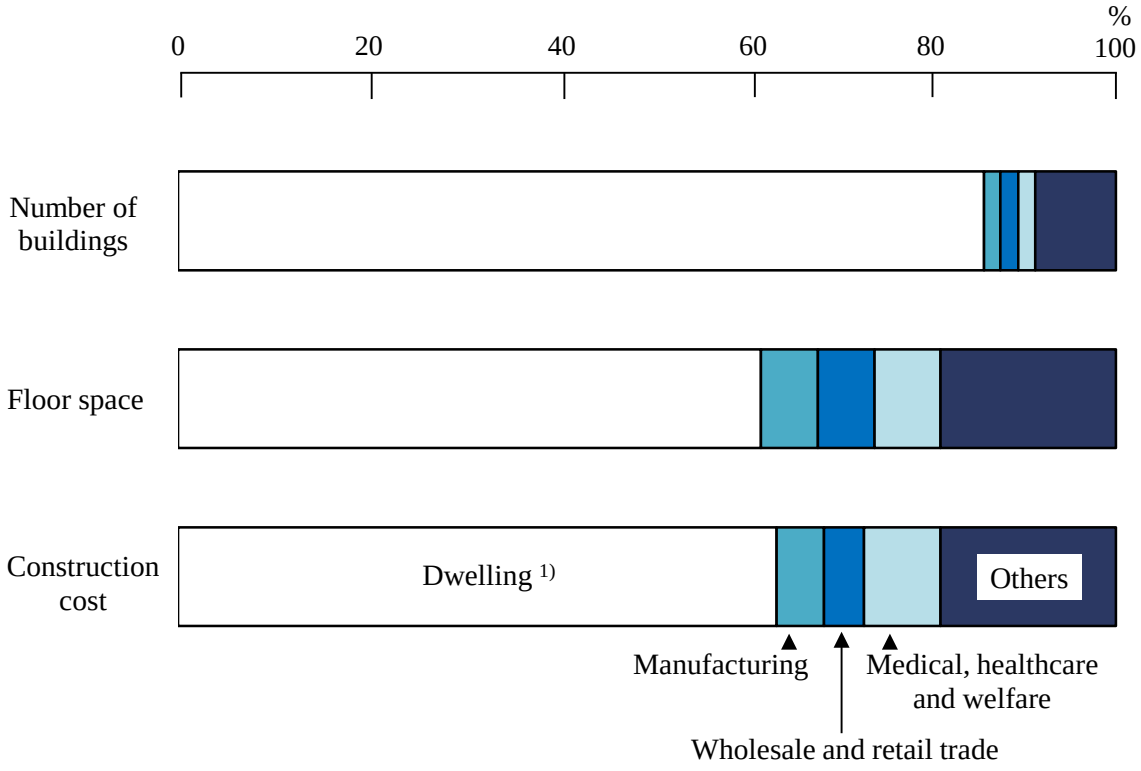
Investment in construction in fiscal 2012 showed a year-on-year increase of 7.2 percent at current prices and a year-on-year increase of 8.7 percent at constant fiscal 2005 prices. Construction investment in fiscal 2012 was down by almost half (46.5 percent) from the fiscal 1992 peak of approximately 84.0 trillion yen.

A breakdown of construction investment shows that building construction totaled 23.4 trillion yen (up 4.2 percent from the previous fiscal year), while civil engineering works amounted to 21.5 trillion yen (up 10.7 percent).

In terms of public and private construction investment in fiscal 2012, public investment amounted to 18.9 trillion yen (up 9.6 percent from the previous fiscal year), while private investment totaled 26.0 trillion yen (up 5.5 percent). Public investment accounted for 42.0 percent of total construction investment, while private investment accounted for 58.0 percent.

The 2012 total floor space of building starts was 132.6 million square meters, up 4.8 percent from the previous year. In particular, the floor space of buildings for medical, healthcare and welfare use decreased by 15.0 percent compared to the previous year, to 9.3 million square meters. Meanwhile, the number of housing construction starts (in the case of apartment buildings, the number of apartment units was counted) increased for owned houses, rental units and built-for-sale units alike, totaling 0.88 million housing units. This was a 5.8-percent increase from the previous year, and the third consecutive year with an increase.

Figure 6.4
Building Construction Started by Use Objective (2012)



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 87.6 percent of its energy supply. Since experiencing the two oil crises of the 1970s, Japan has taken measures to promote energy conservation, introduce alternatives to petroleum, and secure a stable supply of petroleum through stockpiling and other measures. As a result, its dependence on petroleum declined from 77.4 percent in fiscal 1973 to 46.1 percent in fiscal 2011.

Today, in addition to promoting energy conservation and the adoption of renewable energy, the Government of Japan is working on building a disaster-resistant energy supply system, which includes securing nuclear safety, from the perspectives of a zero-based review of energy policy before the Great East Japan Earthquake and addressing global warming.

In fiscal 2011, the total primary energy supply in Japan was 21,960 petajoules, down 5.0 percent from the previous fiscal year. Its breakdown was: 46.1 percent in petroleum, 21.3 percent in coal, 21.4 percent in natural gas, 4.0 percent in nuclear power, and 3.3 percent in hydro power. Other sources were also used, though only in small quantities, including energy from waste, geothermal, and natural energy (solar energy, wind power, biomass energy, etc.).

Energy units

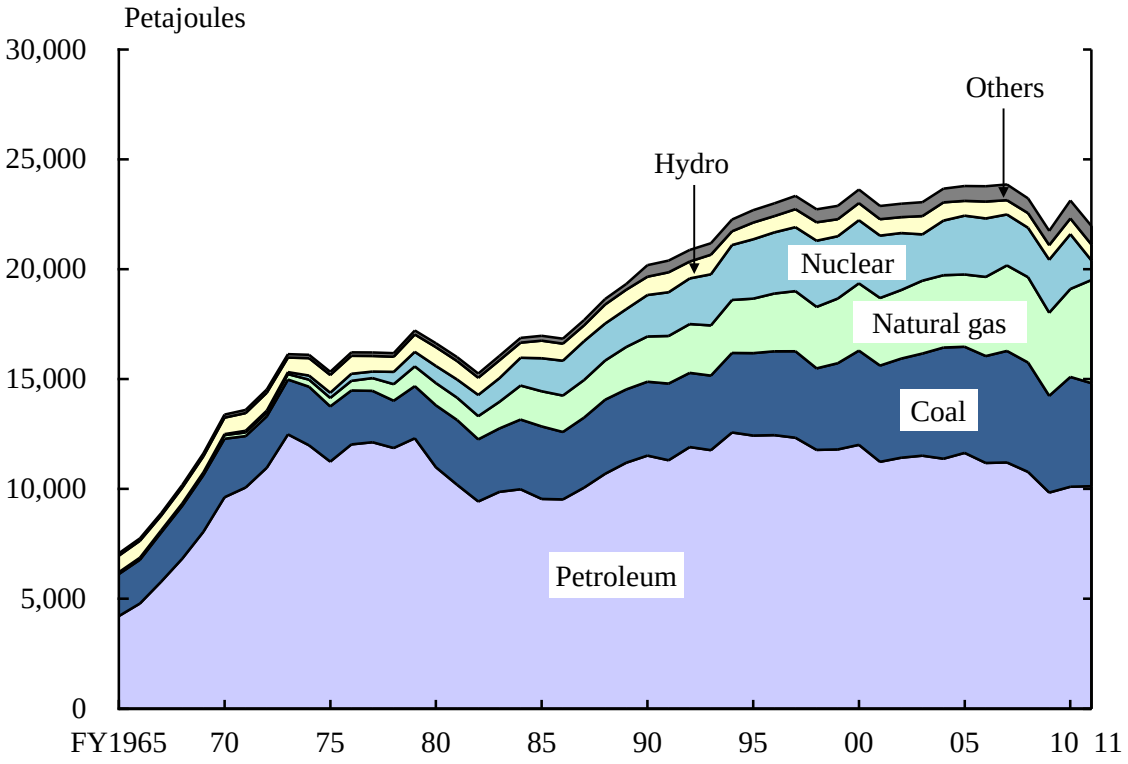
Joule (J) is employed as a common unit (International System of Units: SI) for energy across all energy sources in presenting international statistical information. The unit Petajoule (PJ: 10^{15} or quadrillion joules) is used here to reduce the number of digits. The energy of one kiloliter of petroleum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

1 kiloliter of petroleum = 3.87×10^{10} joules
1 petajoule = 10^{15} joules

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

Japan's final energy consumption was increasing almost steadily since the mid-1980s. However, it has trended downward since fiscal 2005. Final energy consumption in fiscal 2011 decreased by 3.0 percent compared to the previous fiscal year. While energy consumption in the industrial sector has remained mostly level, there were sharp increases in energy consumption in the commercial and residential sector and in the transport sector. In the commercial and residential sector, energy consumption by the commercial sector in particular has risen in recent years. It increased by 40.9 percent over the 22 years from fiscal 1990 through fiscal 2011. 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 and extending opening hours.

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.

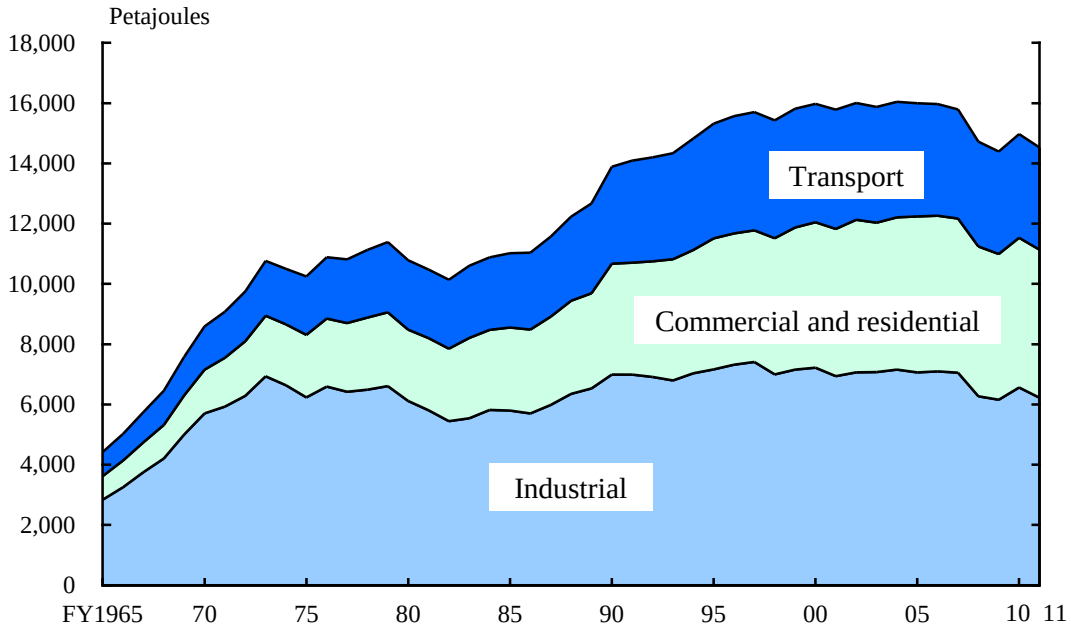
Table 7.1
Trends in Total Primary Energy Supply and Percentage by Energy Source

(Petajoules)

Item	FY1995	FY2000	FY2005	FY2010	FY2011
Total primary energy supply	22,685	23,622	23,784	# 23,124	21,960
Energy self-sufficiency (%) [1]	19.6	19.6	18.4	# 19.1	12.4
Petroleum	12,430	12,008	11,641	10,101	10,126
Coal	3,750	4,286	4,829	4,997	4,687
Natural gas	2,479	3,061	3,288	4,002	4,696
Nuclear	2,700	2,873	2,677	2,495	885
Hydro	761	778	672	712	724
Others	564	616	676	# 817	842
Percentage					
Petroleum	54.8	50.8	48.9	43.7	46.1
Coal	16.5	18.1	20.3	21.6	21.3
Natural gas	10.9	13.0	13.8	17.3	21.4
Nuclear	11.9	12.2	11.3	10.8	4.0
Hydro	3.4	3.3	2.8	3.1	3.3
Others	2.5	2.6	2.8	# 3.5	3.8

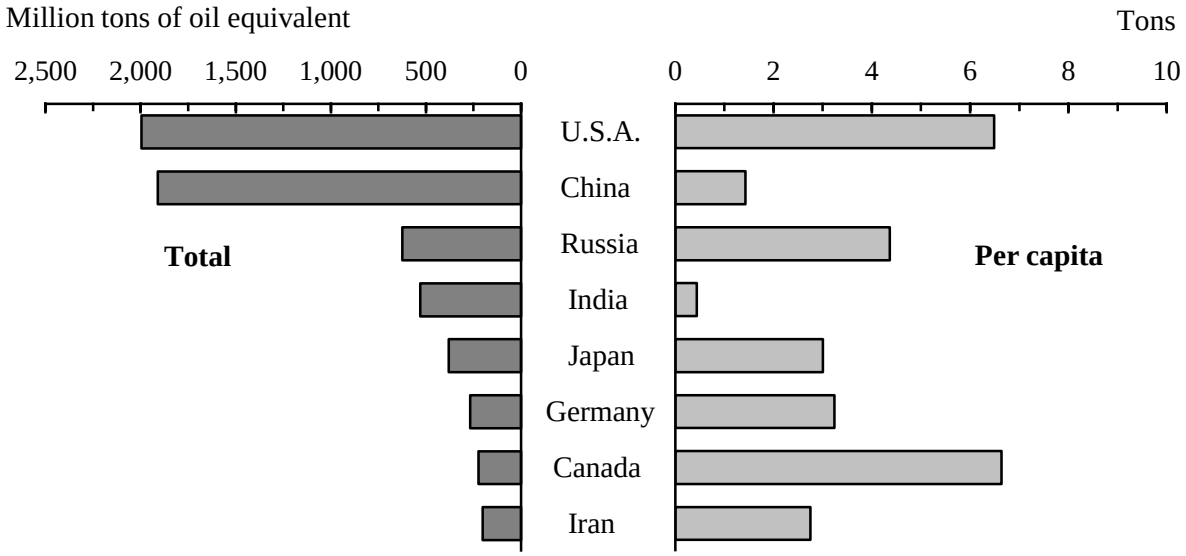
1) Domestic production of primary energy (including nuclear)/Domestic supply of primary energy × 100
Source: Ministry of Economy, Trade and Industry.

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.

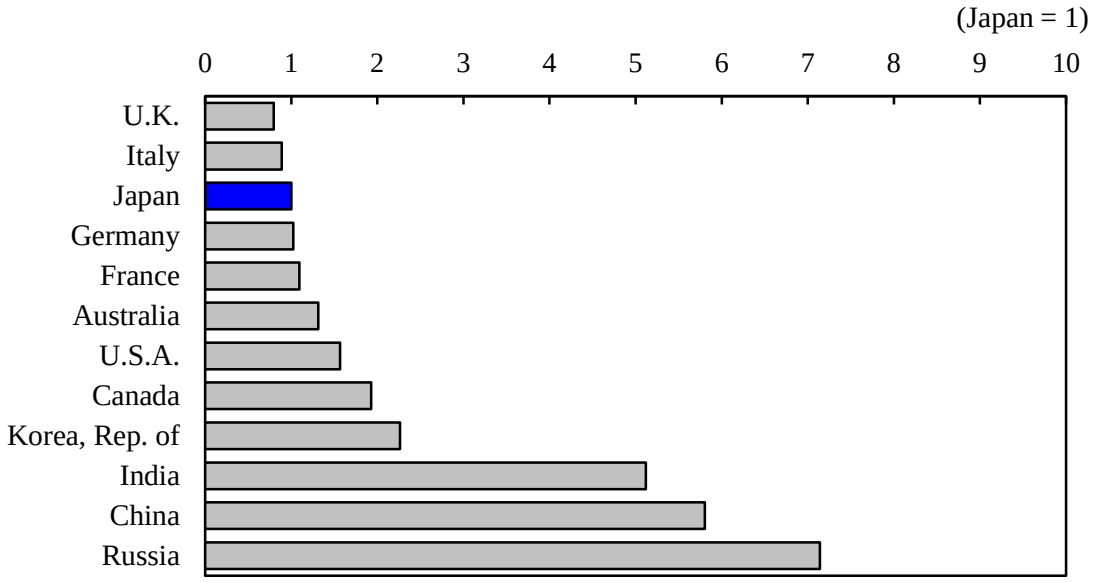
Figure 7.3
Consumption of Commercial Energy by Country (2009)



Source: United Nations.

Total primary energy supply per GDP is lower in Japan than in 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 Ratio [1)] (2010)



1) Total primary energy supply (tons of oil equivalent)/GDP.
Source: International Energy Agency.

2. Electric Power

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

Electricity output (including in-house power generation) in Japan totaled 1,108 billion kWh in fiscal 2011, down 4.2 percent from the previous fiscal year. Of this total, thermal power accounted for 81.9 percent; nuclear power, 9.2 percent; hydro power, 8.3 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	FY2010	FY2011
Electricity Output					
Total	989,880	1,091,500	1,157,926	1,156,888	1,107,829
Thermal	604,206	669,177	761,841	771,306	906,946
Nuclear	291,254	322,050	304,755	288,230	101,761
Hydro	91,216	96,817	86,350	90,681	91,709
Others	3,204	3,456	4,980	6,671	7,413
Percentage					
Total	100.0	100.0	100.0	100.0	100.0
Thermal	61.0	61.3	65.8	66.7	81.9
Nuclear	29.4	29.5	26.3	24.9	9.2
Hydro	9.2	8.9	7.5	7.8	8.3
Others	0.3	0.3	0.4	0.6	0.7
Power Consumption					
Total	881,559	982,066	1,043,800	1,056,441	1,002,445
Generated by electric power suppliers	776,511	858,078	918,265	931,059	883,787
Consumption of in-house generation	105,048	123,988	125,535	125,382	118,658

1) Including in-house generation.
Source: Ministry of Economy, Trade and Industry.

3. Gas

Gas production was 1,306 petajoules in fiscal 2011, up 1.4 percent from the previous fiscal year. Of this total, natural gas plus liquefied natural gas (LNG) accounted for 96.1 percent; and the remaining 3.9 percent were petroleum gases, such as volatile oil, liquefied petroleum gas, etc. Gas purchases for fiscal 2011 totaled 275 petajoules.

Gas sales for fiscal 2011 totaled 1,503 petajoules, or year-on-year growth of 1.8 percent. Of this total, 52.0 percent was sold to industry, 27.3 percent to residential use, and 12.5 percent to the commercial sector.

Table 7.3

Trends in Production and Purchases, and Sales of Gas [1)]

(Petajoules)

Item	FY2000		FY2005		FY2010		FY2011	
Production and purchases	1,061		1,394		1,547		1,581	
Production	952	(100.0)	1,235	(100.0)	1,288	(100.0)	1,306	(100.0)
Coal gases	2	(0.2)	-	(-)	-	(-)	-	(-)
Petroleum gases	111	(11.7)	67	(5.4)	46	(3.6)	50	(3.9)
Natural gas and LNG	839	(88.2)	1,168	(94.6)	1,241	(96.4)	1,256	(96.1)
Others	-	(-)	-	(-)	-	(-)	-	(-)
Purchases	109	(100.0)	159	(100.0)	259	(100.0)	275	(100.0)
Coal gases	8	(7.2)	2	(1.3)	-	(-)	-	(-)
Petroleum gases	15	(13.9)	10	(6.4)	6	(2.4)	6	(2.1)
Natural gas and LNG	86	(78.8)	147	(92.3)	253	(97.6)	269	(97.9)
Others	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Sales	1,047	(100.0)	1,359	(100.0)	1,477	(100.0)	1,503	(100.0)
Residential	397	(37.9)	416	(30.6)	410	(27.7)	410	(27.3)
Commercial	170	(16.2)	205	(15.1)	198	(13.4)	188	(12.5)
Industrial	391	(37.4)	619	(45.5)	738	(50.0)	782	(52.0)
Others	89	(8.5)	120	(8.8)	131	(8.9)	124	(8.3)

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 third among major industrialized countries, following the U.S.A. and China, 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 2012 totaled 844,000. The total research and development (R&D) spending in fiscal 2011 amounted to 17.4 trillion yen, recording the first increase in four years. Relative to GDP, R&D spending was 3.67 percent, the first increase in three years.

Table 8.1
Trends in Research and Development

Year	Number of Researchers [1)]	Females (%)	Fiscal year	R&D expenditures (billion yen)	GDP (billion yen)	Ratio of R&D expenditures to GDP (%)
2003	757,300	11.2	2002	16,675	498,009	3.35
2004	787,300	11.6	2003	16,804	501,889	3.35
2005	790,900	11.9	2004	16,938	502,761	3.37
2006	819,900	11.9	2005	17,845	505,349	3.53
2007	826,600	12.4	2006	18,463	509,106	3.63
2008	827,300	13.0	2007	18,944	513,023	3.69
2009	839,000	13.0	2008	18,800	489,520	3.84
2010	840,300	13.6	2009	17,246	473,934	3.64
2011	842,900	13.8	2010	17,110	480,098	3.56
2012	844,400	14.0	2011	17,379	473,283	3.67

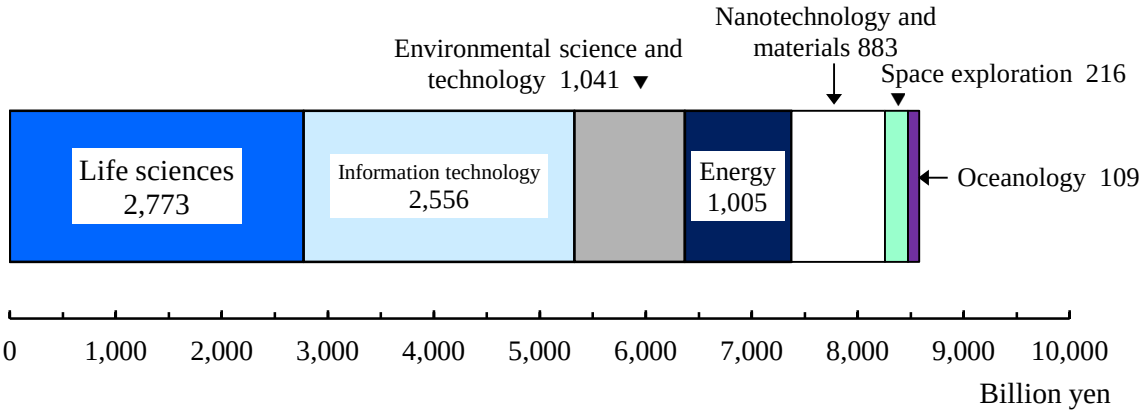
1) In full time equivalent, with the number of researchers partly engaged in R&D recalculated based on the real R&D hours consumed by them.
Source: Statistics Bureau, MIC.

As of the end of March 2012, the number of researchers in business enterprises amounted to 491,000 persons, the number of researchers in non-profit institutions and public organizations was 40,000 persons, and the number of researchers in universities and colleges was 314,000 persons. In terms of R&D expenditures in fiscal 2011, business enterprises spent 12.3 trillion yen (70.6 percent of total R&D expenditures), non-profit institutions and public organizations spent 1.6 trillion yen (9.0 percent), and universities and colleges spent 3.5 trillion yen (20.4 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.

Japan drives its science and technology policy from a long-term perspective based on the Science and Technology Basic Law, established in 1995. The Fourth Basic Plan (2011-2015), which started in August 2011, sets the restoration of the Great East Japan Earthquake that occurred in March 2011 as a priority issue and states to strengthen efforts to promote basic research and human resources development. Of the total research expenditure spent in fiscal 2011, those spent on specific purposes were for "life sciences," "information technology," "environmental science and technology," "energy" and "nanotechnology and materials," in order of the amount spent.

Figure 8.1
R&D Expenditures by Selected Objective (FY2011)

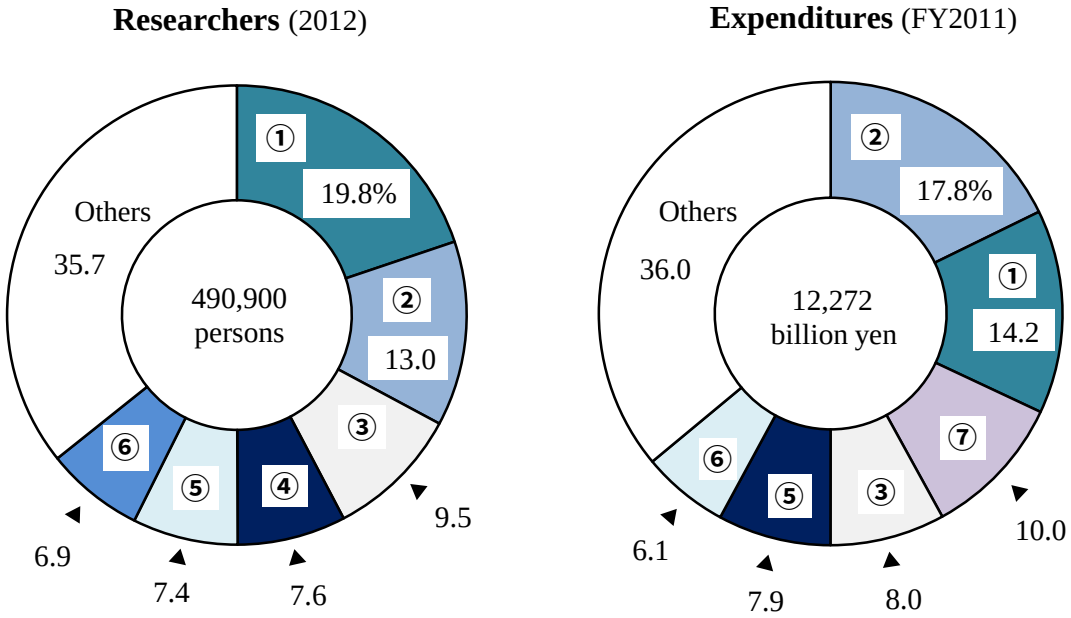


Source: Statistics Bureau, MIC.

Approximately 90 percent of the 491,000 researchers at business enterprises at the end of March 2012, or 438,000 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 business oriented machinery. In terms of R&D expenditures in fiscal 2011, of 12.3 trillion yen spent by business enterprises, 10.8 trillion yen was spent by

manufacturing industries. The motor vehicle, parts and accessories industry spent the most, followed by the information and communication electronics equipment industry, then by the medical and pharmaceutical industry.

Figure 8.2
Researchers and Expenditures by Industry (Business enterprises)



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

Source: Statistics Bureau, MIC.

(2) Technology Trade

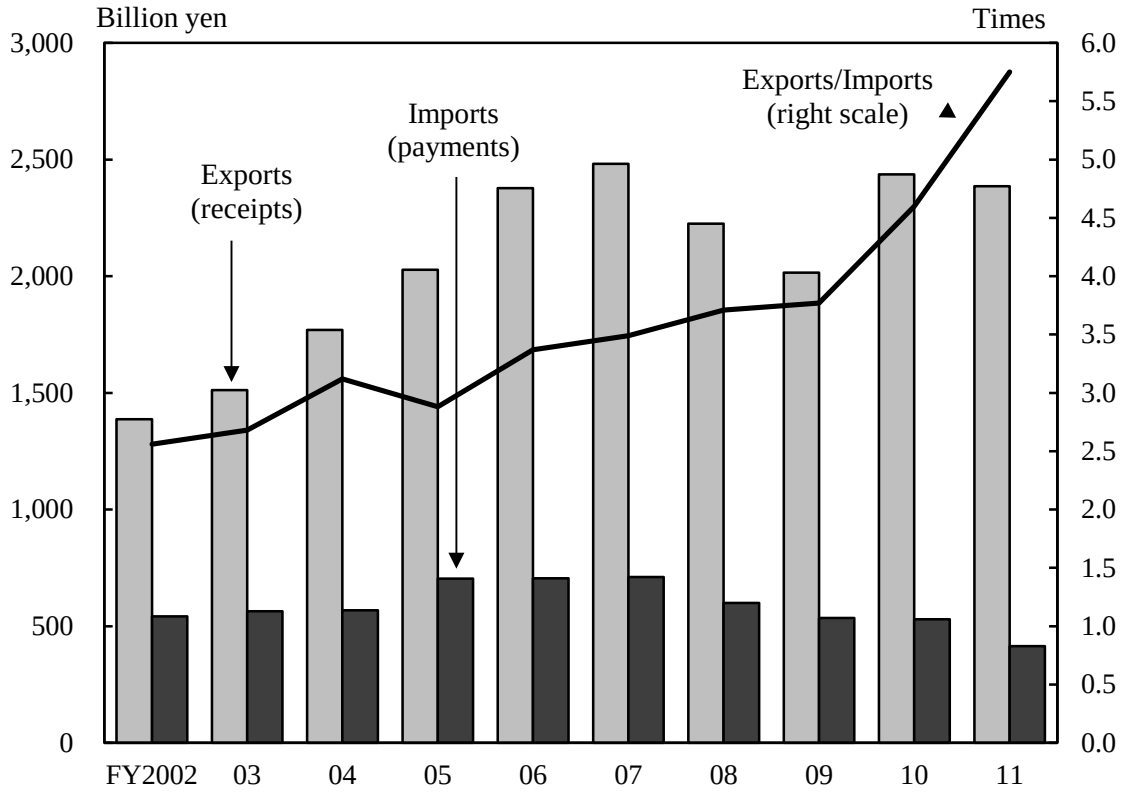
Technology trade is defined as export or import of technology by business enterprises with other countries, such as patents and expertise. In fiscal 2011, Japan earned 2,385 billion yen from technology exports, which was down 2.1 percent from the previous fiscal year; of the total receipts, 71.6 percent was from overseas parent/subsidiary companies. Meanwhile, Japan paid 415 billion yen for technology imports. This was down 21.8 percent from the previous fiscal year, marking the fourth consecutive year of decrease; of this figure, 27.1 percent was payments to overseas parent/subsidiary companies.

Table 8.2
Technology Trade by Business Enterprises [1)]

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
2005	2,028.3	14.6	703.7	24.0	2.88
2009	2,015.3	-9.4	534.9	-10.9	3.77
2010	2,436.6	20.9	530.1	-0.9	4.60
2011	2,385.2	-2.1	414.8	-21.8	5.75

1) The survey coverage was expanded in FY1996 and FY2001.
Source: Statistics Bureau, MIC.

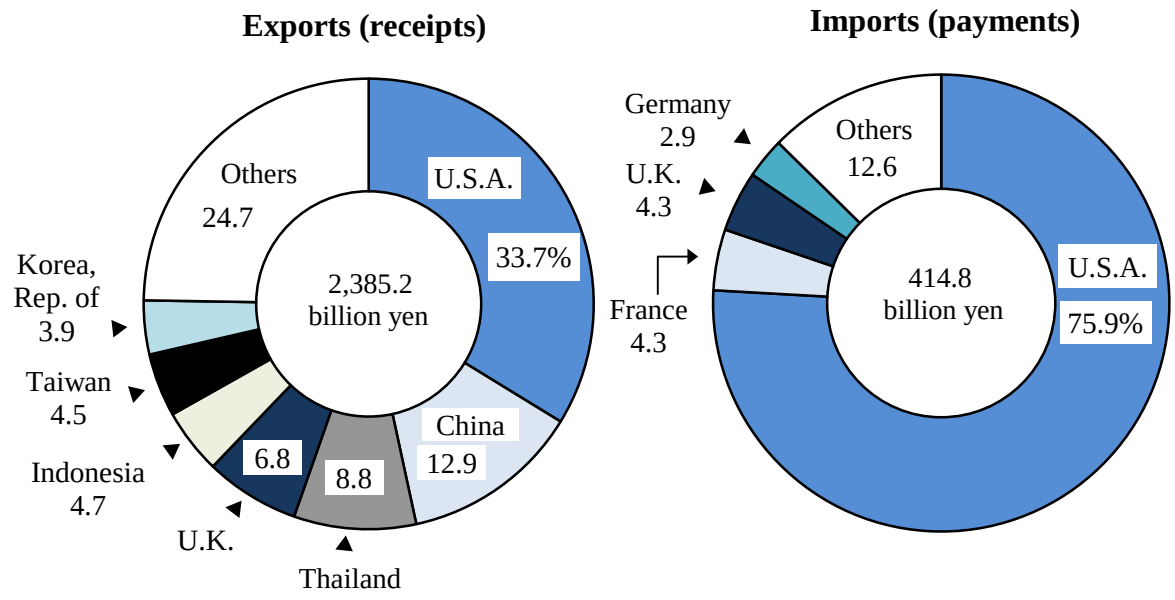
Figure 8.3
Trends in Technology Trade by Business Enterprises



Source: Statistics Bureau, MIC.

In fiscal 2011, Japan exported 2,385.2 billion yen of technologies; major destinations for export were: the U.S.A. (804.9 billion yen, or 33.7 percent of total exports), followed by China (306.7 billion yen), Thailand (209.3 billion yen), and the U.K. (162.2 billion yen). On the other hand, Japan imported 414.8 billion yen of technologies, mainly from the U.S.A. (314.8 billion yen, or 75.9 percent of total imports), followed by France (17.9 billion yen), the U.K. (17.8 billion yen), and Germany (11.9 billion yen).

Figure 8.4
Composition of Technology Trade by Major Country/Region
(FY2011)



Source: Statistics Bureau, MIC.

2. Patents

The total number of patent applications remained robust in and after 1998 as more than 400,000 applications were submitted every year, but a gradual drop has been seen since 2006. In 2011, there were 342,610 applications (down 0.6 percent from the previous year).

Table 8.3
Patents

(Cases)

Item	1995	2000	2005	2010	2011
Applications	369,215	436,865	427,078	344,598	342,610
Registrations	109,100	125,880	122,944	222,693	238,323
Existing vested rights	681,459	1,040,607	1,123,055	1,423,432	1,542,096

Source: Japan Patent Office.

Table 8.4
PCT International Applications by Country of Origin

(Cases)

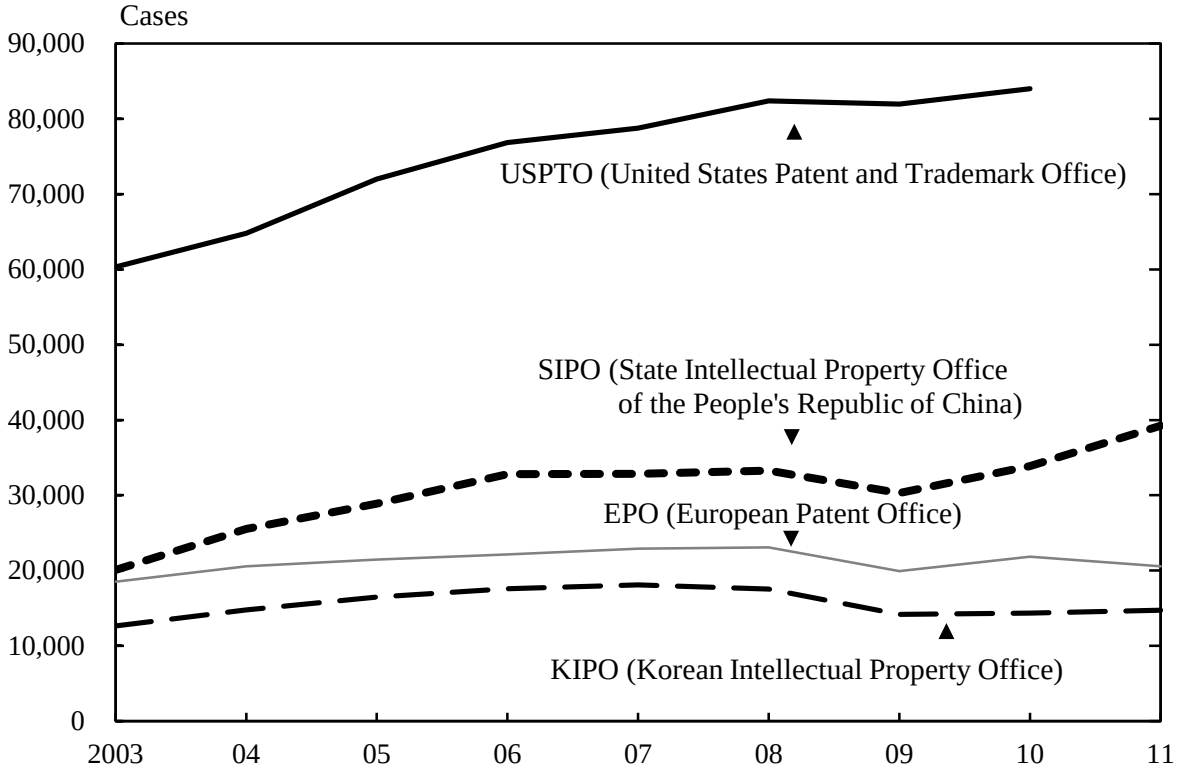
Country	2008	2009	2010	2011	2012	Annual growth (%)
Total	163,240	155,406	164,338	182,411	194,926	6.9
U.S.A.	51,643	45,628	45,029	49,092	51,429	4.8
Japan	28,760	29,802	32,150	38,875	43,659	12.3
Germany	18,855	16,797	17,568	18,851	18,758	-0.5
China	6,120	7,900	12,296	16,402	18,614	13.5
Korea, Rep. of	7,899	8,035	9,669	10,447	11,846	13.4
France	7,072	7,237	7,246	7,438	7,847	5.5
U.K.	5,467	5,044	4,891	4,848	4,893	0.9
Switzerland	3,799	3,672	3,728	4,009	4,189	4.5
Netherlands	4,363	4,462	4,063	3,503	4,070	16.2
Sweden	4,136	3,568	3,314	3,462	3,587	3.6

Source: World Intellectual Property Organization.

Over 140 countries, including Japan, have joined the international patent system of the World Intellectual Property Organization (WIPO) as of July 2012. In 2012, the number of international patent applications made based on the Patent Cooperation Treaty (PCT) was 194,926, of which Japan filed 43,659, an increase of 12.3 percent over the previous year.

The United States Patent and Trademark Office (USPTO) ranked first among major patent offices with which Japanese filed patent applications in 2010, with 84,017 filings. The number of Japanese-filed patent applications at the State Intellectual Property Office of the People's Republic of China (SIPO) has been steadily on a rising trend since the comparable year 2002. It reached 39,231 in 2011, approximately 2.5 times more than the 2002 figure of 15,511.

Figure 8.5
Changes in the Number of Patent Applications Filed with Major Offices by Japanese Applicants



Source: Japan Patent Office.

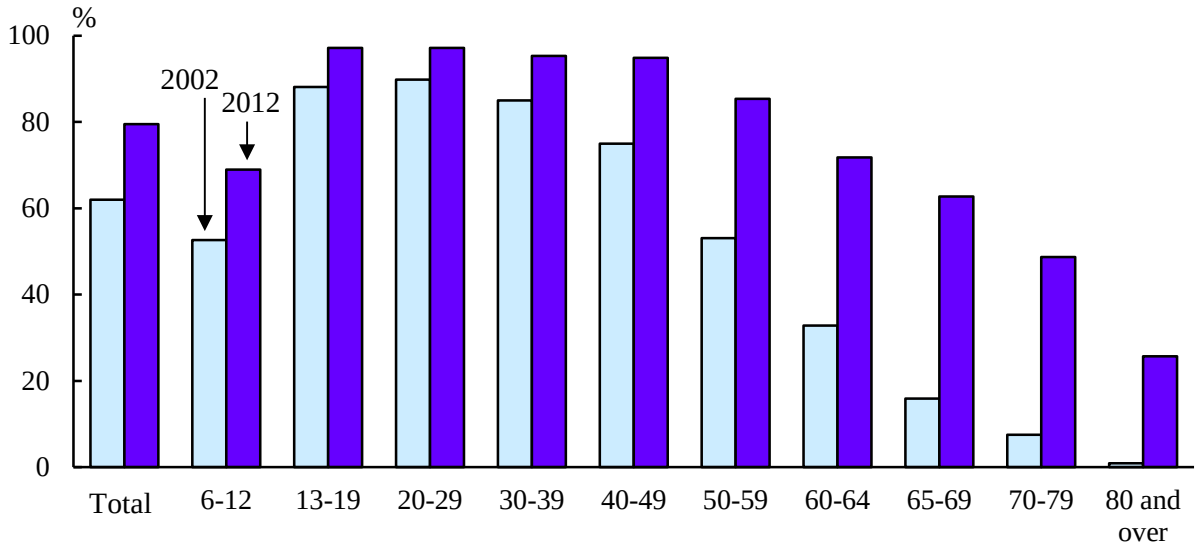
3. Information and Communication

(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 2012, 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, smartphones, tablet terminals and game machines) totaled 96.52 million, or 79.5 percent of the population aged 6 years and over. An observation by age group showed that the individual Internet usage rate exceeded 90 percent in people in each age group of between 13 and 49, although the rate dropped as the age went up.

Looking at the status of Internet use by terminal as of the end of 2012, the usage rate of home PCs was the highest (59.5 percent), followed by cell phones (42.8 percent), PCs outside the home (34.1 percent), and smartphones (31.4 percent). Figures for the rate of Internet use by terminal by age group show that approximately 80 percent of people in each age group of between 13 and 49 use home PCs. In the 13–29 age groups, usage of smartphones surpassed that of cell phones.

Figure 8.6
Trends in Internet Usage Rate by Age Group 1)



1) Ages 6 years and over.
Source: Ministry of Internal Affairs and Communications.

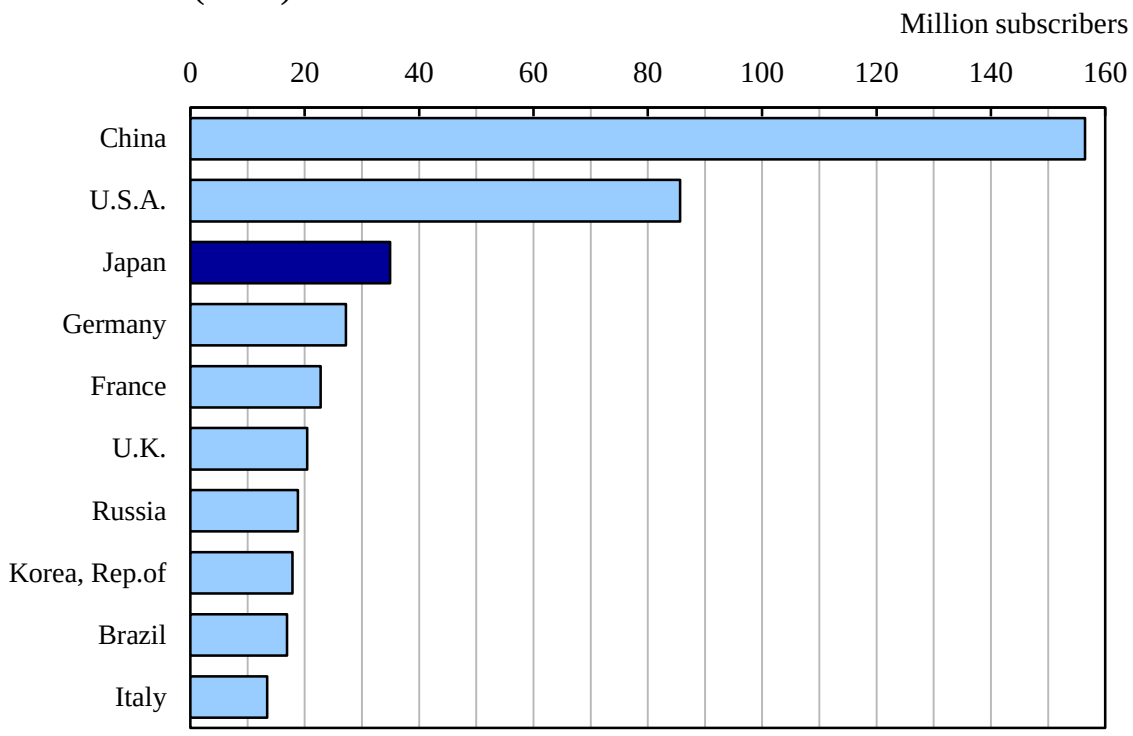
Among enterprises, the Internet usage rate at the end of 2012 was 99.9 percent (up 0.6 percentage points from the previous year). Trends in the Internet usage rate remained flat, at around 99 percent, showing that Internet usage at businesses is fully diffused.

(2) Progress of Communication Technologies

As of the end of March 2012, the contracts of broadband (connection) service subscriptions totaled 37.23 million, marking a 6.6-percent annual increase. Among broadband subscribers, the number of DSL (digital subscriber line) subscribers reached 6.70 million, accounting for 18.0 percent of the total.

In 2011, the number of broadband subscribers in Japan, as an indication of the spread of its use, was 34.92 million, the third largest after China (156.49 million) and the U.S.A. (85.63 million).

Figure 8.7
International Comparison of the Number of Broadband Subscribers (2011)



Source: International Telecommunication Union.

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 2013, the total number of IP phone subscribers was 31.27 million.

Subscribers for Internet connection service using cable television networks (cable Internet) as of the end of March 2012 totaled 5.91 million (up 4.2 percent from the previous year).

FTTH (fiber to the home) service, using optical fiber, is a service that uses an ultra-high speed network capable of communicating faster than a DSL or cable Internet connection. As of the end of March 2012, the number of FTTH (connection) subscribers was 22.30 million, marking a 10.3-percent increase over the past year. The number of DSL subscribers is decreasing, while that of FTTH is increasing. In recent years, the number of BWA (broadband wireless access) service (access services connecting to networks via broadband wireless access systems using the 2.5GHz band [WiMAX, etc.]) subscribers is rapidly increasing, although the share of total is small.

(3) Telephone

The number of fixed phone subscription contracts was 28.47 million (down 9.1 percent year-on-year) at the end of March 2013. In contrast, the total number of IP phone subscribers continues on an upward trend. Meanwhile, the number of mobile phone subscribers (cell phones and personal handyphone systems) totaled 132.76 million at the end of March 2012, marking a rise by 6.3 percent year-on-year to 141.12 million at the end of March 2013.

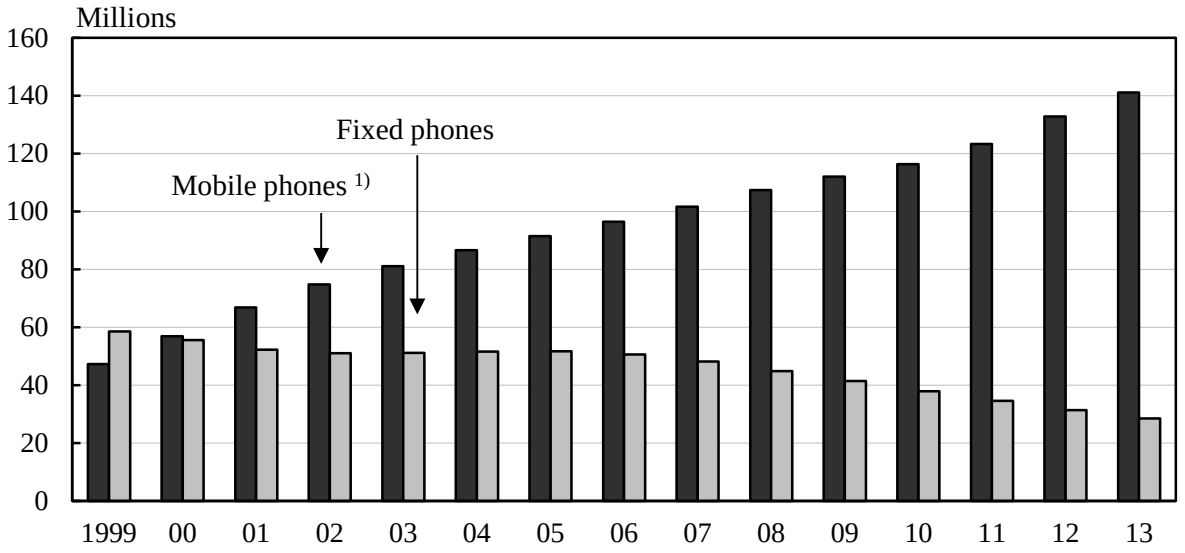
Table 8.5
Telecommunications Services [1)]

(Thousands)

Item	1995	2000	2005	2010	2011	2012
Public phones (NTT [2)] only) ...	801	736	442	283	253	231
Fixed phone service subscribers	59,936	55,547	51,626	37,918	34,539	31,319
Mobile phone subscribers [3)]	4,331	56,846	91,474	116,295	123,287	132,761
ISDN (Integrated Services Digital Network) subscribers ..	344	6,683	7,981	5,421	5,029	4,634
DSL (Digital Subscriber Line) subscribers	-	0	13,676	9,735	8,201	6,705
Cable Internet subscribers	-	216	2,961	5,314	5,674	5,910
FTTH (Fiber to the home) subscribers	-	-	2,890	17,802	20,218	22,303
International phone calls, sent and received	599,400	801,200	# 1,103,700	1,101,600	1,085,800	992,900

1) End of March. 2) Nippon Telegraph and Telephone Corporation. 3) Subscribers of cell phones, car phones and PHS (personal handyphone system).
Source: Ministry of Internal Affairs and Communications.

Figure 8.8
Telephone Service Subscribers



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

(4) Postal Service

As of the end of March 2012, there were, nationwide, 24,514 post offices and 185,409 mailboxes.

Japan Post Co., Ltd. handled 21.84 billion pieces of domestic mail (letters and parcels) in fiscal 2012 (a 0.1-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 2012 amounted to 47.9 million pieces (a decrease of 3.2 percent from the previous fiscal year), representing an enormous decrease from that of fiscal 1992 (131.6 million).

Table 8.6
Postal Services

(Millions)

Item	FY1995	FY2000	FY2005	FY2010	FY2011	FY2012
Domestic						
Letters	24,262.9	26,114.4	22,666.1	19,299.6	18,598.0	18,351.7
Parcels	400.2	310.5	2,075.0	2,968.4	3,255.4	3,483.5
International						
Sent	122.8	106.0	77.5	54.2	49.5	47.9
Letters [1]	119.9	104.3	76.1	52.8	48.2	46.6
Parcels	2.9	1.7	1.5	1.4	1.3	1.3

1) Including express mail services (EMS).
Source: Japan Post Co., Ltd.

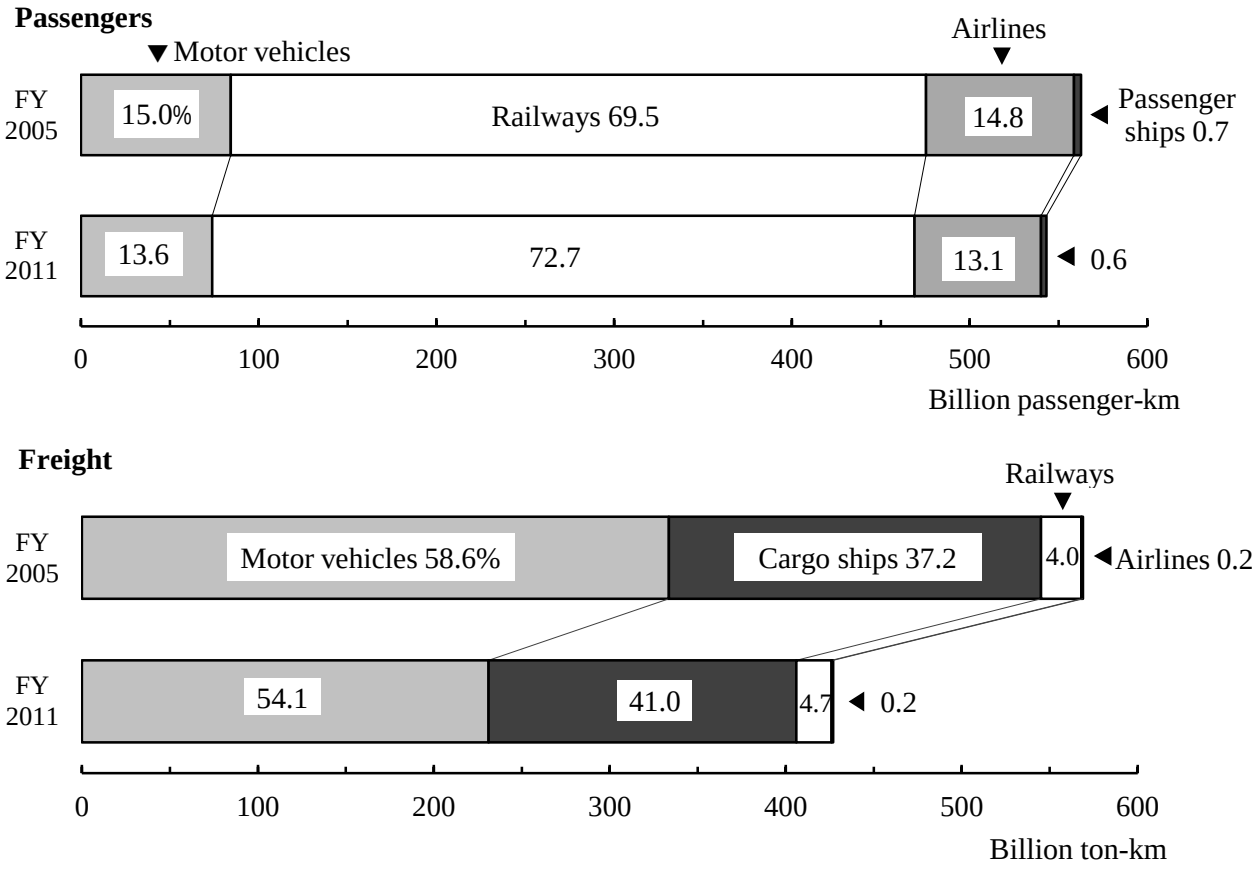
Chapter 9

Transport

1. Domestic Transport

Various modes of domestic transport are used in Japan; almost all passenger transport is by railway, while nearly all freight transport is by motor vehicle and cargo ship. The transport sector, which released 20 percent of the total CO_2 emissions in fiscal 2011, is improving the energy efficiency of cars, promoting the broader use of environmentally-friendly cars, and in an effort to further reduce emissions, the Government works to promote the development and commercialization of next-generation large vehicles and the dissemination of "eco driving."

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. Under these circumstances, a shift from private automobiles to public transportation should be promoted as a measure against global warming. Therefore, in addition to promotion of computerization such as adoption of IC cards (multiple-use IC [integrated circuit] cards) and increased convenience in public transportation through the improvement of transfers, workplace "eco-commuting" measures have been promoted along with cooperation on regional eco-commuting measures to develop greener commuter traffic.

In fiscal 2011, the number of domestic transport passengers was 28.87 billion (down 0.7 percent from the previous fiscal year). The total volume of passenger transport was 543.2 billion passenger-kilometers (down 0.9 percent).

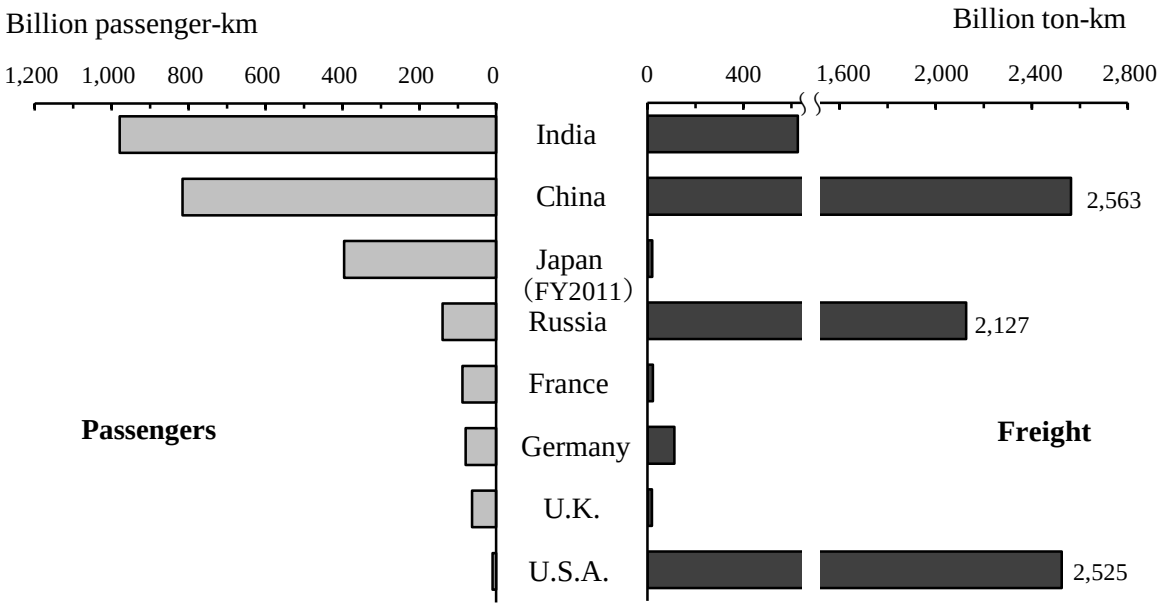
Table 9.1
Domestic Passenger Transport [1)]

Item	Passengers carried (thousands)		Passenger kilometers (millions)	
	FY2010	FY2011	FY2010	FY2011
Total transport volume	29,077,664	28,868,961	547,898	543,195
Railways	22,669,011	22,632,357	393,466	395,067
JR (Japan Railways)	8,818,311	8,837,406	244,593	246,937
Other than JR	13,850,700	13,794,951	148,873	148,130
Motor vehicles	6,241,395	6,073,486	77,677	73,916
Buses (Commercial use)	4,458,229	4,413,757	69,955	66,696
Taxis and limousine hires	1,783,166	1,659,729	7,723	7,221
Airlines	82,211	79,052	73,751	71,165
Passenger ships	85,047	84,066	3,004	3,047

1) Excluding March and April 2011 data of the Hokkaido District Transport Bureau and the Tohoku District Transport Bureau.
Source: Ministry of Land, Infrastructure, Transport and Tourism.

In fiscal 2011, the Japan Railways (JR) group reported 8.84 billion passengers (up 0.2 percent from the previous fiscal year) and 246.94 billion passenger-kilometers (up 1.0 percent). Railways other than JR reported 13.79 billion passengers (down 0.4 percent) and 148.13 billion passenger-kilometers (down 0.5 percent).

Figure 9.2
Rail Transport by Country (2011)



Source: Ministry of Land, Infrastructure, Transport and Tourism; The World Bank.

Commercial buses transported 4.41 billion passengers (down 1.0 percent from the previous fiscal year) and achieved 66.70 billion passenger-kilometers (down 4.7 percent); both figures decreased in fiscal 2011. In order to encourage the use of buses, various efforts to improve their convenience have been promoted.

Taxi and limousine hire services have marked a long-term downward trend in passengers. They carried 1.66 billion passengers (down 6.9 percent from the previous fiscal year) and reported 7.22 billion passenger-kilometers (down 6.5 percent).

Table 9.2
Number of Motor Vehicles Owned

Type of vehicles	FY1995	FY2000	FY2005	FY2010	FY2012
Trucks and trailers	20,235,051	18,064,744	16,707,445	15,137,641	14,851,666
Buses	242,907	235,550	231,696	226,839	226,047
Passenger cars	45,068,530	52,449,354	57,097,670	58,139,471	59,357,223
Special purpose vehicles	1,524,405	1,754,311	1,618,698	1,646,018	1,654,739
Two-wheeled vehicles [1)]	3,035,643	3,021,014	3,336,551	3,510,804	3,535,528

1) Two-wheeled vehicles with engine displacement of more than 125cc.
Source: Ministry of Land, Infrastructure, Transport and Tourism.

Fiscal 2011 air transport records show that there were 79 million passengers (down 3.8 percent from the previous fiscal year), and passenger-kilometers amounted to 71.17 billion (down 3.5 percent).

In fiscal 2011, passenger ships reported 84 million passengers (down 1.2 percent from the previous fiscal year) and 3.05 billion passenger-kilometers (up 1.4 percent).

(2) Domestic Freight Transport

In the area of domestic freight, a total of 4.90 billion metric tons (up 0.1 percent from the previous fiscal year) of freight was transported for a total of 426.95 billion ton-kilometers (down 3.9 percent) in fiscal 2011.

As for transport tonnage volume in fiscal 2011, motor vehicle transport accounted for more than 90 percent of the total.

Table 9.3
Domestic Freight Transport

Item	Freight tonnage (thousands)		Ton kilometers (millions)	
	FY2010	FY2011	FY2010	FY2011
Total transport volume	4,891,580	4,898,783	444,478	426,951
Railways	43,647	39,886	20,398	19,998
Motor vehicles	4,480,195	4,496,954	243,150	231,061
Commercial use	3,069,416	3,153,051	213,288	202,441
Non-commercial use	1,410,779	1,343,904	29,862	28,620
Cargo ships	366,734	360,983	179,898	174,900
Airlines [1)]	1,004	960	1,032	992

1) Including overweight baggage and postal mail.
Source: Ministry of Land, Infrastructure, Transport and Tourism.

2. International Transport

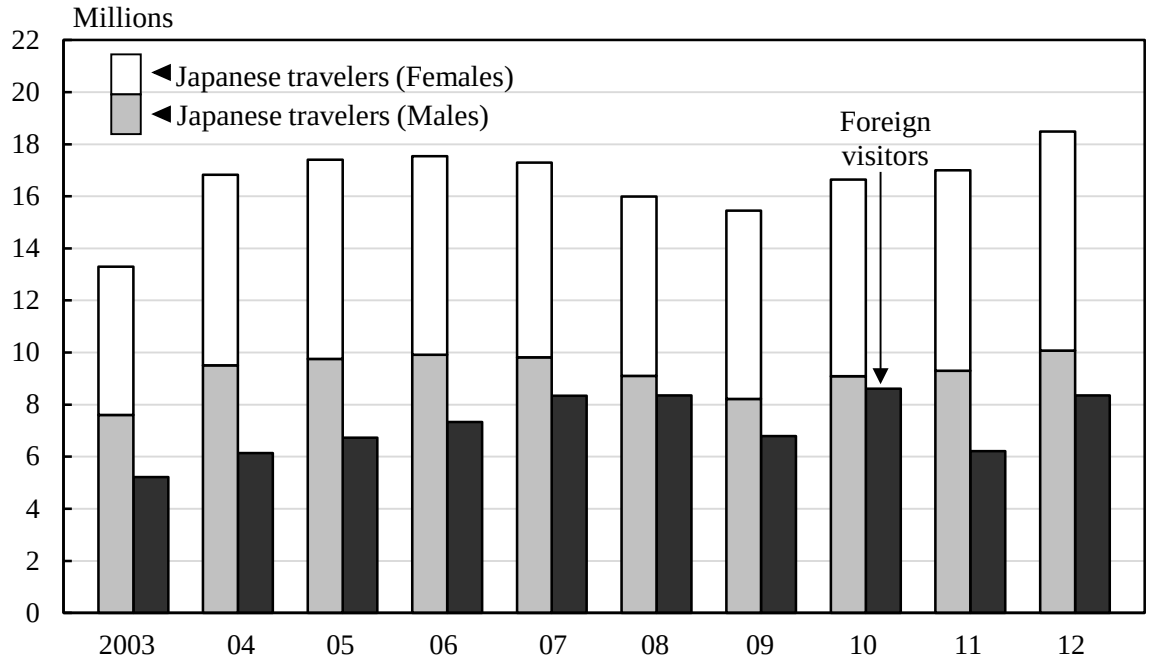
(1) International Passenger Transport

The global economic downturns after September 2008, the spread of new influenza in early 2009, and the influence of the Great East Japan Earthquake decreased international air passenger transport with Japanese airlines. In 2012, however, they transported 14.00 million passengers (up 15.1 percent from the previous year) on international flights, and registered 61.36 billion passenger-kilometers (up 15.7 percent). It was the first upturn in the five years since 2008.

The number of Japanese overseas travelers in 2012 rose from the previous year to 18.49 million (up 8.8 percent). It was the third consecutive year with an increase, and the highest number ever.

According to reports on arrivals by tourist offices in countries around the world, China, Republic of Korea and the U.S.A. had many Japanese visitors in 2011.

Figure 9.3
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	2010		2011		2012	
	Number of arrivals	Annual growth (%)	Number of arrivals	Annual growth (%)	Number of arrivals	Annual growth (%)
China	3,731,200	12.5	3,658,200	-2.0	3,518,200	-3.8
Korea, Rep. of	3,023,009	-1.0	3,289,051	8.8	3,518,792	7.0
U.S.A. [1]	3,386,076	16.0	3,249,569	-4.0	…	…
Taiwan	1,080,153	7.9	1,294,758	19.9	1,432,315	10.6
Hong Kong SAR	1,316,618	9.3	1,283,687	-2.5	1,254,602	-2.3
Thailand	993,674	-1.1	1,127,893	13.5	1,371,253	21.6
Germany [2]	605,231	12.5	642,542	6.2	…	…
France	595,977	-14.5	621,541	4.3	…	…

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

The number of foreign visitors to Japan was 8.36 million in 2012 (up 34.4 percent from the previous year). Broken down by country/region, the number of visitors from Asian countries was highest, totaling 6.39 million persons (up 35.2 percent from the previous year). Among Asian countries, the number of visitors from Republic of Korea was highest, amounting to 2.04 million, a figure that accounted for 24.4 percent of the total number of foreign visitors to Japan.

Table 9.5
Foreign Visitors

Country or area of origin	2010		2011		2012	
	Number of arrivals	Percent distribution	Number of arrivals	Percent distribution	Number of arrivals	Percent distribution
Total arrivals	8,611,175	100.0	6,218,752	100.0	8,358,105	100.0
Korea, Rep. of	2,439,816	28.3	1,658,073	26.7	2,042,775	24.4
China	1,412,875	16.4	1,043,246	16.8	1,425,100	17.1
Taiwan	1,268,278	14.7	993,974	16.0	1,465,753	17.5
U.S.A.	727,234	8.4	565,887	9.1	716,709	8.6
Hong Kong SAR ..	508,691	5.9	364,865	5.9	481,665	5.8
Australia	225,751	2.6	162,578	2.6	206,404	2.5
Thailand	214,881	2.5	144,969	2.3	260,640	3.1
U.K.	184,045	2.1	140,099	2.3	173,994	2.1
Singapore	180,960	2.1	111,354	1.8	142,201	1.7
Canada	153,303	1.8	101,299	1.6	135,355	1.6

Source: Japan National Tourism Organization.

In 2012, of the total number of foreign visitors to Japan, tourists numbered 6.04 million persons, or 72.3 percent of total foreign visitors. The highest number of tourists came from Republic of Korea with 1.57 million travelers, followed by Taiwan with 1.33 million travelers.

(2) International Freight Transport

The volume of seaborne foreign transport in 2012 was 973.9 million tons, up 0.7 percent over the previous year. Of this figure, total exports decreased by 19.2 percent to 41.9 million tons, and total imports decreased by 2.6 percent to 521.8 million tons.

Table 9.6
Seaborne Foreign Transport

(Thousand tons)

Year	Total	Exports	Imports	Cross Transport
1995	703,606	38,761	529,929	134,916
2000	739,377	34,960	538,875	165,542
2005	777,869	45,403	529,239	203,225
2010	819,075	44,758	465,898	308,419
2011	966,697	51,863	535,977	378,857
2012	973,892	41,898	521,848	410,146

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

Air-shipped international freight in 2012 totaled 1.14 million tons in terms of volume (up 7.8 percent from the previous year) and 6.10 billion tons in terms of ton-kilometers (up 8.3 percent).

Chapter 10

Commerce

1. Wholesale and Retail

The 2009 Economic Census for Business Frame showed that 1.56 million wholesale and retail establishments were in operation in Japan. The number of persons engaged became 12.70 million.

(1) Wholesale Trade

The number of wholesale establishments was 402,000 in 2009. Observed by size of operation in terms of persons engaged, establishments with less than 20 persons accounted for 89.3 percent of the total. A total of 86.6 percent were corporations, while 13.3 percent were individual proprietorships.

The number of persons engaged in wholesale was 4.13 million in 2009, of which there were 804,000 part-timers and temporary employees, 19.5 percent of the total.

Table 10.1
Establishments and Persons Engaged in the Wholesale and Retail Sector (2009)

Item	Total	Wholesale	Retail
Number of Establishments	1,555,486	402,314	1,153,172
Size of operation (persons engaged)			
1-4 persons	933,975	196,947	737,028
5-9	318,436	103,750	214,686
10-19	178,944	58,551	120,393
20-29	56,140	18,361	37,779
30-49	33,563	12,803	20,760
50-99	20,363	7,044	13,319
100 and over	9,692	3,343	6,349
Dispatched employees only	4,373	1,515	2,858
Persons engaged	12,696,990	4,125,249	8,571,741
Regular employees	10,223,518	3,479,864	6,743,654
Full-timers	5,543,778	2,801,689	2,742,089
Part-timers	4,679,740	678,175	4,001,565
Temporary employees	635,443	126,039	509,404
Dispatched employees from the separately operated establishments	253,858	113,511	140,347
Dispatched employees to the separately operated establishments	139,379	90,917	48,462

Source: Statistics Bureau, MIC.

(2) Retail Trade

The number of retail establishments in operation totaled 1.15 million in 2009. Observed by size of operation in terms of persons engaged, establishments with less than 10 persons accounted for 82.5 percent of the total. By type of legal organization, 53.1 percent of retail establishments were corporations, while 46.7 percent were individual proprietorships. The proportion of individual proprietorships was higher in the retail sector than in the wholesale sector.

The number of persons engaged in retail was 8.57 million in 2009, of which 4.51 million part-timers and temporary employees comprised 52.6 percent of the total.

2. Eating and Drinking Places

There were 673,000 eating and drinking places establishments in operation and 4.42 million persons engaged in 2009.

Table 10.2
Eating and Drinking Places (2009)

Size of operation (persons engaged)	Establishments		Persons engaged	
	Number	Ratio (%)	Number	Ratio (%)
Total	673,458	100.0	4,421,927	100.0
1-4 persons	427,123	63.4	928,025	21.0
5-9	127,430	18.9	824,137	18.6
10-19	68,950	10.2	935,474	21.2
20-29	27,467	4.1	651,803	14.7
30 and over	22,024	3.3	1,082,488	24.5
Dispatched employees only	464	0.1	-	-

Source: Statistics Bureau, MIC.

Chapter 11

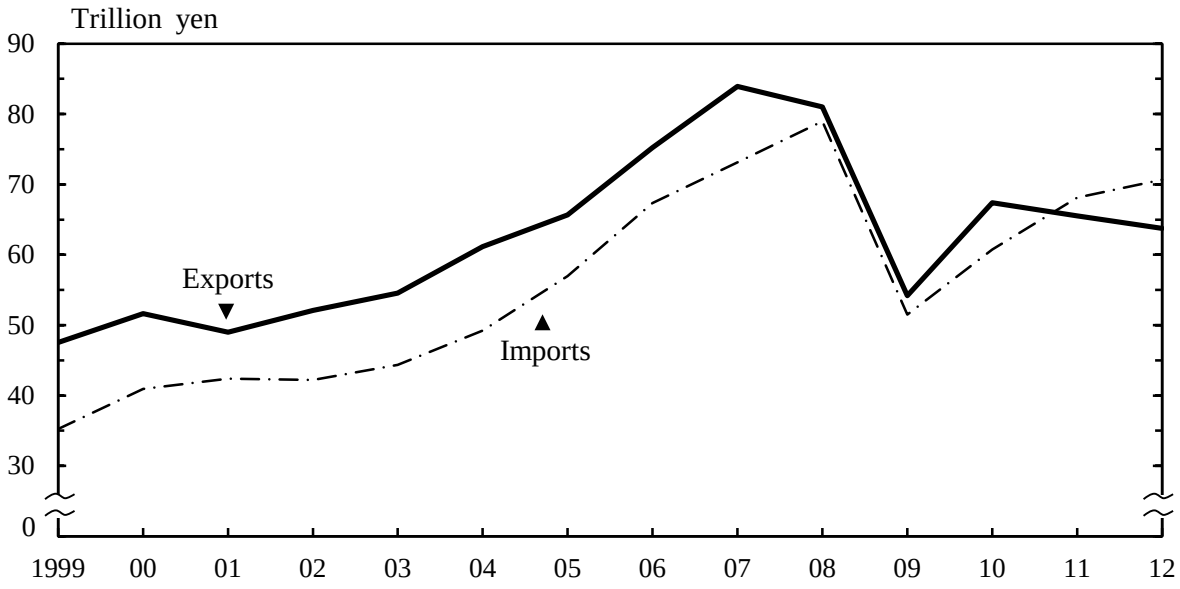
Trade, International Balance of Payments, and International Cooperation

1. Trade

(1) Overview of Trade

Although Japan's trade surplus has continued since 1981, the trade turned to a deficit in 2011 for the first time in 31 years. This trade trend is considered to be affected by the Great East Japan Earthquake, rapid appreciation of the yen, and the slowdown in global economy. In terms of Japan's international trade on a customs clearance basis in 2012, exports (in FOB value) was 63.7 trillion yen, down 2.7 percent from the previous year. This was a decrease for the second consecutive year. Imports (in CIF value) grew by 3.8 percent to 70.7 trillion yen, an increase for the third consecutive year. Consequently, Japan's trade deficit was 6.9 trillion yen. The deficit expanded from 2.6 trillion yen in 2011.

Figure 11.1
Foreign Trade



Source: Ministry of Finance.

Table 11.1
Trends in Foreign Trade and Indices of Trade

Year	Value (billion yen) (Customs clearance basis)			Indices of trade (2005=100)					
				Exports			Imports		
	Exports (FOB)	Imports (CIF)	Balance	Value index	Quantum index 1)	Unit value index	Value index	Quantum index 1)	Unit value index
2003	54,548	44,362	10,186	83.1	89.6	92.7	77.9	90.8	85.8
2004	61,170	49,217	11,953	93.2	99.2	93.9	86.4	97.2	88.9
2005	65,657	56,949	8,707	100.0	100.0	100.0	100.0	100.0	100.0
2006	75,246	67,344	7,902	114.6	107.7	106.4	118.3	103.8	113.9
2007	83,931	73,136	10,796	127.8	112.9	113.2	128.4	103.7	123.9
2008	81,018	78,955	2,063	123.4	111.2	111.0	138.6	103.0	134.6
2009	54,171	51,499	2,671	82.5	81.6	101.1	90.4	88.2	102.5
2010	67,400	60,765	6,635	102.7	101.4	101.3	106.7	100.5	106.2
2011	65,546	68,111	-2,565	99.8	98.4	101.5	119.6	103.7	115.4
2012	63,748	70,689	-6,941	97.1	93.9	103.4	124.1	105.9	117.2

1) Quantum index = Value index / Unit value index × 100
Source: Ministry of Finance.

Japan's 2012 exports increased by 1.9 percent from the previous year in terms of unit value index (an increase for the third consecutive year), and decreased by 4.6 percent from the previous year in terms of quantum index (a decrease next to the preceding year).

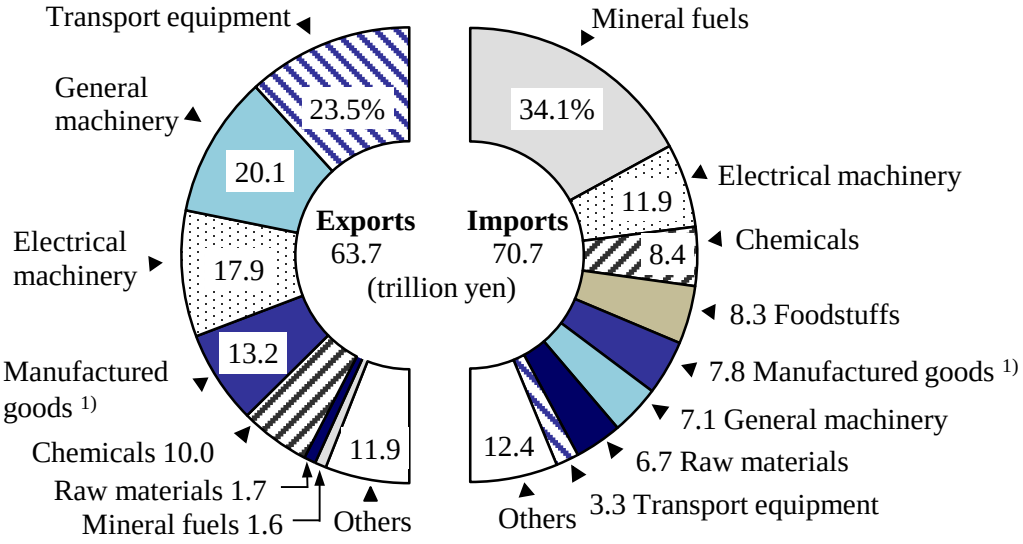
Japan's imports in 2012, unit value index and quantum index, increased by 1.6 percent and 2.1 percent compared to the previous year; both indices recorded their third consecutive year of increase.

(2) Trade by Commodity

Japan's exports in 2012 consisted of transport equipment, which accounted for the largest portion of the total export value, 23.5 percent, followed by general machinery and electrical machinery, making up 20.1 percent and 17.9 percent, respectively. Motor vehicles, which are in the transport equipment category, constituted 14.5 percent of the total export value, up 9.0 percent in quantity and 12.4 percent in value from the previous year. One characteristic of Japan's exports is the large proportion of high value-added products manufactured with advanced technology, such as motor vehicles, iron and steel and integrated circuits.

The leading import item category was mineral fuels, which represented 34.1 percent of the total value imported, followed by electrical machinery and chemicals, with 11.9 percent and 8.4 percent, respectively. Crude petroleum and partially refined petroleum, in the mineral fuels category, constituted 17.3 percent of the total import value, up 2.0 percent in quantity and 7.3 percent in value from the previous year. In recent years, the ratio of product imports has been rising 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 (2012)



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

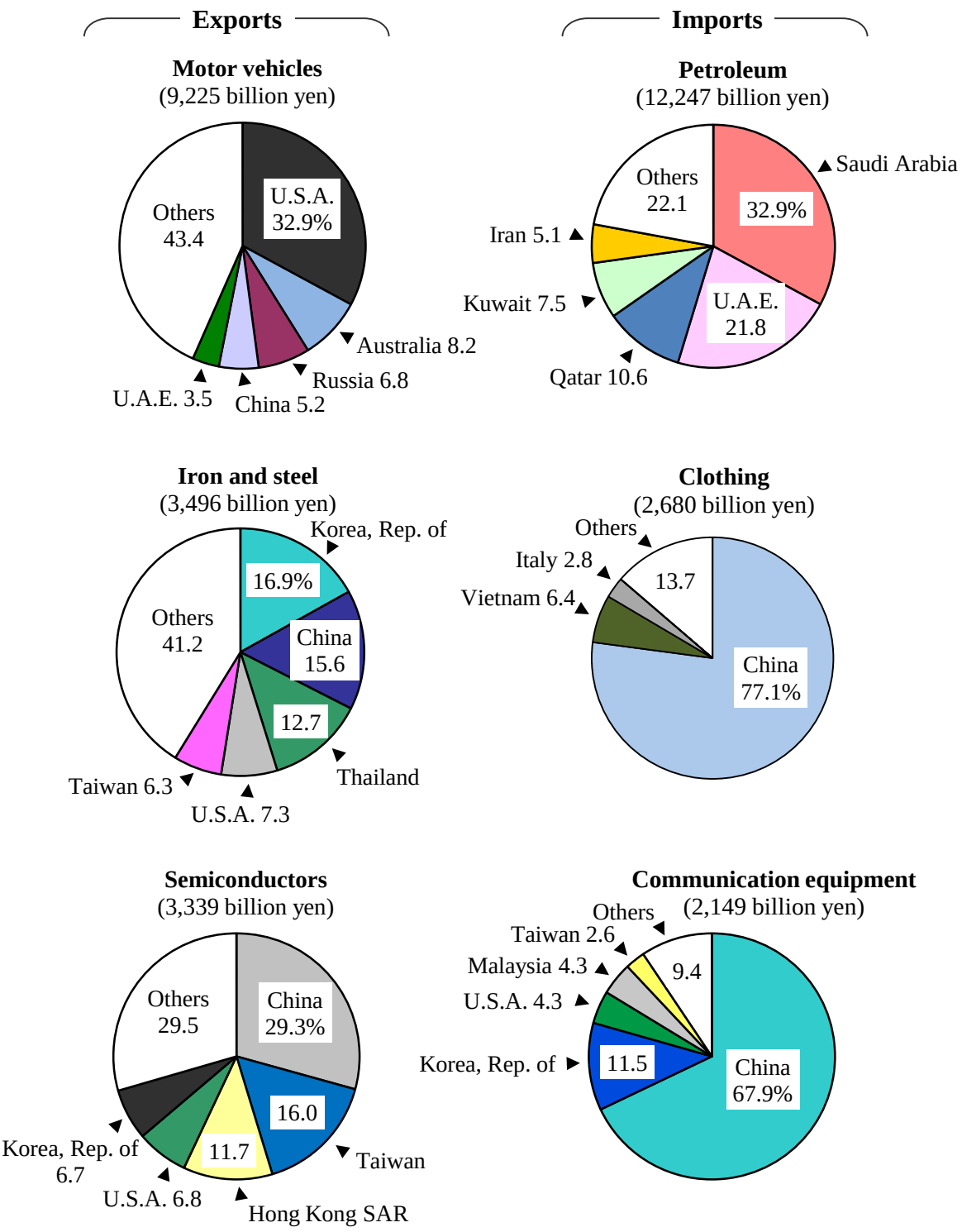
Table 11.2
Value of Exports and Imports, by Principal Commodity

(Billion yen)

Item	2009	2010	2011	2012	Annual growth (%)
Exports, total	54,171	67,400	65,546	63,748	-2.7
Foodstuffs	366	406	359	355	-1.0
Raw materials	826	946	972	1,060	9.1
Mineral fuels	948	1,105	1,247	1,026	-17.8
Chemicals	5,780	6,925	6,798	6,365	-6.4
Plastics	1,844	2,336	2,188	2,043	-6.6
Manufactured goods [1)]	7,017	8,785	8,786	8,442	-3.9
Iron and steel products	2,906	3,675	3,709	3,496	-5.8
General machinery	9,669	13,317	13,803	12,843	-7.0
Power generating machinery	1,839	2,327	2,317	2,261	-2.4
Electrical machinery	10,771	12,650	11,600	11,405	-1.7
Semiconductors and other electronic parts	3,419	4,153	3,565	3,339	-6.3
Transport equipment	11,850	15,258	14,033	14,995	6.8
Motor vehicles	6,693	9,174	8,204	9,225	12.4
Others	6,944	8,007	7,948	7,258	-8.7
Scientific and optical instruments	1,578	2,014	2,109	2,084	-1.2
Imports, total	51,499	60,765	68,111	70,689	3.8
Foodstuffs	4,999	5,199	5,854	5,852	-0.0
Fish and fish preparation	1,208	1,260	1,350	1,400	3.7
Raw materials	3,395	4,766	5,270	4,768	-9.5
Mineral fuels	14,202	17,398	21,816	24,088	10.4
Petroleum, crude and partly refined	7,564	9,406	11,415	12,247	7.3
Chemicals	4,583	5,379	6,098	5,926	-2.8
Medical and pharmaceutical products	1,329	1,523	1,725	1,941	12.5
Manufactured goods [1)]	4,345	5,379	6,069	5,508	-9.3
Non-ferrous metals	1,013	1,606	1,813	1,370	-24.4
General machinery	4,225	4,826	4,970	5,004	0.7
Electrical machinery	6,509	8,101	7,989	8,438	5.6
Communication equipment	1,007	1,253	1,576	2,149	36.3
Transport equipment	1,501	1,681	1,738	2,312	33.0
Others	7,742	8,036	8,307	8,793	5.8
Clothing and clothing accessories	2,358	2,328	2,598	2,680	3.2

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 (2012)



Source: Ministry of Finance.

(3) Trade by Country/Region

Japan has maintained a trade surplus with Asia and the U.S.A., 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	Middle East	Oceania
Exports from Japan									
2008	81,018	39,966	12,950	6,168	4,782	14,214	11,430	3,508	2,200
2009	54,171	29,338	10,236	4,410	3,399	8,733	6,749	2,013	1,409
2010	67,400	37,827	13,086	5,460	4,594	10,374	7,616	2,216	1,796
2011	65,546	36,686	12,902	5,269	4,058	10,018	7,619	1,955	1,778
2012	63,748	34,855	11,509	4,911	3,673	11,188	6,501	2,262	1,837
Imports to Japan									
2008	78,955	32,034	14,830	3,052	2,258	8,040	7,292	17,351	5,378
2009	51,499	22,989	11,436	2,051	1,711	5,512	5,518	8,640	3,542
2010	60,765	27,511	13,413	2,504	2,025	5,911	5,821	10,387	4,327
2011	68,111	30,391	14,642	3,170	1,852	5,931	6,411	12,832	4,893
2012	70,689	31,306	15,039	3,234	1,921	6,082	6,642	13,542	4,901

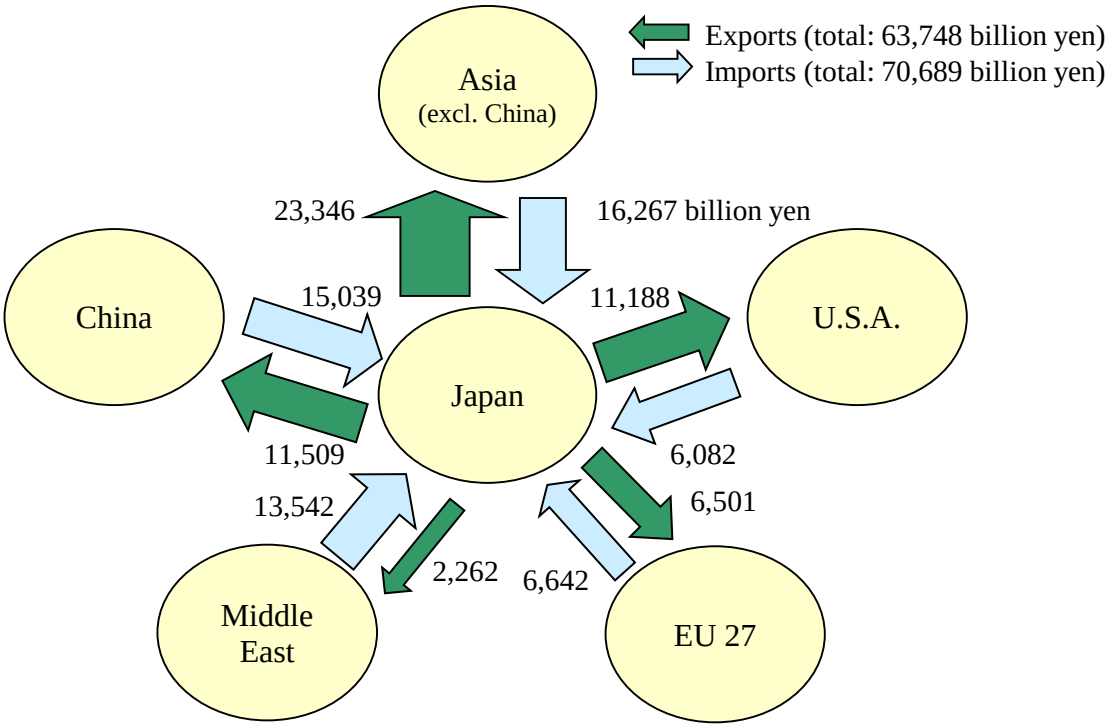
Source: Ministry of Finance.

(A) Trade with Asia

Japan's 2012 trade balance with Asia resulted in 3.5 trillion yen in surplus, a decrease for the second consecutive year (down 43.6 percent from the previous year). Exports (in FOB value) totaled 34.9 trillion yen (down 5.0 percent), marking a decrease next to the preceding year; this was mainly due to the contributions for the decrease in general machinery and manufactured goods. Imports (in CIF value) amounted to 31.3 trillion yen (up 3.0 percent), an increase for the third consecutive year; this was mainly attributed to the increase in electrical machinery and mineral fuels.

In 2012, Japan's trade with China amounted to 11.5 trillion yen in exports and 15.0 trillion yen in imports. Trade with China accounts for about 20 percent of the value of both Japan's imports and its exports. China is therefore Japan's largest trade partner.

Figure 11.4
Japan's Foreign Trade by Country/Region (2012)



Source: Ministry of Finance.

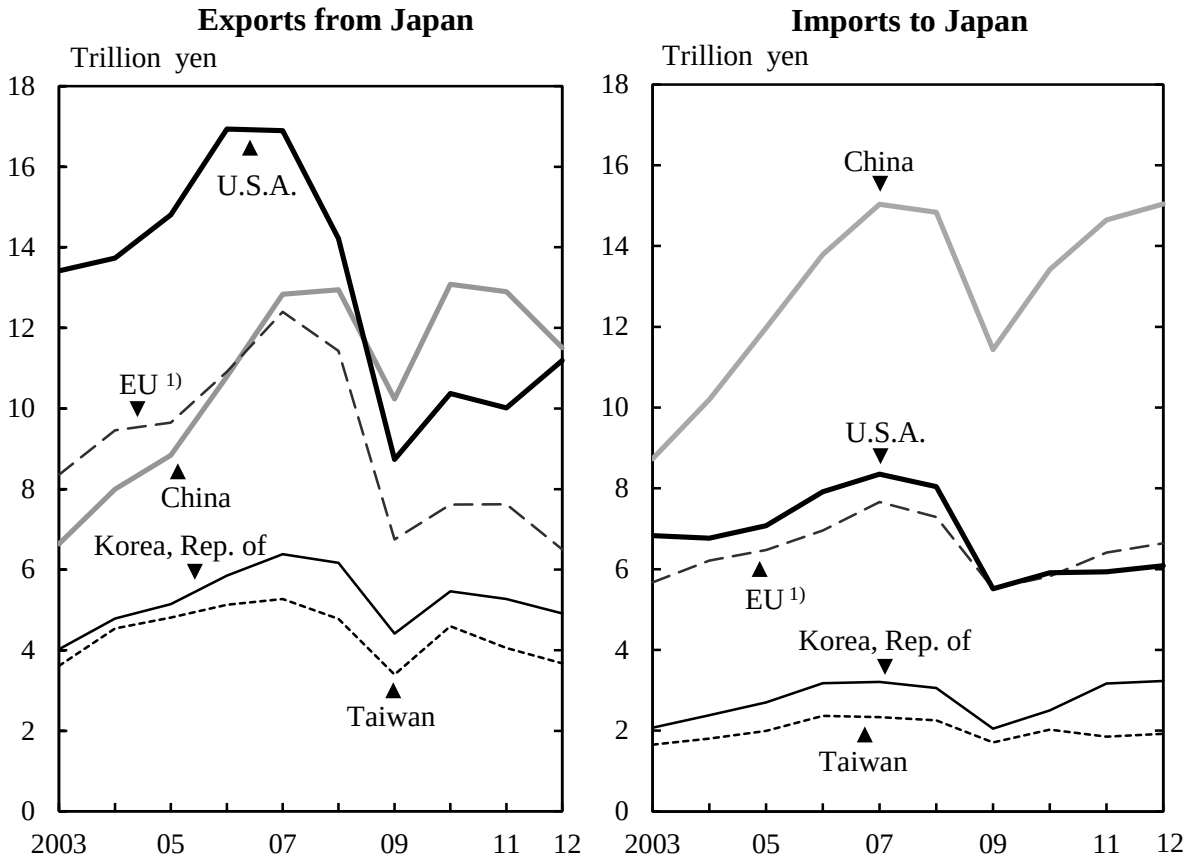
(B) Trade with U.S.A.

Japan's 2012 trade balance with the U.S.A. showed a surplus of 5.1 trillion yen. This was bigger than the previous year (up 25.0 percent). Exports (in FOB value) amounted to 11.2 trillion yen (up 11.7 percent), the first increase in two years. Transport equipment and general machinery made major contributions to the increase. Imports (in CIF value) totaled 6.1 trillion yen (up 2.5 percent), the third consecutive annual increase. The rise was due mainly to the contributions of transport equipment and mineral fuels.

(C) Trade with EU

As for trade with the EU (27 countries) in 2012, exports (in FOB value) decreased for almost all products, including general machinery and transport equipment. Exports therefore fell by 14.7 percent year-on-year, to 6.5 trillion yen. Imports (in CIF value), on the other hand, led by increases in transport equipment and chemicals, rose by 3.6 percent year-on-year, to 6.6 trillion yen. The resulting trade balance was a deficit of 141.2 billion yen. It was the first trade deficit with the EU (27 countries) since Japan began keeping the statistic in January 2007.

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



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

2. International Balance of Payments

In 2012, Japan's current account surplus dropped to 4.8 trillion yen, half that of the previous year. This was mainly because the trade deficit expanded. Breaking down the current account, in the trade balance, exports decreased, while imports, led by mineral fuels, increased. This led to a trade deficit of 5.8 trillion yen. The services balance posted a deficit of 2.5 trillion yen. The deficits grew for both the trade balance and the services balance. The income balance rose 1.7 percent year-on-year, to 14.3 trillion yen. It was the second straight year with a surplus.

On the other hand, the balance of the capital and financial account registered a deficit of 8.2 trillion yen, scoring a red ink figure (excess outflow) for the first time in two years.

Table 11.4
International Balance of Payments

(Billion yen)

Item	2009	2010	2011	2012
Current account	13,735.6	17,887.9	9,550.7	4,823.7
Goods and services	2,124.9	6,564.6	-3,378.1	-8,304.1
Trade balance	4,038.1	7,978.9	-1,616.5	-5,814.1
Exports	50,857.2	63,921.8	62,724.8	61,442.1
Imports	46,819.1	55,942.9	64,341.2	67,256.2
Services	-1,913.2	-1,414.3	-1,761.6	-2,490.0
Income	12,774.2	12,414.9	14,038.4	14,272.3
Current transfers	-1,163.5	-1,091.7	-1,109.6	-1,144.5
Capital and financial account [1)]	-14,267.8	-17,697.1	1,172.2	-8,187.8
Financial account	-13,802.5	-17,263.0	1,144.0	-8,107.4
Direct investment	-5,872.5	-5,048.7	-8,727.5	-9,640.1
Portfolio investment	-20,505.3	-13,249.3	12,925.5	-3,221.5
Financial derivatives	948.7	1,026.2	1,347.0	-590.3
Other investment	11,626.6	8.9	-4,401.0	5,344.5
Capital account	-465.3	-434.1	28.2	-80.4
Changes in reserve assets [1)]	-2,526.5	-3,792.5	-13,789.7	3,051.5
Errors and omissions	3,058.7	3,601.7	3,066.9	312.6

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 2012 amounted to 661.9 trillion yen, while its foreign liabilities (assets held in Japan by nonresidents) were 365.6 trillion yen. As a result, Japan's net foreign assets (foreign assets minus foreign liabilities) were 296.3 trillion yen.

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

(Billion yen)

Item	2008	2009	2010	2011	2012
Assets	519,179	554,826	560,215	581,509	661,902
Liabilities	293,271	286,580	304,308	316,083	365,588
Net assets	225,908	268,246	255,906	265,426	296,315

1) End of year.
Source: Ministry of Finance.

Japan's foreign reserve assets remained at around 220 billion U.S. dollars during the period from 1996 to 1998. Beginning in 1999, foreign reserve assets increased continuously. At the end of 2012, however, they began to decrease, falling to 1,268.1 billion U.S. dollars (down 2.1 year-on-year).

Table 11.6
Reserve Assets

(Million U.S. dollars)

End of year	Total	Foreign currency [1)]	Reserve position in IMF	SDRs	Gold [2)]	Other reserve assets [3)]
2008	1,030,647	1,003,300	2,659	3,033	21,281	374
2009	1,049,397	996,552	4,313	20,968	27,161	403
2010	1,096,185	1,035,817	4,608	20,626	34,695	439
2011	1,295,841	1,220,785	17,181	19,745	37,666	464
2012	1,268,125	1,193,077	13,697	19,911	40,939	501

1) Including securities in market value. 2) Market value. 3) Including Asian Bond Fund.
Source: Ministry of Finance.

The yen against the U.S. dollar was 83.19 yen in May 1995. The trend subsequently shifted to a progressively weaker yen, which eventually reached 143.79 yen in July 1998. After hovering between the 100 and 140 yen ranges for the most part, the yen began appreciating sharply in late 2008. From 2011 into 2012, the yen stayed between the higher 70 yen range and the lower 80 yen range. In January 2013, the Japanese Government announced economic policies such as monetary easing, raising market confidence and accelerating the yen's depreciation. As of the end of June 2013, the yen had reached 98.83 to the U.S. dollar.

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

Source: Bank of Japan.

3. International Cooperation

In Japan, there are diverse international cooperation donors: 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 Cooperation [1)]

(Million U.S. dollars)

Item	1995	2000	2005	2010	2011
Total value	42,295	11,423	23,259	48,213	61,828
Official flows	20,033	8,467	10,726	14,683	13,736
Official development assistance (ODA)	14,489	13,508	13,147	11,021	10,831
Bilateral official development assistance [2)]	10,419	9,768	10,406	7,337	6,592
Grants [2)]	6,298	5,678	9,195	6,943	8,216
Grants-in-aid [2)]	2,876	2,100	6,524	3,464	4,682
Technical cooperation	3,422	3,578	2,671	3,478	3,534
Loans, etc.	4,120	4,090	1,212	395	-1,624
Contributions to multilateral institutions, etc. [3)]	4,071	3,740	2,740	3,684	4,239
Other official flows (OOF)	5,544	-5,041	-2,421	3,662	2,905
Official export credits (over one year)	981	-1,239	-1,202	-1,039	-622
Direct investment finance, etc.	3,541	-3,709	-222	4,217	3,889
Concessional lending to multilateral institutions, etc.	1,021	-93	-997	485	-362
Private flows at market terms (PF)	22,046	2,725	12,278	32,837	47,594
Private export credits (over one year)	3,054	-799	-3,433	2,767	1,853
Direct investments	9,398	2,874	14,472	21,650	40,315
Bilateral investment in securities, etc.	9,543	702	1,158	7,428	5,844
Concessional lending to multilateral institutions, etc.	50	-52	81	992	-419
Grants by private voluntary agencies	216	231	255	692	497
ODA as percentage of GNI (%)	a) 0.28	0.28	0.28	0.20	* 0.18
ODA as percentage of GNI (DAC average) (%)	a) 0.27	0.22	0.33	0.32	* 0.31

1) Net disbursement at current prices. Negative figures (-) indicate that loan repayments, etc., exceeded the disbursed amount. 2) Beginning in 2010, the data include bilateral grants through multilateral institutions. 3) Starting in 2010, expenditures clearly addressing a country at the point of disbursement are considered as bilateral ODA. a) ODA as percentage of GNP (%).

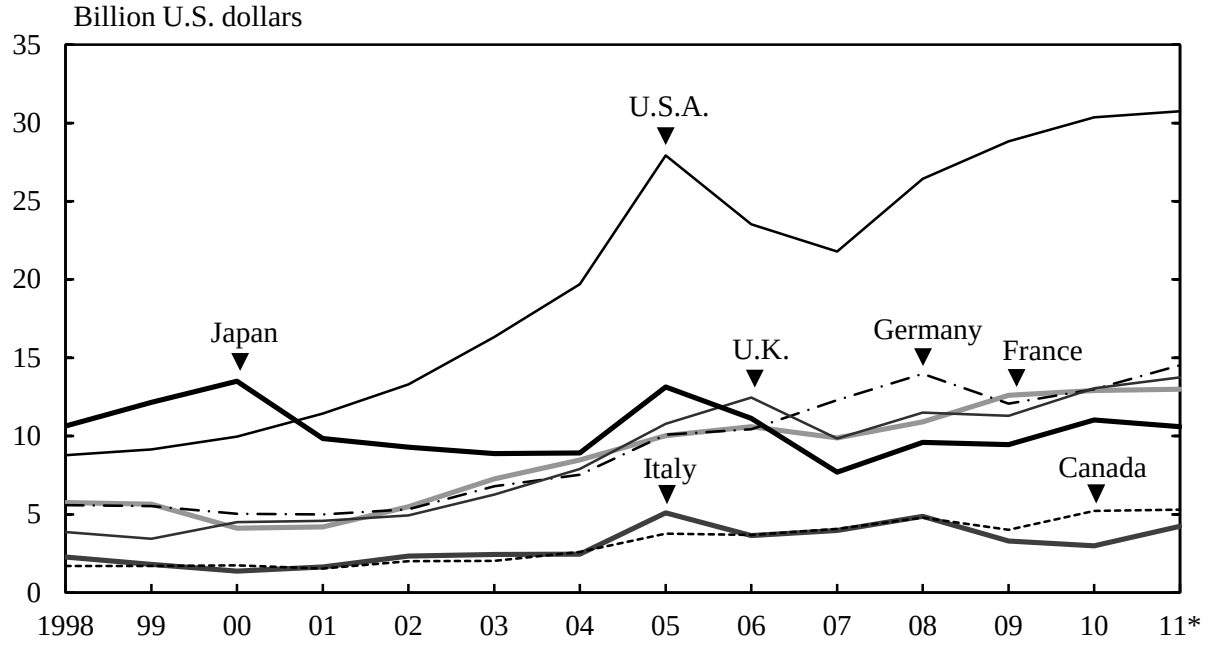
Source: Ministry of Foreign Affairs; Ministry of Finance; OECD.

In the ODA framework, Japan has contributed to the growth of developing countries as the world's number-one ODA donor for ten consecutive years up until 2000. Recently, Japan's ODA budget has been declining because of the country's severe economic and financial situation. Its 2011 ODA spending (on the basis of net disbursement at current prices) decreased by 1.7 percent over the previous year to 10.8 billion U.S. dollars.

In 2011, the 23 member countries of the Development Assistance Committee (DAC) of the OECD provided 133.5 billion U.S. dollars in ODA. Of this total, Japan's ODA contribution accounted for 7.9 percent,

making Japan the fifth-largest contributor behind the U.S.A., Germany, the U.K. and France. The ratio of Japan's ODA to Gross National Income (GNI) was 0.18 percent, or a decrease of 0.02 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 10.8 billion U.S. dollars in ODA provided by Japan in 2011, 6.6 billion U.S. dollars or 60.9 percent was bilateral ODA (down 10.2 percent year-on-year), and 4.2 billion U.S. dollars or 39.1 percent was ODA contributed through multilateral institutions (up 15.1 percent).

Bilateral ODA provided in 2011 consisted of 4.7 billion U.S. dollars in grants-in-aid, 3.5 billion U.S. dollars in technical cooperation, and -1.6 billion U.S. dollars in loans, etc. (negative value indicates a larger amount of repayment received in 2011 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: Sub-Saharan Africa, 26.6 percent; Asia, 21.1 percent; Middle East and North Africa, 14.6 percent; Latin America and the Caribbean, 5.1 percent; Europe, 2.7 percent; and Oceania, 2.4 percent.

Table 11.8

Regional Distribution of Bilateral ODA [1)]

(Million U.S. dollars)

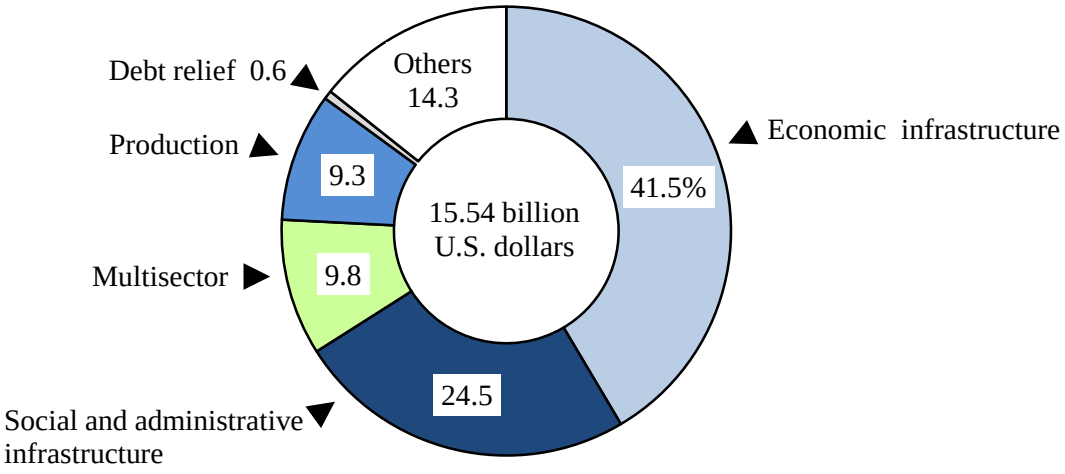
Region	1995	2000	2005	2010	2011
Total	10,557	9,640	10,464	7,428	6,511
Asia	5,745	5,284	3,841	2,528	1,371
ASEAN [2)]	2,229	# 3,126	1,968	902	-169
Middle East	721	727	3,477	…	…
Africa	1,333	970	1,139	…	…
Middle East and North Africa	…	…	…	1,592	952
Sub-Saharan Africa	…	…	…	1,733	1,734
Latin America and the Caribbean	1,142	800	409	-344	335
Oceania	160	151	94	176	159
Europe	153	118	309	181	174
Multiple regions, etc.	a) 1,303	1,592	1,194	1,562	1,785

1) Net disbursement at current prices. Including aid to Eastern European countries and graduated countries. Negative figures (-) indicate that loan repayments, etc., exceeded the disbursed amount. 2) The data in 1995: 9 countries, the data from 2000: 10 countries. a) ODA not classifiable by region.

Source: Ministry of Foreign Affairs.

Bilateral ODA in 2011 (including aid to Eastern European countries and graduated countries) was broken down by purpose (on a commitment basis) as follows: 41.5 percent for improving the economic infrastructure, followed in descending order by social and administrative infrastructure (including education, water supply and sanitation), with 24.5 percent.

Figure 11.8
Distribution of Bilateral ODA by Sector (2011) [1)]



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

In addition to the financial assistance described above, Japan has also been active in the areas of human resources development and technology transfer, both vital to the growth of a developing country, through its ODA activities.

Table 11.9
Number of Persons Involved in Technical Cooperation by Type [1)]

Type of cooperation	FY2000	FY2005	FY2009	FY2010	FY2011
Total	31,968	37,291	44,652	41,212	46,799
Trainees received	17,513	24,504	29,982	23,978	27,847
Dispatched					
Experts	3,381	3,488	6,659	8,296	9,082
Research team	9,428	6,862	5,788	7,046	8,527
Japan Overseas					
Cooperation Volunteers	1,370	1,804	1,708	1,459	1,046
Other volunteers	276	633	515	433	297

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

Chapter 12

Labor

Because of the effects of the Great East Japan Earthquake that occurred in March 2011, the data on labor in 2011 (1. Labor Force - 3. Unemployment) is supplementary estimated figures.

1. Labor Force

The labor force, defined as the sum of the employed and unemployed in population of 15 years old or more, numbered 65.55 million people in Japan in 2012, down 360,000 (0.5 percent) from the previous year.

As for trends in Japan's labor force, until the mid-1990s, both the labor force and the number of persons employed grew along with the population and the working-age population. In 1997, the working-age population began decreasing, and the labor force and the number of persons employed shifted to a downward trend. The labor force is expected to shrink in the long run as the falling birth rate and the aging population change the population composition.

The 2012 labor force participation rate (rate of the labor force to the population aged 15 years and over) was 59.1 percent (down 0.2 percentage points from the previous year). Observed by gender, the rate was 70.8 percent for men (down 0.3 percentage points) and 48.2 percent for women (the same rate as the previous year).

Table 12.1
Population by Labor Force Status

(Thousands)

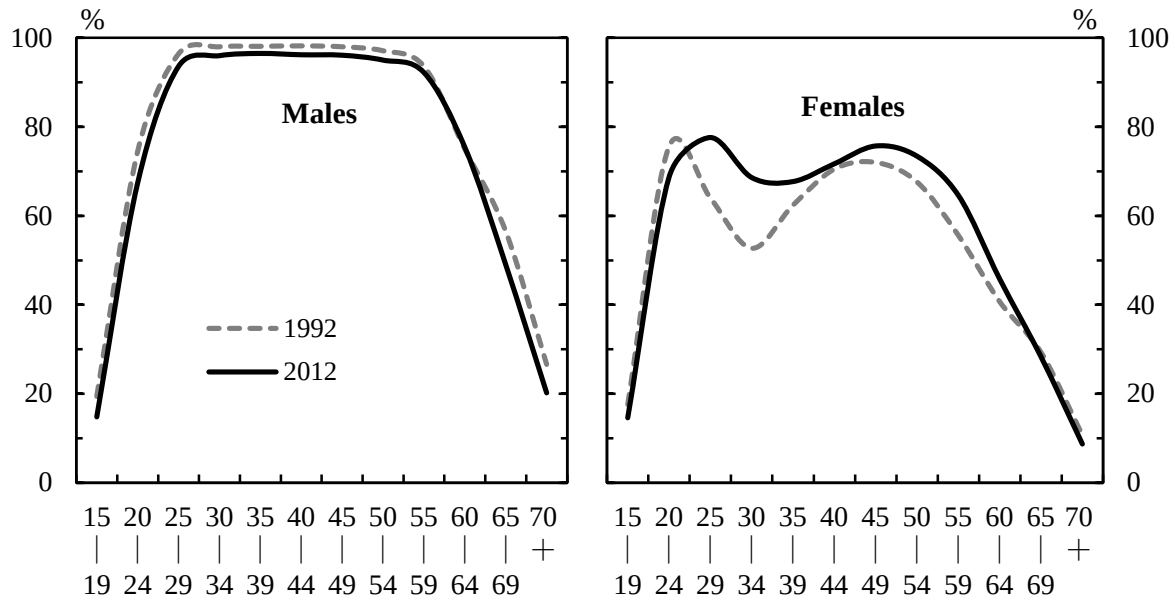
Year	Population aged 15 years and over	Labor force			Not in labor force	Unemployment rate (%)
		Total	Employed	Unemployed		
Total						
1995	105,100	66,660	64,570	2,100	38,360	3.2
2000	108,360	67,660	64,460	3,200	40,570	4.7
2005	110,080	66,510	63,560	2,940	43,460	4.4
2009	110,990	66,500	63,140	3,360	44,460	5.1
2010	111,110	66,320	62,980	3,340	44,730	5.1
2011 [1)]	111,110	65,910	62,890	3,020	45,170	4.6
2012	110,980	65,550	62,700	2,850	45,400	4.3
Males						
1995	51,080	39,660	38,430	1,230	11,390	3.1
2000	52,530	40,140	38,170	1,960	12,330	4.9
2005	53,230	39,010	37,230	1,780	14,160	4.6
2009	53,640	38,690	36,660	2,030	14,940	5.3
2010	53,650	38,500	36,430	2,070	15,130	5.4
2011 [1)]	53,630	38,220	36,360	1,870	15,380	4.9
2012	53,550	37,890	36,160	1,730	15,650	4.6
Females						
1995	54,020	27,010	26,140	870	26,980	3.2
2000	55,830	27,530	26,290	1,230	28,240	4.5
2005	56,850	27,500	26,330	1,160	29,300	4.2
2009	57,360	27,820	26,490	1,330	29,520	4.8
2010	57,460	27,830	26,560	1,270	29,600	4.6
2011 [1)]	57,480	27,680	26,530	1,150	29,790	4.2
2012	57,420	27,660	26,540	1,120	29,760	4.0

1) Supplementary estimated figures (excluding "Population aged 15 years and over").
Source: Statistics Bureau, MIC.

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. A comparison with the data from twenty years ago (1992) shows that, in 2012, the 35-39 age group replaced the 30-34 age group to form the bottom of the M-shaped curve. The participation rate rose by 15.9 percentage points in

the 30-34 age group and by 5.3 percentage points in the 35-39 age group, resulting in a noticeable change in the bottom of the curve: it has become flatter and more gradual.

Figure 12.1
Labor Force Participation Rate by Gender



Source: Statistics Bureau, MIC.

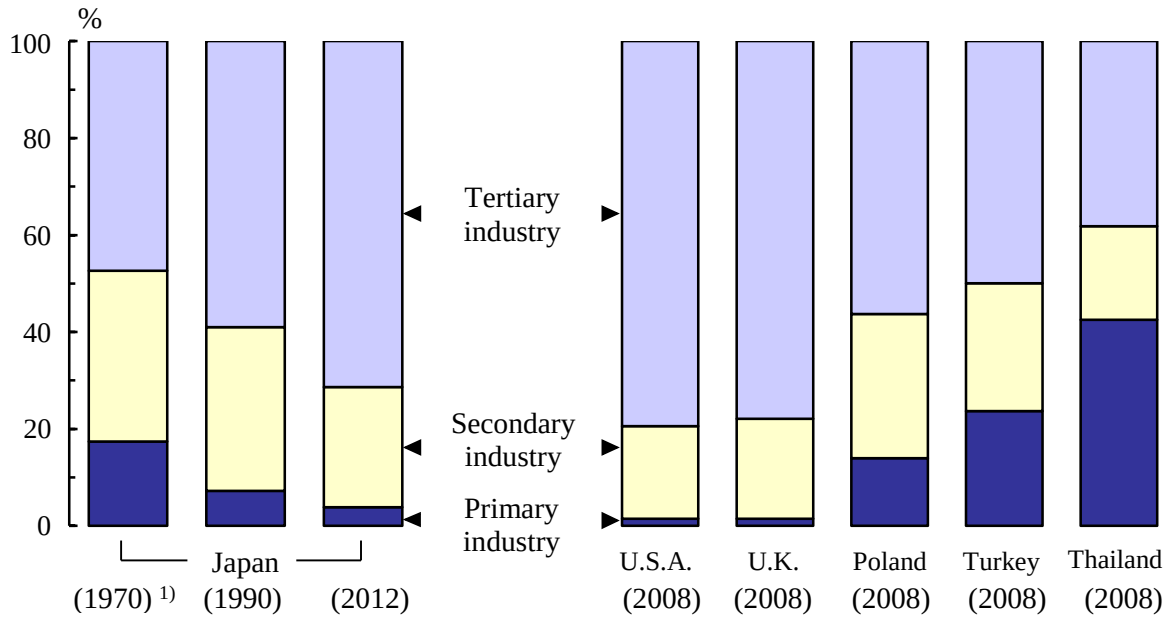
2. Employment

The number of employed persons in Japan had declined continuously since 1998, but it began to rise in 2004 and continued rising for four years in a row. However, a downward trend set in once again in 2008, which led to a decrease of 190,000 in 2012, from 62.89 million (56.6 percent of the population aged 15 years and over) in the previous year to 62.70 million (56.5 percent).

(1) Employment by Industry

In 2012, the primary industry accounted for 3.9 percent of employment; the secondary industry, 24.8 percent; and the tertiary industry, 71.4 percent.

Figure 12.2
Structure of Employment by Country



1) Excluding Okinawa prefecture.
Source: Statistics Bureau, MIC; International Labour Organization.

Over the long term, the percentage employed in primary industry has been continually falling, while the percentage employed in tertiary industry has been continually rising. The percentage employed in secondary industry has also been trending downward.

By industry, the number of persons employed in the primary industries of agriculture and forestry, and in the secondary industries of manufacturing and construction has been on a downward trend.

Table 12.2
Employment by Industry

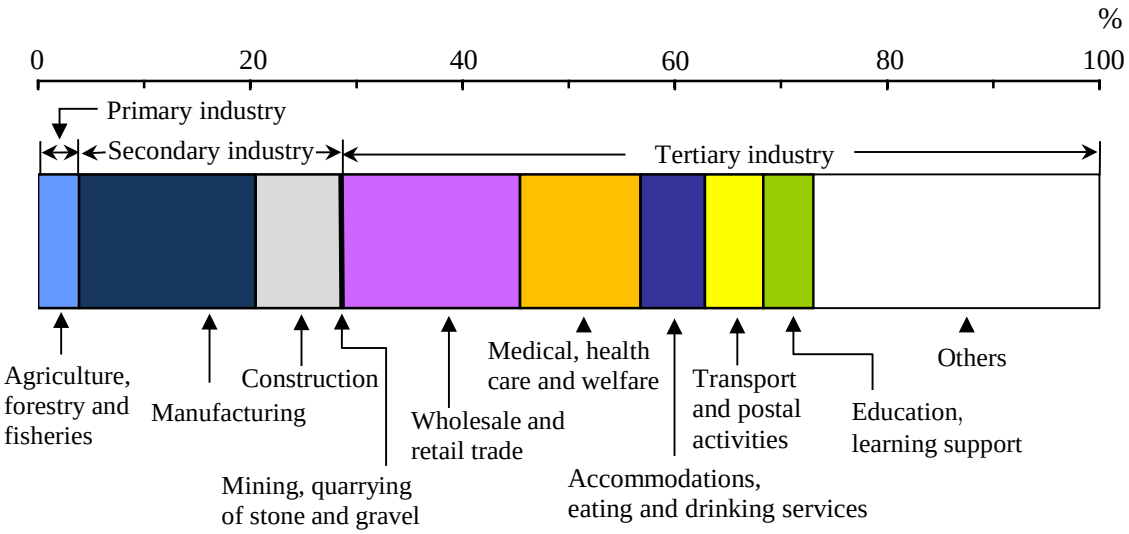
(Thousands)

Industries	2009	2010	2011 [1]	2012	Percentage	
					Males	Females
Total [2]	63,140	62,980	62,890	62,700	57.7	42.3
Primary industry	**2,640**	**2,550**	**2,490**	**2,400**	**61.3**	**38.8**
Agriculture and forestry	2,440	2,370	2,310	2,240	60.3	39.7
Fisheries	200	180	180	160	75.0	25.0
Secondary industry	**16,070**	**15,670**	**15,540**	**15,380**	**75.7**	**24.3**
Mining and quarrying of stone and gravel	30	30	30	30	-	-
Construction	5,220	5,040	5,020	5,030	86.1	13.9
Manufacturing	10,820	10,600	10,490	10,320	70.5	29.5
Tertiary industry	**43,800**	**44,110**	**44,310**	**44,300**	**51.3**	**48.7**
Electricity, gas, heat supply and water	340	340	310	310	87.5	12.5
Information and communications	1,940	1,970	1,900	1,880	74.5	25.5
Transport and postal activities	3,500	3,520	3,510	3,400	82.4	17.6
Wholesale and retail trade	10,590	10,620	10,570	10,420	49.7	50.3
Finance and insurance	1,650	1,630	1,620	1,630	47.2	52.8
Real estate and goods rental and leasing	1,100	1,100	1,130	1,120	63.4	36.6
Scientific research, professional and technical services	1,950	1,980	2,080	2,050	67.3	32.7
Accommodations, eating and drinking services	3,790	3,860	3,820	3,760	38.6	61.4
Living-related and personal services and amusement services	2,410	2,400	2,420	2,390	41.4	58.6
Education, learning support	2,880	2,890	2,940	2,950	44.4	55.6
Medical, health care and welfare	6,230	6,560	6,780	7,060	24.8	75.2
Compound services	520	450	440	470	59.6	40.4
Services, n.e.c.	4,650	4,560	4,570	4,620	59.0	41.0
Government [3]	2,250	2,230	2,220	2,240	75.9	24.1

1) Supplementary estimated figures. 2) Including "Industries unable to classify." 3) Except elsewhere classified.

Source: Statistics Bureau, MIC.

Figure 12.3
Distribution of Employment by Industry (2012)



Source: Statistics Bureau, MIC.

In the tertiary industry, which accounted for approximately 70 percent of all industry, employment increased from the previous year by 280,000 in the "medical, health care and welfare" sector. Meanwhile, employment in "wholesale and retail trade" and "transport and postal activities" decreased by 150,000 and 110,000, respectively.

Depending on the industrial sector, a difference was seen in the employment tendency between men and women. In 2012, the percentage of female employment was highest in "medical, health care and welfare" (75.2 percent), followed by "accommodations, eating and drinking services" (61.4 percent) and "living-related and personal services and amusement services" (58.6 percent).

(2) Employment by Occupation

In terms of occupation, employment in the "manufacturing process workers" category has been declining in recent years, due to the overseas relocation of production sites and increased imports of manufactured goods. The number of "manufacturing process workers" was 9.02 million in 2012, down 0.3 percent from the previous year's 9.05 million. In contrast, the trend toward a service-oriented economy, the aging population, and improvements to the welfare services have been on a rising trend over the last few years in the number of "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 engineering workers."

Table 12.3
Employment by Occupation

(Thousands)

Occupation	2009	2010	2011 [1)]	2012	Percentage	
					Males	Females
Total [2)]	63,140	62,980	62,890	62,700	57.7	42.3
Administrative and managerial workers	1,690	1,620	1,580	1,530	88.9	11.1
Professional and engineering workers	9,440	9,610	9,870	10,100	53.7	46.3
Clerical workers	12,460	12,370	12,340	12,140	40.9	59.1
Sales workers	8,910	8,900	8,920	8,750	58.0	42.0
Service workers	7,390	7,540	7,530	7,580	33.0	67.0
Security workers	1,220	1,240	1,230	1,220	94.3	5.7
Agricultural, forestry and fishery workers	2,630	2,530	2,460	2,370	63.1	36.9
Manufacturing process workers	9,390	9,250	9,050	9,020	71.4	28.6
Transport and machine operation workers	2,240	2,230	2,230	2,220	97.3	2.7
Construction and mining workers	3,070	2,990	3,010	3,020	98.3	1.7
Carrying, cleaning, packaging, and related workers	4,140	4,130	4,140	4,140	54.8	45.2

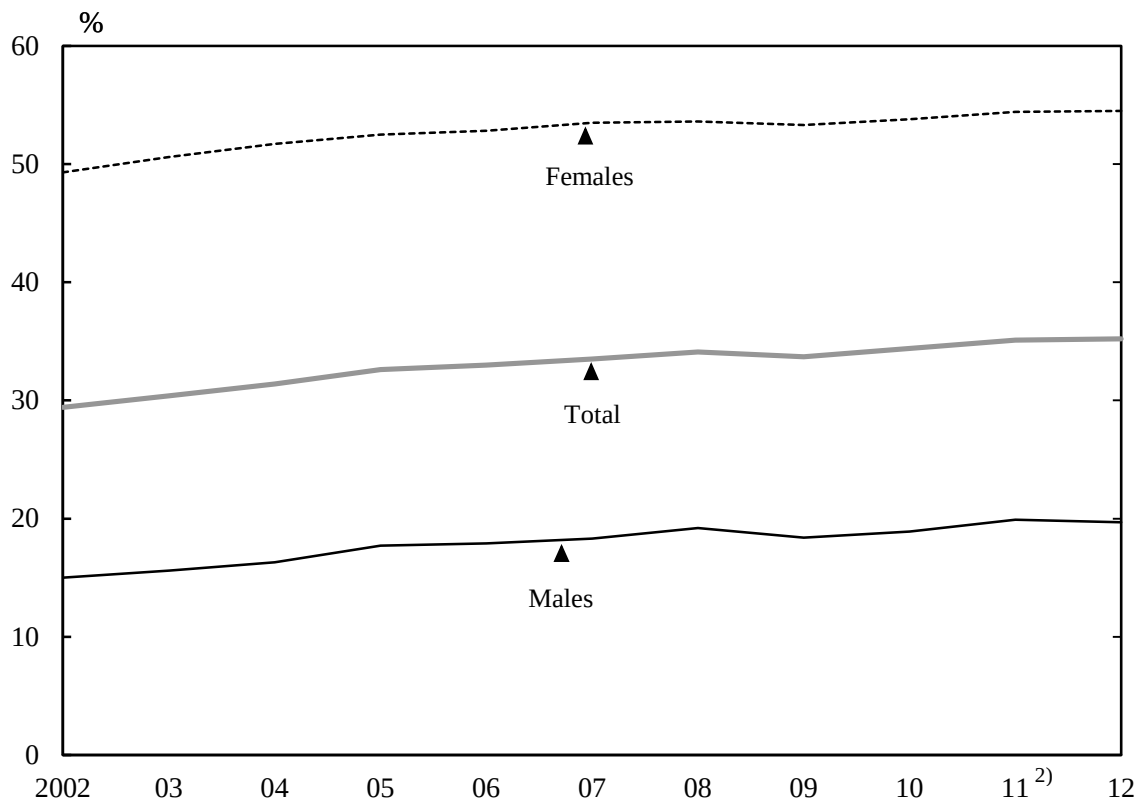
1) Supplementary estimated figures. 2) Including "Labor force status not reported."
Source: Statistics Bureau, MIC.

In 2012, percentages of male and female employed persons by occupation shows that men were particularly prominent among "construction and mining workers" (98.3 percent) and "transport and machine operation workers" (97.3 percent). Women were prominent among "service workers" (67.0 percent) and "clerical workers" (59.1 percent).

(3) Employment by Employment Pattern

Observation of employment by patterns in Japan shows that regular staff members have been on a declining trend since the late 1990s, while non-regular staff members, including part-time workers and agency-dispatched workers, have increased almost continuously.

Figure 12.4
Percentage of Non-Regular Staff Members by Gender 1)



1) Yearly average. 2) Supplementary estimated figures.
Source: Statistics Bureau, MIC.

In 2012, there were 51.54 million employees (excluding company executives), of whom 18.13 million, or 35.2 percent, were non-regular staff members. The ratio of non-regular staff members among all male employees was 19.7 percent, while the corresponding ratio for females was 54.5 percent, revealing a large difference between the genders.

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

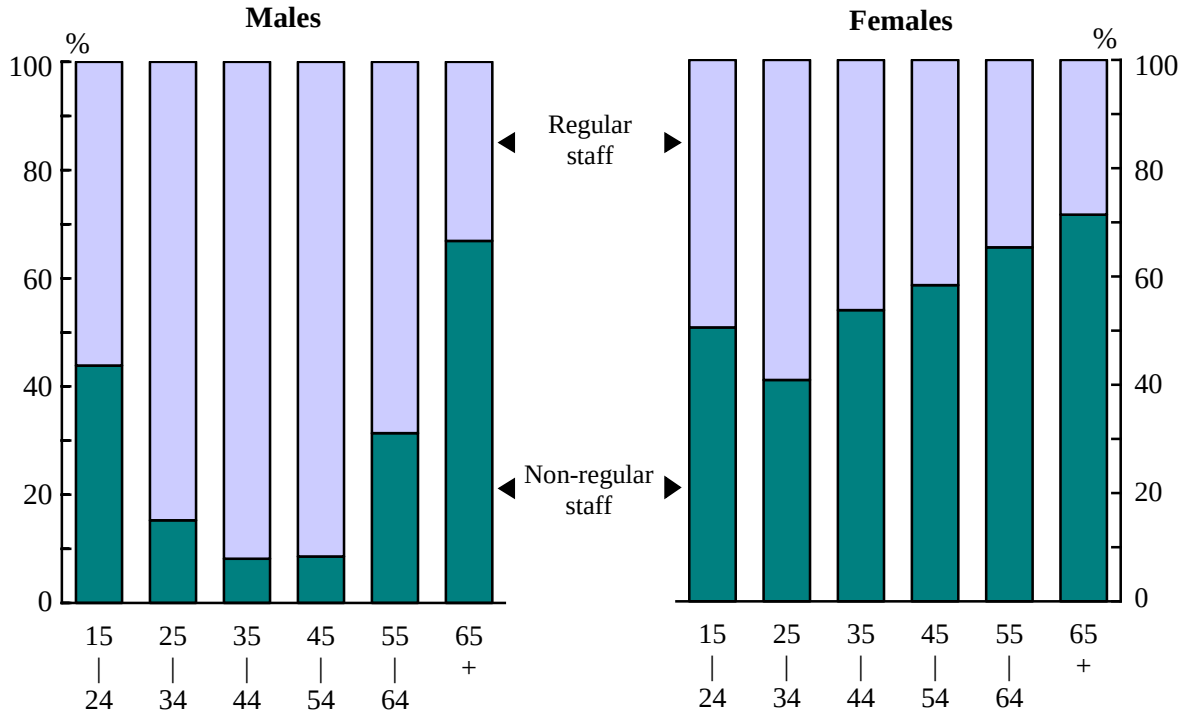
Table 12.4
Employment by Employment Pattern (2012)

(Thousands)

	Employees[1)]	Regular staff	Percentage	Non-regular staff	Percentage
Total	51,540	33,400	64.8	18,130	35.2
Males	28,650	23,000	80.3	5,660	19.7
Females	22,880	10,410	45.5	12,470	54.5

1) Excluding company executives.
Source: Statistics Bureau, MIC.

Figure 12.5
Employment Pattern by Gender and Age (2012)



Source: Statistics Bureau, MIC.

Factors behind the rise in non-regular staff members include labor cost-cutting and the trend where seeking work-ready, pre-trained workers was preferred to developing human resources by hiring new graduates. As a result, there was a change in terms of employment patterns in that non-regular staff members increased, particularly among young people.

The employment rate of new graduates had been worsening as a result of the economic slowdown since 2008, but their employment situation showed a sign of improvement in 2012.

3. Unemployment

In 2012 the unemployed numbered 2.85 million persons, down 5.6 percent from the previous year. The unemployment rate was 4.3 percent, down 0.3 percentage points from the previous year.

After the ratio of job openings to job seekers peaked out in 2006, it was on a falling trend in recent years. The ratio has been increasing since 2009 and is gradually recovering.

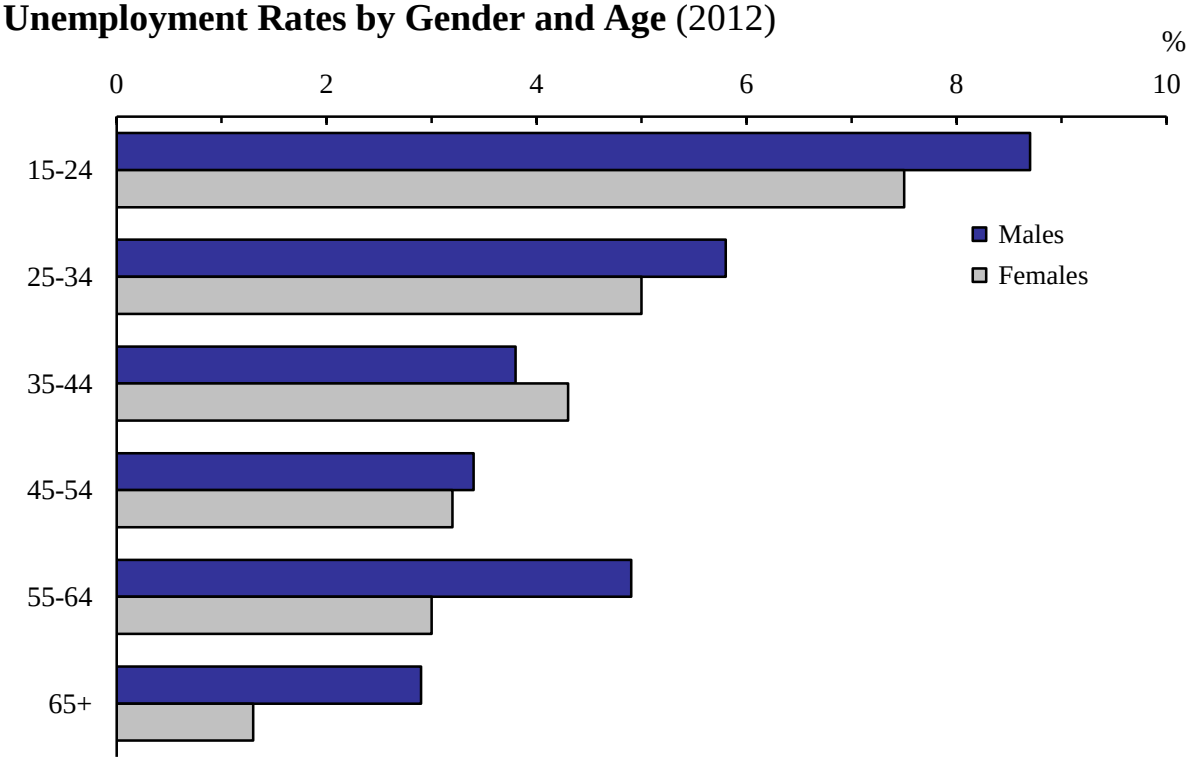
Figure 12.6
Unemployment Rate and Ratio of Job Openings to Job Seekers

1) The data for 2011 indicates supplementary estimated figure.
Source: Statistics Bureau, MIC; Ministry of Health, Labour and Welfare.

A breakdown by gender shows that the unemployment rate in 2012 was 4.6 percent among men, and 4.0 percent among women. The unemployment rate has been higher among men for fifteenth consecutive years since 1998.

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

Figure 12.7
Unemployment Rates by Gender and Age (2012)

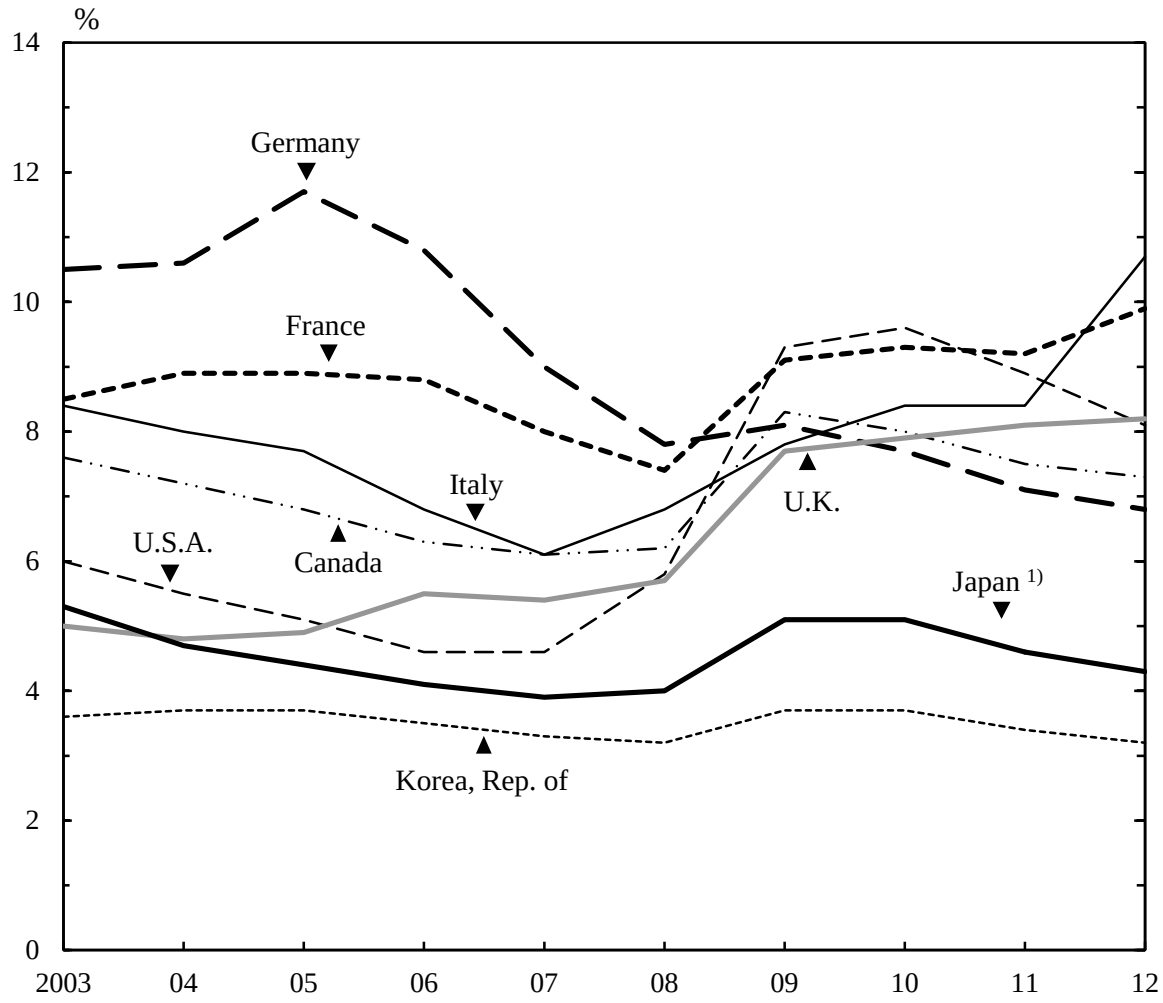


Source: Statistics Bureau, MIC.

Analyzing the total number of unemployed in 2012 (2.85 million people), by reasons for job-seeking, the major reasons were: (i) involuntarily dismissed due to corporate or business circumstances, or reaching retirement age limit, 1.02 million persons; (ii) voluntarily left their jobs for personal or family reasons, 1.01 million persons; (iii) new job seekers due to the necessity to earn income, 0.37 million; and (iv) new job seekers just graduated from schools, 0.16 million.

In terms of the duration of unemployment, most were unemployed for "1 year or more" (1.07 million persons), followed by "less than 3 months" (0.85 million persons). The younger a job seeker is, the shorter the job-seeking period tends to be; on the other hand, the older a person, the longer the job-seeking period tends to be.

Figure 12.8
Unemployment Rates by Country



1) The data for 2011 indicates supplementary estimated figure.
Source: Statistics Bureau, MIC; Cabinet Office.

4. Hours of Work and Wages

In 2012, the monthly average of total hours worked was 147.1 per regular employee (in establishments with five or more regular employees), up 0.5 percent from the previous year, and an annual average of 1,765 hours.

Of the total monthly hours worked, 136.7 were scheduled working hours, representing an increase of 0.5 percent from the previous year. Non-scheduled work such as overtime work averaged 10.4 hours per month, representing an increase of 0.6 percent from the previous year. Working days averaged 19.1 days per month in 2012.

In 2012, the monthly average of total cash earnings per regular employee (in establishments with five or more regular employees) was 314,000 yen. This total amount includes 262,000 yen in "contractual cash earnings" (which include "scheduled cash earnings" plus "non-scheduled cash earnings" for working overtime, on holidays and late at night, as well as other allowances), and 53,000 yen in "special cash earnings" (which include summer and year-end bonuses, payments to celebrate employees' marriages, etc.).

Table 12.5

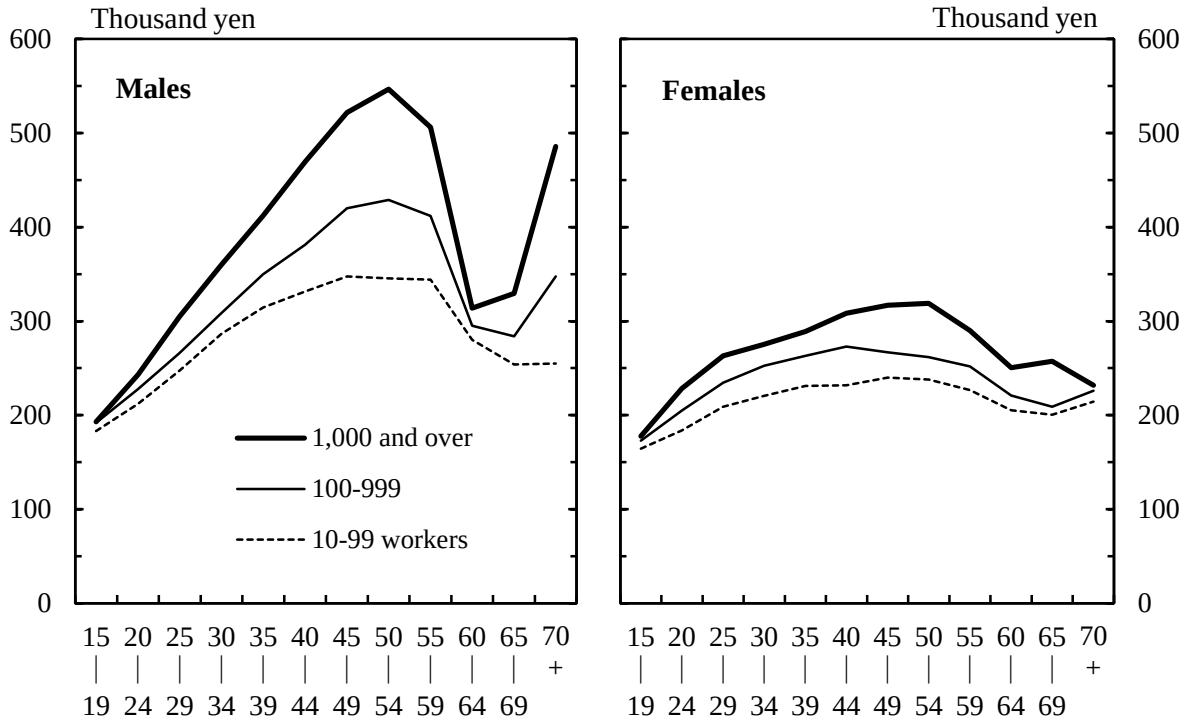
Hours of Work and Wages [1] (Monthly average)

Year	Days worked	Hours of Work			Wages (1,000 yen)				
		Total	Scheduled	Non-scheduled	Total	Contractual	Scheduled	Non-scheduled	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
2010	19.0	146.2	136.2	10.0	317	263	245	18	54
2011	19.0	145.6	135.6	10.0	317	262	244	18	54
2012	19.1	147.1	136.7	10.4	314	262	243	19	53
Indices (2010 average=100) [3]									
1995	-	108.5	109.4	96.0	110.6	103.4	104.1	-	-
2000	-	105.4	105.8	98.2	110.5	106.4	106.7	-	-
2005	-	102.9	102.7	104.3	104.7	102.8	102.6	-	-
2010	-	100.0	100.0	100.0	100.0	100.0	100.0	-	-
2011	-	99.8	99.7	101.0	99.8	99.6	99.4	-	-
2012	-	100.3	100.2	101.6	99.1	99.5	99.2	-	-

1) Establishments with 5 or more regular employees. 2) Bonuses and other special allowances. 3) Data was recalculated 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 40s to mid-50s 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. 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 12.9
Monthly Contractual Cash Earnings by Size of Enterprise (2012)



Source: Ministry of Health, Labour and Welfare.

Chapter 13

Family Budgets and Prices

1. Family Budgets

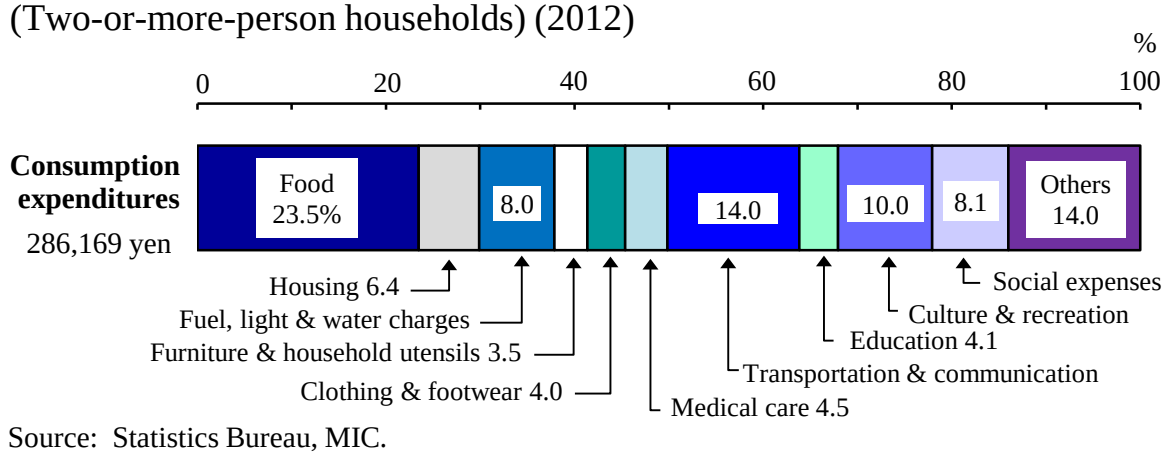
In 2010, there were approximately 52 million households in Japan, of which about 70 percent are two-or-more-person households and about 30 percent are one-person households. Family budgets vary significantly depending on the employment situation and ages of their members. In this section, family budgets in various types of households are described on the basis of the 2012 results of the Family Income and Expenditure Survey.

(1) Income and Expenditure

(A) Two-or-more-person Households

The 2012 average monthly consumption expenditures per two-or-more-person households (the average number of household members being 3.07 and the average age of the household head being 57.5 years) was 286,169 yen. Compared to the previous year, it increased by 1.1 percent in both nominal and real terms. The share of food expenses to the whole consumption expenditures (Engel's coefficient) was 23.5 percent.

Figure 13.1
Average Monthly Consumption Expenditures
(Two-or-more-person households) (2012)



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 3.42 and the average age of the household head being 47.8 years) was 518,506 yen in 2012, of which about 80 percent came from the household head's income.

Table 13.1

Average Monthly Income and Expenditures (Workers' households [1])

(Thousand yen)

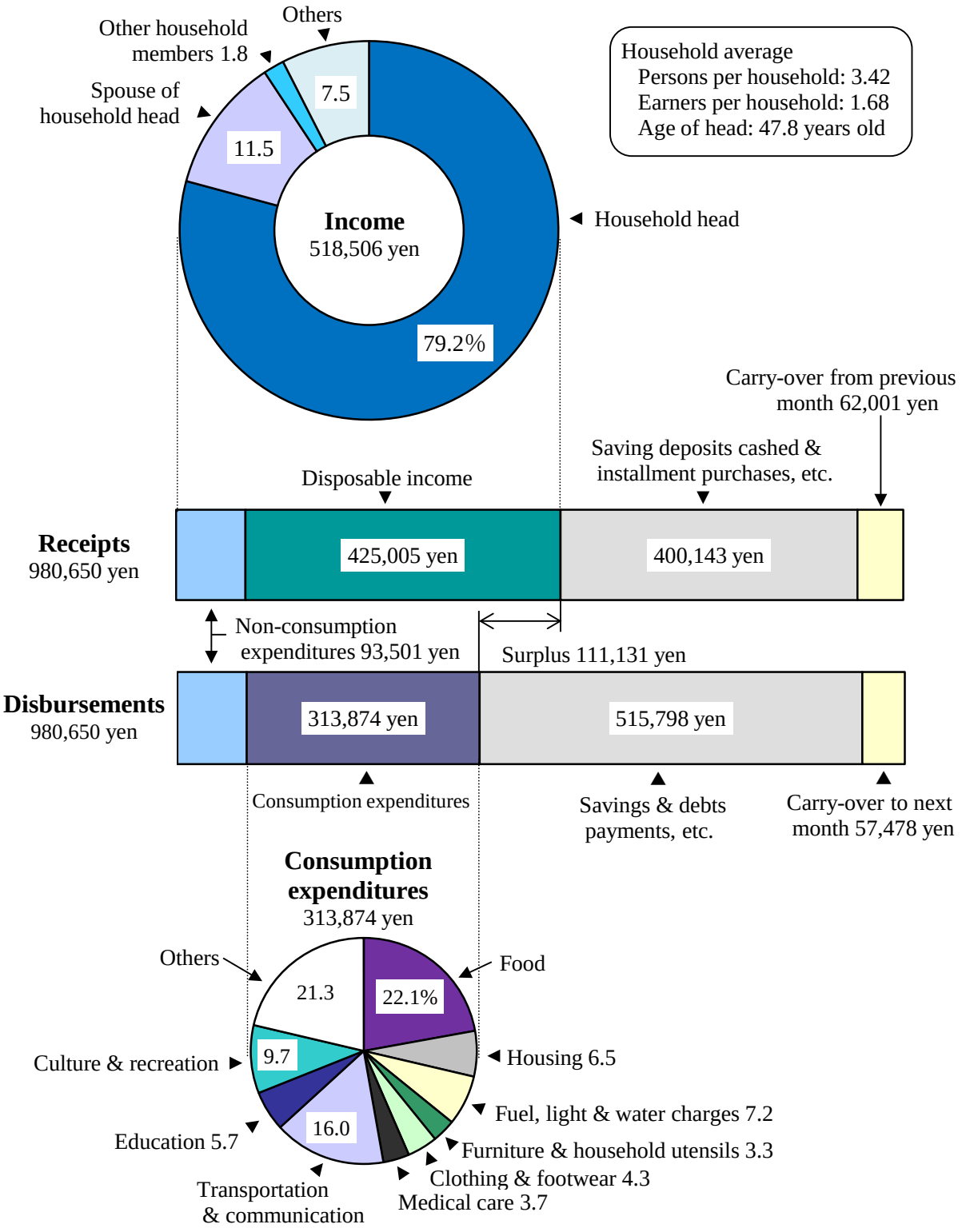
Item	2008	2009	2010	2011	2012
Income (A)	534.2	518.2	520.7	510.1	518.5
Wages and salaries	500.7	484.9	485.3	473.1	479.6
Others	33.5	33.3	35.4	37.0	38.9
Disposable income (A-C)	442.7	427.9	430.0	420.5	425.0
Expenditures	416.4	409.4	409.0	398.4	407.4
Consumption expenditures (B)	324.9	319.1	318.3	308.8	313.9
Non-consumption expenditures (C) [2]	91.5	90.3	90.7	89.6	93.5
Surplus ((A-C)-B)	117.8	108.9	111.7	111.7	111.1
Net increase in savings and insurance	81.2	69.5	76.8	76.8	77.8
Average propensity to consume (%) [3]	73.4	74.6	74.0	73.4	73.9
Ratio of net increase in savings and insurance (%) [4]	18.3	16.2	17.9	18.3	18.3
Engel's coefficient (%)	21.9	22.0	21.9	22.2	22.1
Annual rate of increase (%) (real terms)					
Disposable income	-1.5	-1.9	1.3	-1.9	1.1
Consumption expenditures	-1.1	-0.3	0.6	-2.7	1.6

1) Two-or-more-person households. 2) Direct taxes, social insurance contributions, etc.
3) Ratio of consumption expenditures 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 expenditures such as taxes and social insurance contributions, was 425,005 yen. Of this disposable income, 313,874 yen was used for living expenses (consumption expenditures), such as food and housing expenses, while the remainder (surplus), totaling 111,131 yen, was applied to savings, life insurance premiums and repaying debt such as housing loans.

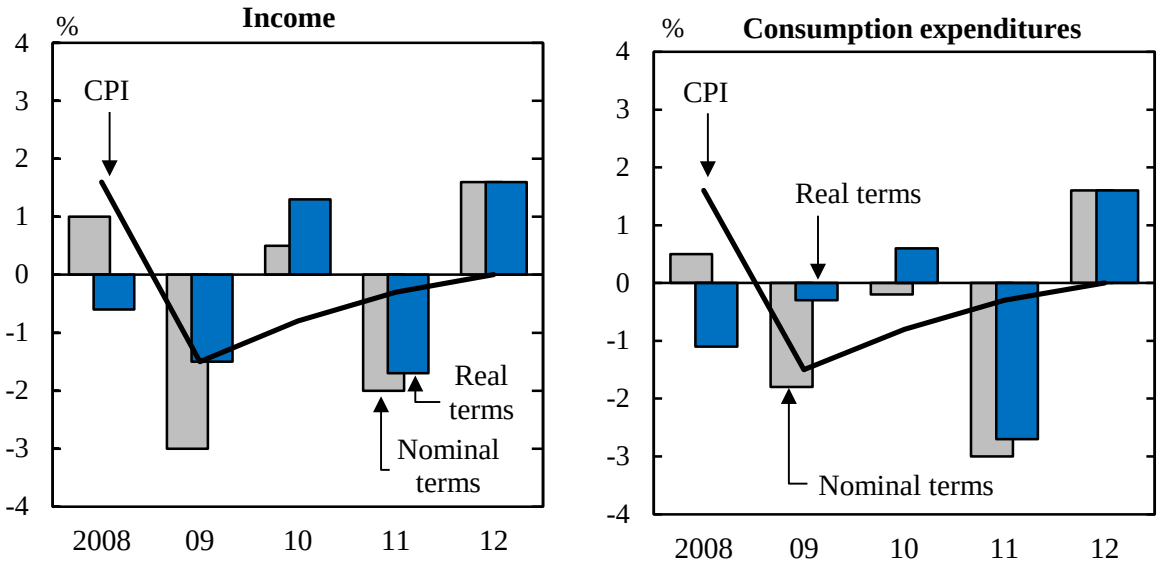
A look at consumption expenditures by category showed that some categories, including spending on "transportation and communication" and "medical care," increased from the previous year in real terms, while "housing," "education" and other spending decreased in real terms.

Figure 13.2
Balance of Income and Expenditures
(Monthly average, workers' households [1]) (2012)



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

Figure 13.3
Annual Change in Household Income and Expenditures
(Workers' households [1])

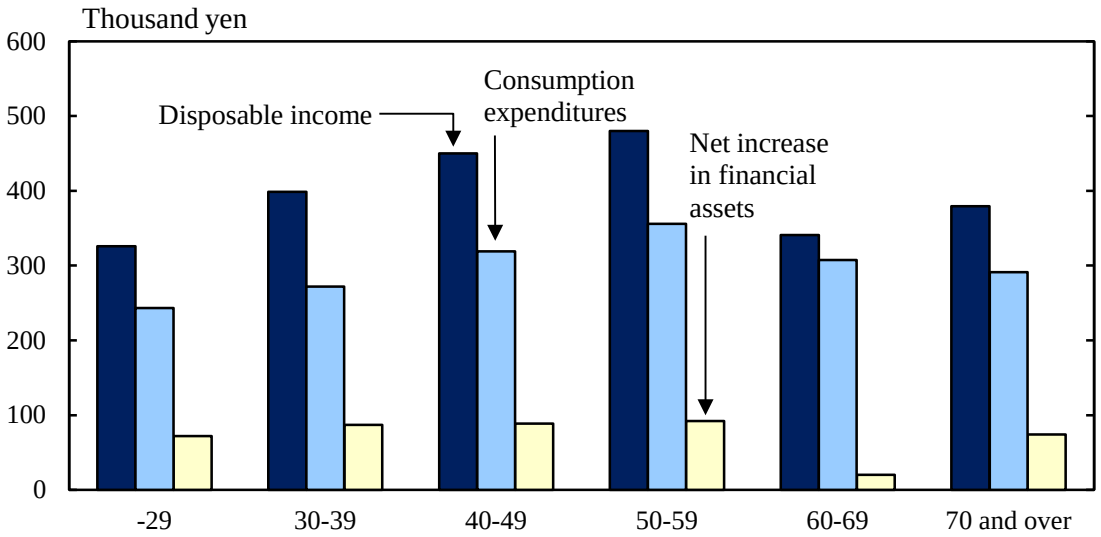


1) Two-or-more-person households.
Source: Statistics Bureau, MIC.

Family budgets differ among households according to their stages in life. Observed by age group of the household head, the 2012 average monthly disposable income of workers' households was the highest in households in the 50s group (480,037 yen), followed by those in the 40s group (450,136 yen) and the 30s group (398,669 yen).

The 2012 average propensity to consume (the ratio of consumption expenditures to disposable income) was the lowest in households in the 30s group (68.2 percent). The figure was 70.8 percent in those in the 40s group, 74.2 percent in the 50s group, and 90.3 percent in the 60s group. The percentage tends to be higher as the age goes up, except for the under-30 group (74.7 percent) and the 70-and-over group (76.8 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 Expenditures by Age Group of Household Head (Workers' households [1]) (2012)



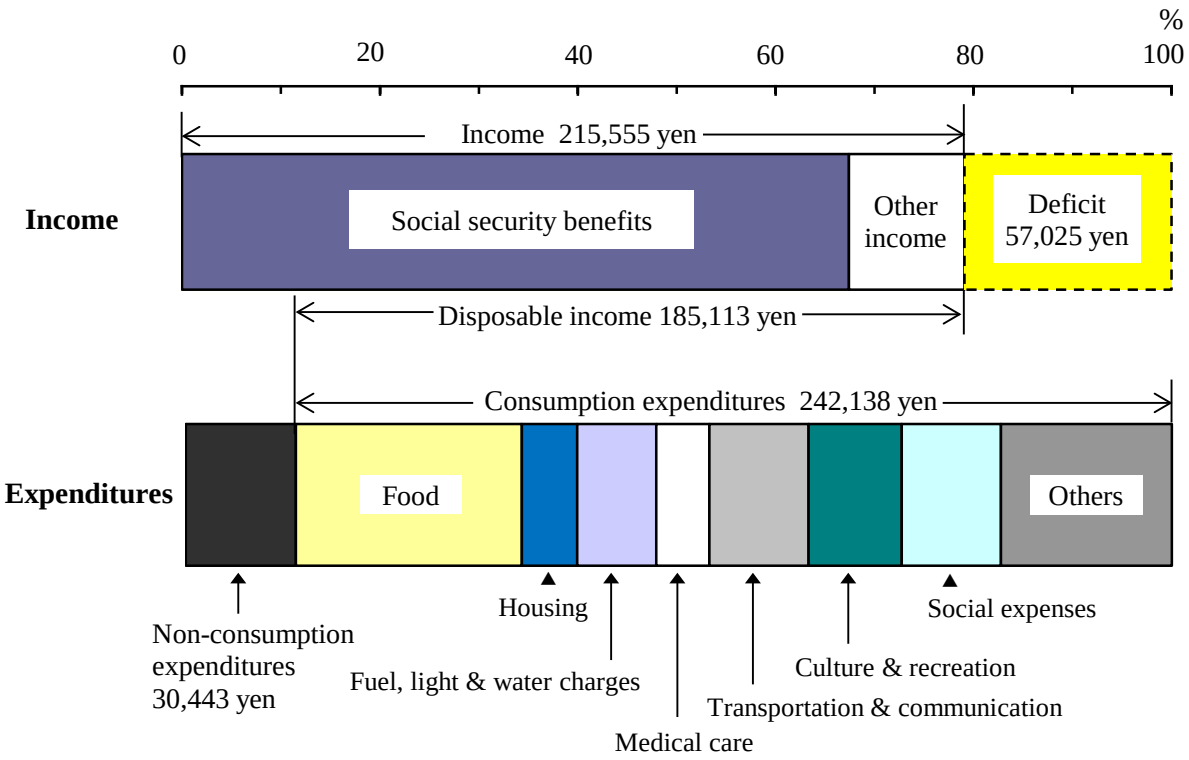
1) Two-or-more-person households.
Source: Statistics Bureau, MIC.

(b) Non-working Elderly Households

According to an analysis of the average monthly income and expenditures 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 215,555 yen in 2012. Social security benefits amounted to 183,769 yen, thus accounting for 85.3 percent of income.

Disposable income averaged 185,113 yen, while consumption expenditures averaged 242,138 yen. The average propensity to consume in non-working elderly households was 130.8 percent, which means consumption expenditures exceeded disposable income. The deficit of disposable income to consumption expenditures (57,025 yen) increased from that of the previous year (52,819 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 Expenditures
(Non-working elderly households [1]) (2012)



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

(B) One-person Households

The average monthly consumption expenditures of one-person households in 2012 was 156,450 yen, down 2.8 percent in both nominal and real terms from the previous year. Compared on an age-group basis to the previous year in real terms, the average monthly consumption expenditures were down 6.7 percent for the under 35-year-old group and down 6.2 percent in the 35-59 age group, while there was a 1.4 percent increase in the 60-and-over. Spending on categories such as "fuel, light and water charges," "furniture and household utensils" and "medical care" tended to be larger in older age groups. Meanwhile, older age groups were found to spend increasingly less on categories such as "housing."

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

(Yen)

	2008	2009	2010	2011	2012	Annual growth [1] (%)
Average	171,602	162,731	162,009	160,891	156,450	-2.8
Under 35 years	192,515	171,233	156,582	169,813	158,474	-6.7
35-59	188,158	183,380	186,396	180,173	168,929	-6.2
60 and over	151,670	146,861	150,669	147,077	149,089	1.4

1) Real terms.
Source: Statistics Bureau, MIC.

(2) Savings and Debts

Two-or-more-person households in 2012 showed that the average amount of savings per workers' household was 12.33 million yen, resulting in its ratio to average yearly income (6.91 million yen) amounting to 178.4 percent. On the other hand, the average amount of debts per household was 6.95 million yen, which was 100.6 percent relative to yearly income. The portion for "housing and land" accounted for 6.48 million yen of the debts (6.95 million yen). A total of 40.8 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 (%)
2008	7,170	12,500	174.3	6,520	6,030	90.9	52.4
2009	7,090	12,030	169.7	6,430	5,960	90.7	52.8
2010	6,970	12,440	178.5	6,790	6,290	97.4	52.8
2011	6,890	12,330	179.0	6,470	6,010	93.9	51.9
2012	6,910	12,330	178.4	6,950	6,480	100.6	53.5

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]) (2012)

(Million yen)

Item	Average	-29	30-39	40-49	50-59	60-69	70 and over
Yearly income	6.91	4.44	5.69	7.17	8.36	6.24	6.20
Savings	12.33	2.90	5.69	9.88	16.09	21.68	22.32
Financial institutions	11.77	2.83	5.37	9.24	15.22	21.32	22.23
Demand deposits	2.79	1.34	2.10	2.39	3.13	4.14	5.24
Time deposits	4.79	0.94	1.84	3.33	6.34	9.82	9.27
Life insurance	3.13	0.49	1.09	2.81	4.58	4.78	4.00
Securities	1.05	0.06	0.34	0.69	1.17	2.58	3.72
Non-financial institutions	0.56	0.07	0.32	0.65	0.87	0.36	0.09
Debts	6.95	3.02	9.29	10.02	5.16	1.98	1.69
Housing and land	6.48	2.70	8.87	9.47	4.60	1.70	1.05
Other than housing and land	0.29	0.12	0.24	0.37	0.35	0.18	0.01
Monthly and yearly installments	0.18	0.20	0.18	0.18	0.20	0.10	0.62

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

By yearly income group, an almost 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 declined. 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. After the beginning of 2013, domestic corporate goods prices have risen at a moderate pace. Consumer prices have declined moderately. From a long-term viewpoint, price movements are different between consumer prices and domestic corporate goods prices.

(1) Consumer Price Index (CPI)

The overall index of consumer prices (with base year 2010 = 100) was 99.7 in 2012, the same level as the previous year.

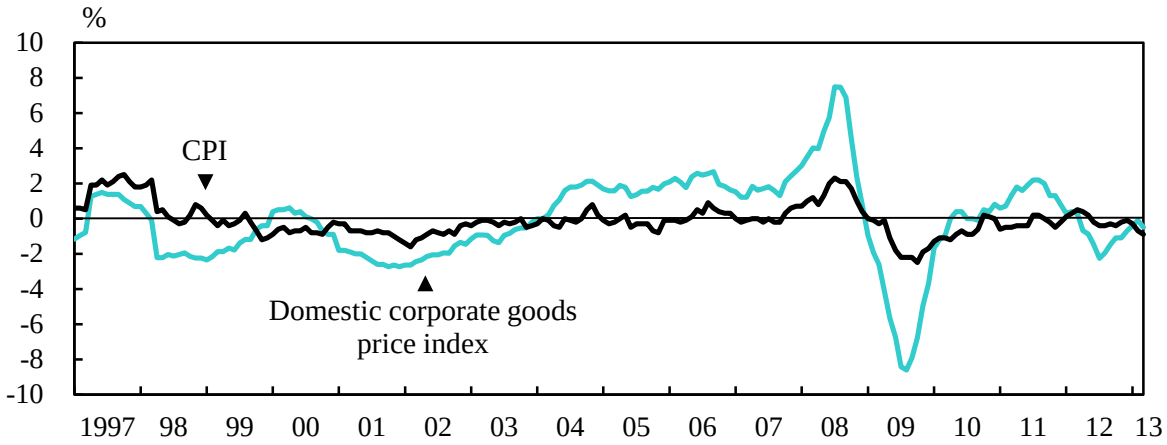
Table 13.5
CPI for Major Categories of Goods and Services

(2010=100)

Item	Weight	2000	2005	2009	2011	2012
Overall	10000	102.7	100.4	100.7	99.7	99.7
Overall, excluding imputed rent	8442	103.1	100.3	100.8	99.7	99.7
Food	2525	98.4	96.8	100.3	99.6	99.7
Housing	2122	100.9	100.6	100.4	99.8	99.5
Fuel, light and water charges	704	94.6	94.4	100.2	103.3	107.3
Furniture and household utensils	345	131.1	111.6	104.8	94.4	91.7
Clothing and footwear	405	106.3	100.2	101.2	99.7	99.7
Medical care	428	98.7	101.2	100.5	99.3	98.5
Transportation and communication	1421	103.0	101.6	99.0	101.2	101.5
Education	334	103.2	107.4	110.6	97.9	98.2
Culture and recreation	1145	118.0	107.9	101.7	96.0	94.5
Miscellaneous	569	95.4	97.1	98.7	103.8	103.5
Goods	4931	104.5	100.1	100.6	99.3	99.3
Services	5069	100.8	100.7	100.9	100.1	100.0

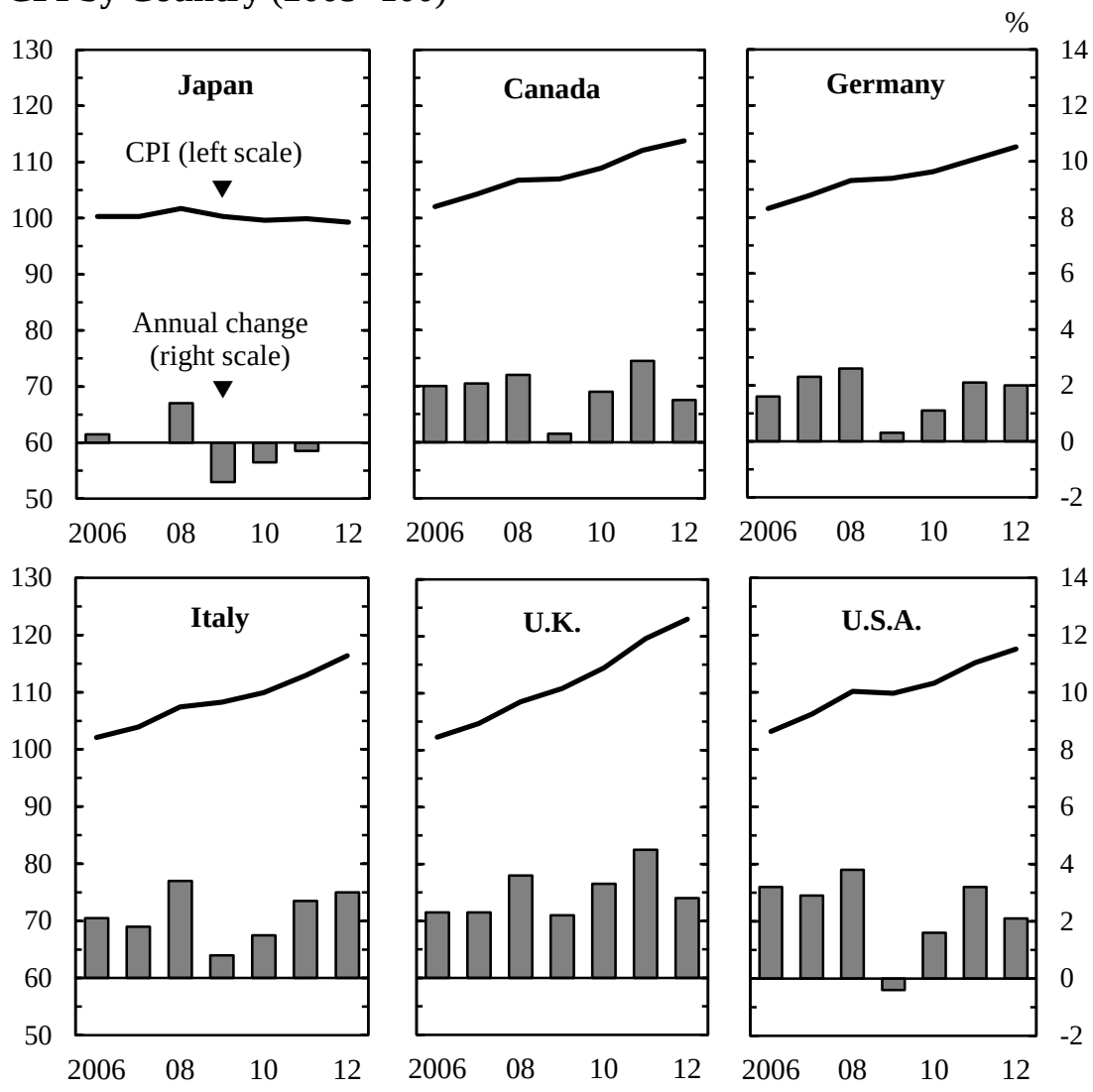
Source: Statistics Bureau, MIC.

Figure 13.6
Price Trends (Percent change from previous year)



Source: Statistics Bureau, MIC; Bank of Japan.

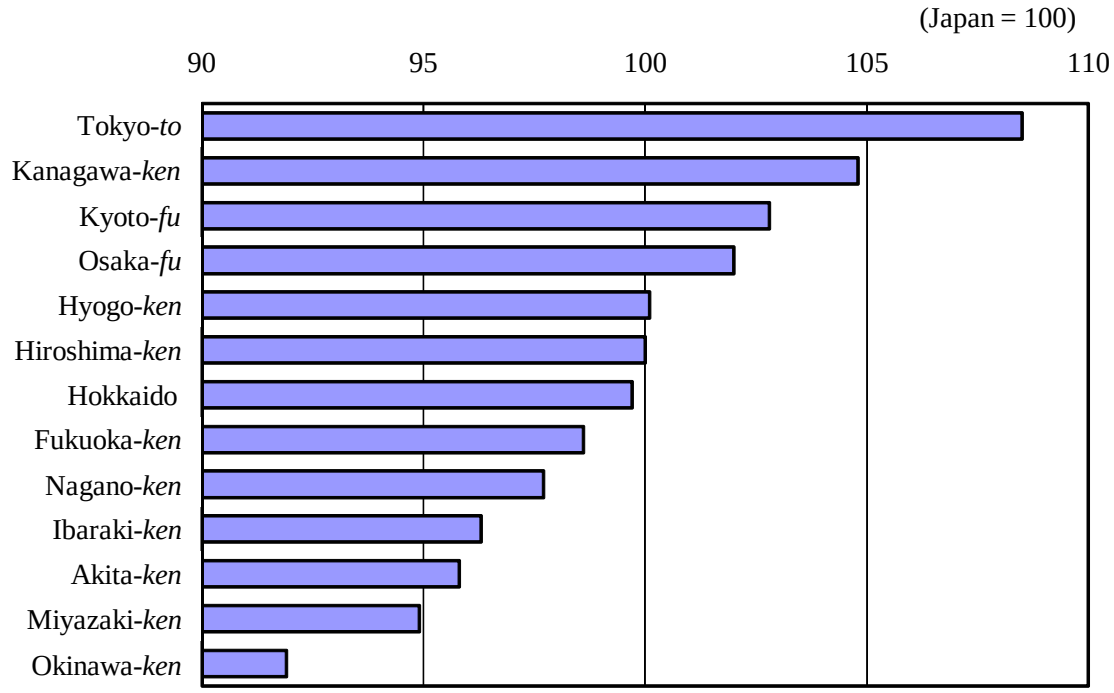
Figure 13.7
CPI by Country (2005=100)



Source: Statistics Bureau, MIC; International Monetary Fund.

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

Figure 13.8
Regional Difference Index of Prices by Selected Prefectures (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 is comprised of the domestic corporate goods price index (index of transaction prices between companies for domestic products targeted at the domestic market), the export price index, and the import price index.

In 2012, the domestic corporate goods price index (2010 as the base year = 100) was 100.6, down 0.9 percent from the previous year.

In 2012, the export price index decreased 101.6 on a contract currency basis (down 1.5 percent from the previous year); measured in yen, the index decreased to 95.8 (down 2.0 percent). Meanwhile, the import price index fell to 115.1 on a contract currency basis (down 0.1 percent from the previous year) and to 107.3 on a yen basis (down 0.2 percent), thus turning down in both contractual currency and yen terms.

The corporate services price index measures price movements of services traded between companies. In 2012, the corporate services price index (2005 as the base year = 100) was 95.8, down 0.4 percent from the previous year.

Table 13.6
Corporate Goods and Services Price Indices

Item	Weight	2000	2005	2010	2011	2012
Corporate goods price index (2010=100)						
Domestic corporate goods price index	1000.0	99.5	97.2	100.0	101.5	100.6
Manufactured products	902.5	99.6	97.4	100.0	101.3	99.7
Export price index (yen basis)	1000.0	117.7	115.7	100.0	97.8	95.8
Import price index (yen basis)	1000.0	79.7	94.1	100.0	107.5	107.3
Corporate services price index (2005=100)						
All items	1000.0	107.4	100.0	96.9	96.2	95.8
Transportation	210.3	96.7	100.0	99.7	99.6	99.3
Information and communications	216.5	112.3	100.0	95.0	94.0	93.3
Advertising services	68.5	102.3	100.0	89.7	89.5	89.5
Leasing and rental	84.6	146.6	100.0	84.3	82.5	81.3

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 2011, Japan's total emission of greenhouse gases, which are a major cause of global warming, amounted to 1.31 billion tons (calculated after their conversion into carbon dioxide), representing an increase of 4.0 percent from the previous fiscal year. Carbon dioxide accounted for 95 percent of these greenhouse gases, with an emission volume of 1.24 billion tons. A breakdown of carbon dioxide emissions by sector revealed that emissions from the industrial sector accounted for 34 percent of the total, followed in order by emissions from the commercial sector (office buildings, etc.), the transport sector, the residential sector, and the energy sector (electric power plants, etc.).

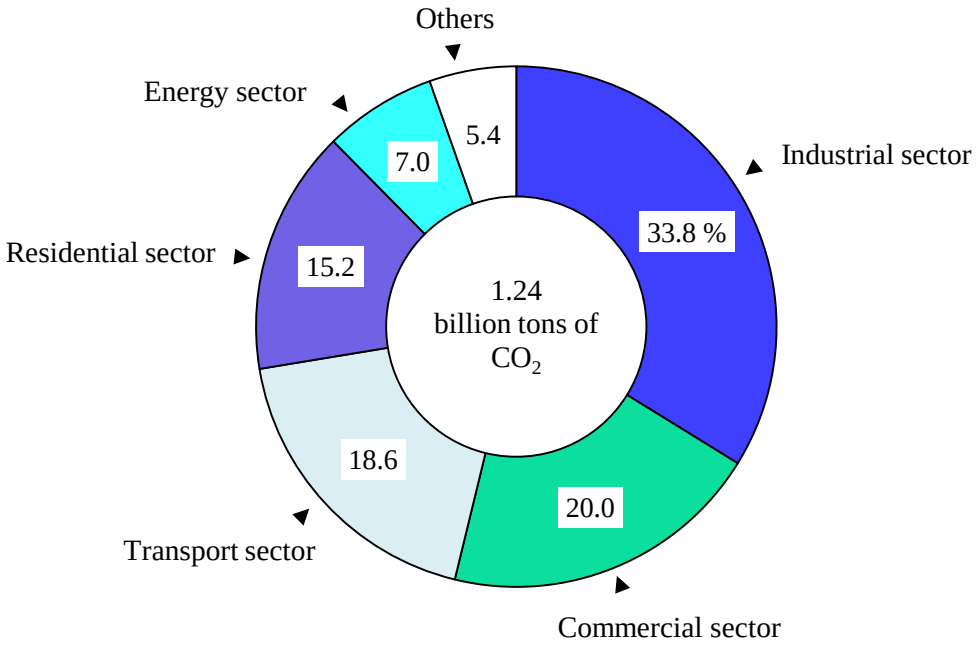
Table 14.1
Breakdown of Carbon Dioxide Emissions in Japan [1)]

(Million tons)

Item	FY1990	FY1995	FY2000	FY2005	FY2010	FY2011
Total	1,141	1,224	1,251	1,282	1,191	1,241
Industrial sector	482	471	467	459	421	419
Transport sector	217	258	265	254	232	230
Commercial sector	164	185	206	236	217	248
Residential sector	127	148	158	174	172	189
Energy sector	68	73	71	79	81	87
Industrial processes	60	61	54	50	41	41
Waste (incineration, etc.)	22	27	31	30	27	26

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)] (FY2011)



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

The state of waste management in Japan had remained grave due to the shrinking remaining capacity of final disposal sites and increased illegal dumping. This led to the Basic Act on 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. Another ongoing effort is the promotion of the "3Rs" (reduce, reuse and recycle) in waste management, including appropriate management of hazardous materials and R&D on waste recycling technology.

Of various types of waste generated as a result of business activities, 20 of them, including sludge, waste oil, and soot and dusts, are designated as "industrial waste." The fiscal 2010 nationwide industrial waste generation totaled 385.99 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 14.26 million tons in fiscal 2010.

Meanwhile, a total of 45.36 million tons of "nonindustrial waste" (household waste and also shop, office and restaurant waste) was generated in fiscal 2010. This translates to 976 grams per person per day. In terms of nonindustrial waste disposal in fiscal 2010, the total volume processed was 42.79 million tons. The total volume of recycled waste was 9.45 million tons, with the recycling rate at 20.8 percent.

Table 14.2
Waste Generation and Disposal (Industrial and nonindustrial waste)

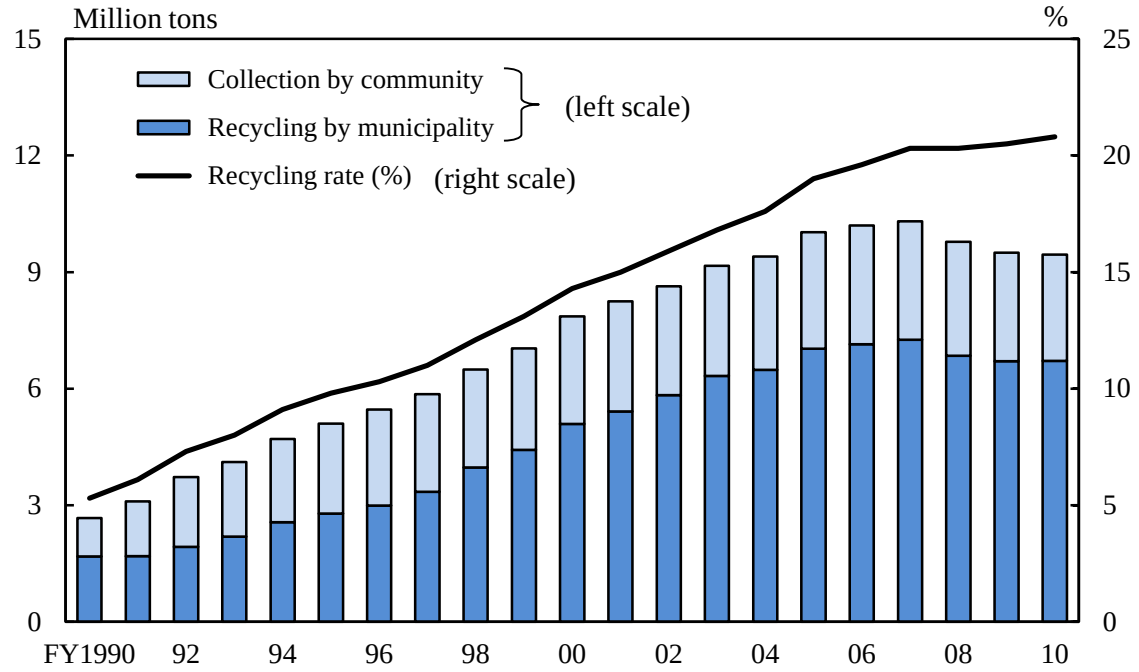
(Thousand tons)

Item	FY1990	FY1995	FY2000	FY2005	FY2010
Industrial waste					
Total volume of waste generation	394,736	393,812	406,037	421,677	385,988
Recycling	150,568	146,620	184,237	218,888	204,733
Treatment for waste reduction	154,443	177,941	176,933	178,560	167,000
Final disposal	89,725	69,257	44,868	24,229	14,255
Nonindustrial waste [1)]					
Total volume of waste generation	50,257	52,224	54,834	52,720	45,359
Municipally scheduled and collected	42,495	44,100	46,695	44,633	38,827
Directly brought to waste treatment facilities	6,776	5,806	5,373	5,090	3,803
Recyclable waste collected by community	986	2,318	2,765	2,996	2,729
Waste generated daily per person (in grams)	1,115	1,138	1,185	1,131	976
Total volume of processed waste	49,282	49,899	52,090	49,754	42,791
Direct incineration	36,192	38,048	40,304	38,486	33,799
Intermediate treatment for recycling, etc.	3,300	6,131	6,479	7,283	6,161
Direct recycling			2,224	2,541	2,170
Direct final disposal	9,790	5,721	3,084	1,444	662

1) Figures for FY2010 exclude those for Minamisanriku-*cho* (Miyagi Prefecture) for the Great East Japan Earthquake.

Source: Ministry of the Environment.

Figure 14.2
Recycling of Nonindustrial Waste [1)]



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

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

1) Figures for FY2010 exclude those for Minamisanriku-*cho* (Miyagi Prefecture) for the Great East Japan Earthquake.

Source: Ministry of the Environment.

2. Housing

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

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

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

Table 14.3
Housing Conditions

(Thousands)

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
2008	49,973	57,586	49,598	30,316	17,770	48,281	92.4

Source: Statistics Bureau, MIC.

Table 14.4
Occupied Dwellings by Type of Building

(Thousands)

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

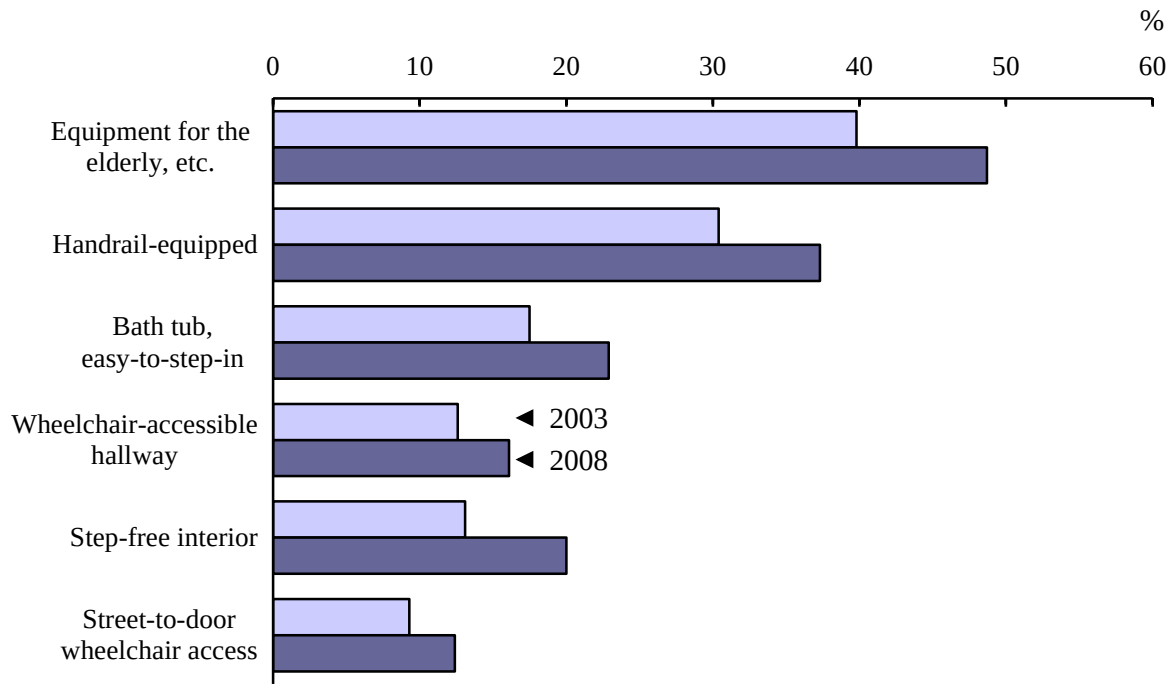
Source: Statistics Bureau, MIC.

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

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

A study of housing with accessibility equipment for the elderly and physically challenged persons showed that the number of housing units "with equipment for the elderly, etc." was 24.15 million, or 48.7 percent of all housing, up 8.9 percentage points from 18.66 million (39.8 percent) in 2003. Housing "equipped with handrails" accounted for 37.3 percent of all housing, and housing with a "step-free interior" made up 20.0 percent. Figures increased from 2003 in all categories of equipment surveyed.

Figure 14.3
Ratio of Housing with Barrier-Free Features



Source: Statistics Bureau, MIC.

3. Traffic Accidents

In 1970, the annual number of fatalities from traffic accidents hit a record high of 16,765, leading to the enactment of the Traffic Safety Measures Basic Law in the same year. Based on this law, the government has since promoted traffic safety measures in a comprehensive and systematic manner. As a result, the number of traffic accident fatalities declined to 4,612 in 2011, and they recorded their eleventh consecutive year of decrease. This represented less than one-third of that of 1970.

In 2011, traffic deaths per 100,000 population were 3.6 persons, while the number of persons killed per 10,000 motor vehicles was 0.6 persons.

Table 14.5
Traffic Accidents and Casualties

Year	Traffic accidents	Injuries	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
2010	725,773	896,208	4,863	0.6	3.8
2011	691,937	854,493	4,612	0.6	3.6

1) Death within 24 hours of the accident.
Source: National Police Agency.

4. Crime

In 2012, the reported number of penal code offenses (excluding cases related to traffic accidents) was 1.38 million, a decrease of 98,639 (6.7 percent) compared to the previous year. The proportion of thefts was the highest, accounting for approximately 75 percent, or 1.04 million cases (down 8.2 percent from the previous year).

The number of persons arrested for penal code offenses was 287,021 in 2012, a decrease of 18,610 (6.1 percent) compared to the previous year, marking an eight-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 31.7 percent in 2012.

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
2010	1,585,856	497,356	322,620	31.4	1,238.0
2011	1,480,760	462,535	305,631	31.2	1,158.7
2012	1,382,121	437,612	287,021	31.7	1,084.0

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 2012, involving the abuse of computer technology and telecommunications technology, was 7,334, up 27.7 percent from the previous year. This represented about an eightfold increase from the 913 cases registered in 2000.

The police organization consists of the National Public Safety Commission and the National Police Agency, both of which are state organizations, as well as the Prefectural Public Safety Commission and prefectural police, both of which are organizations under the authority of individual prefectures. As of April 1, 2012, the prefectural police operated police headquarters, police schools, 1,174 police stations, 6,240 police boxes (*Koban*) and 6,714 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, the birth rate has been falling, while the number of elderly people has been growing. As these trends continue, Japanese society faces the prospect of accelerating population decline. Meanwhile, its social security system is required to address various changes in the socioeconomic environment, including the expanding the fiscal deficit.

In April 2000, a long-term care insurance system was launched. This is due to the fact that the issue of elderly care, including the excessive burden of care resting on family members alone, had loomed as a social problem as the aging of society progressed. At the onset of the system (in 2000), the number of care service users was approximately 1.5 million. It subsequently jumped, coinciding with rapid rises in the aggregate long-term care insurance cost (long-term care insurance finances). Therefore, an all-round revision was made to the system in 2005, including putting greater emphasis on nursing care prevention. Moreover, a 2011 revision emphasizes building a comprehensive local care system (an integrated system to provide medical treatment, caregiving, prevention, and livelihood support to people in the places where they live). As of April 2012, the number of long-term care service users amounted to approximately 4.5 million.

In fiscal 2010, social security benefit expenditures totaled 103.5 trillion yen (up 3.6 percent from the previous fiscal year), a figure which amounted to 808,100 yen per person. The ratio of Japan's social security benefit expenditures to national income registered 29.6 percent. 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. Benefits for the aged accounted for approximately 70 percent of total social security benefit expenditures.

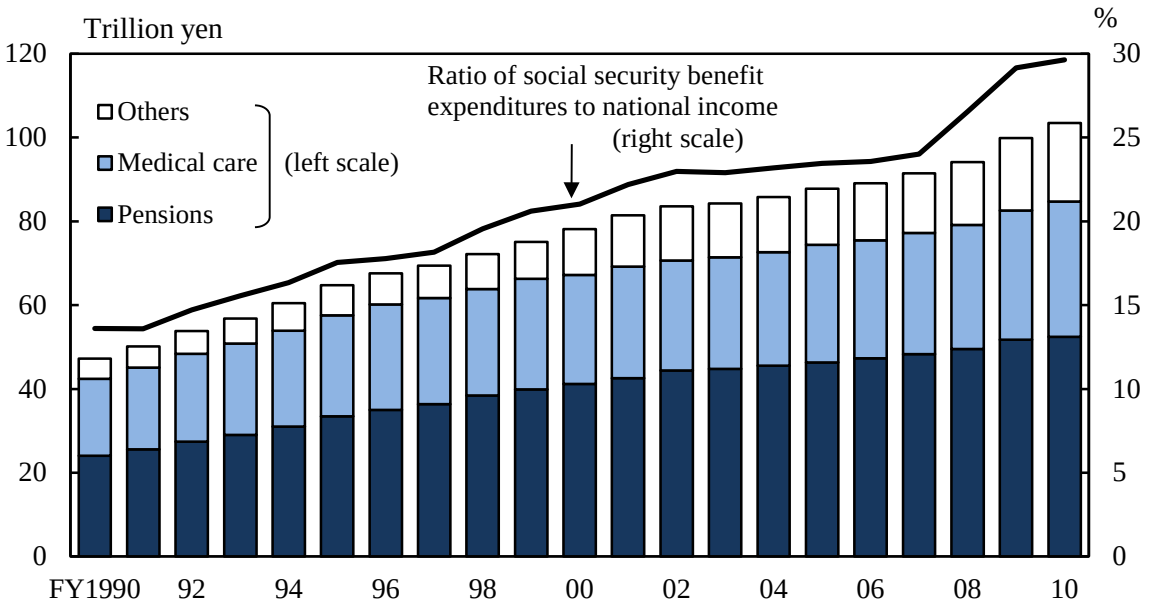
Table 15.1
Trends in Social Security Benefit Expenditures by Institutional Scheme

(Billion yen)

Item	FY2000	FY2005	FY2008	FY2009	FY2010
Total	78,139	87,777	94,104	99,861	103,488
Medical insurance	14,573	16,141	17,741	18,196	18,794
Health and medical services for the aged [1]	10,447	10,754	10,444	11,007	11,700
Long-term care insurance	3,262	5,815	6,587	7,051	7,434
Pension benefits	39,173	44,669	48,151	50,406	51,191
Employment insurance [2]	2,665	1,435	1,401	2,697	2,088
Workers' accident compensation insurance	1,019	953	946	922	907
Family allowance [3]	712	1,158	1,559	1,610	3,042
Public assistance	1,939	2,594	2,701	3,007	3,330
Social welfare	2,186	2,505	3,048	3,311	3,353
Public health	555	548	547	762	831
Gratuities for retired public employees	1,420	1,059	841	772	702
Aid for war victims	188	146	138	120	116

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.

Figure 15.1
Trends in Social Security Benefit Expenditures by Sector



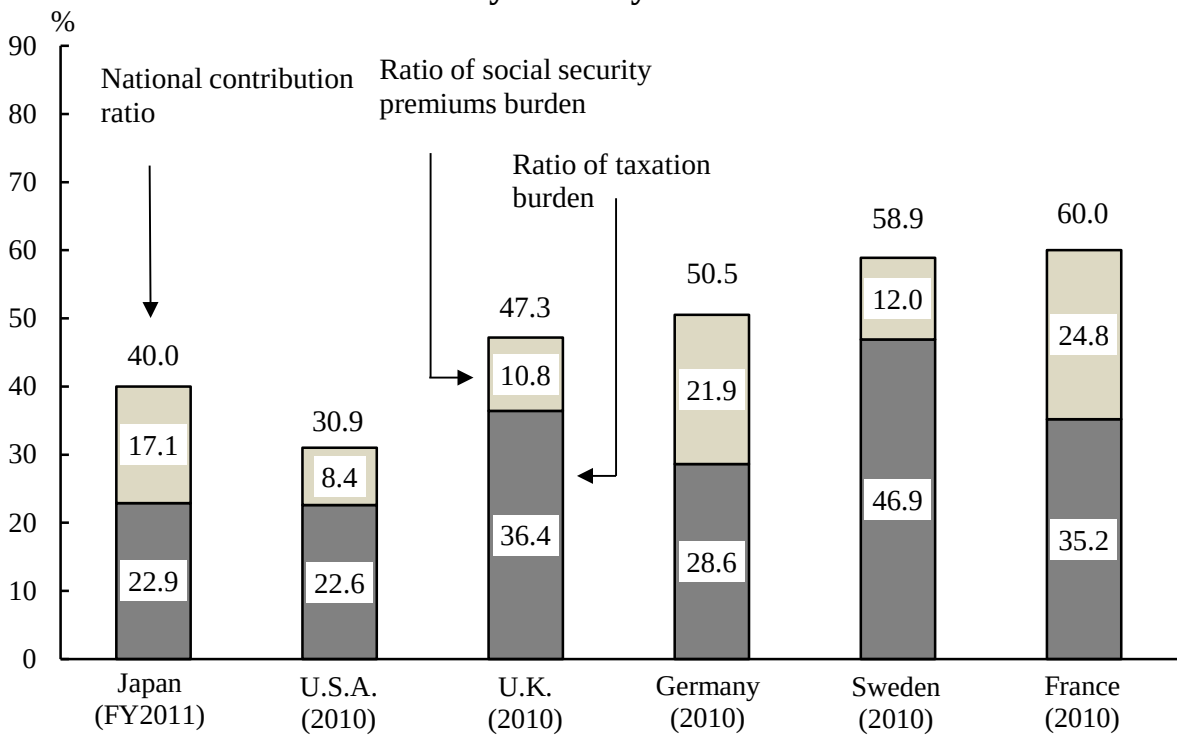
Source: Ministry of Health, Labour and Welfare.

In fiscal 2010, pensions accounted for half (50.7 percent) of total social security benefit expenditures, while medical care accounted for 31.2 percent, and social welfare and others for 18.1 percent. Social security benefit expenditures are forecasted to continue growing, and are projected to reach 149 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 112.2 trillion yen in fiscal 2010. This was financed by 57.8 trillion yen from social insurance contributions, 40.1 trillion yen from taxes and 14.2 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 2011 (taxation burden: 22.9 percent; social security premiums: 17.1 percent), up 1.5 percentage points from 38.5 percent in fiscal 2010. The national contribution ratio in 2010 was 30.9 percent in the U.S.A., 47.3 percent in the U.K., and 58.9 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, 2011)

Type of institutions	Institutions	Users	Workers [1]
Total	50,129	2,684,538	769,777
Institutions under the Public Assistance Act [2]	294	19,342	6,232
Welfare for the elderly	4,827	136,029	40,446
Nursing homes	893	56,381	15,847
Welfare centers	1,933	-	6,220
Support for the physically challenged, etc.	4,263	105,317	71,572
Rehabilitation for the physically challenged	286	10,743	5,857
Rehabilitation for the mentally challenged	1,127	50,827	20,975
Rehabilitation for the mentally ill	366	6,288	2,134
Support for social participation of the physically challenged	318	...	2,758
Protection for women	45	411	364
Child welfare [3]	31,599	2,157,692	523,339
Day nurseries	21,751	2,084,136	447,013
Maternal and child welfare	60	...	251
Others [4]	6,944	197,889	95,850
Pay nursing homes for the elderly	4,640	179,505	90,439

1) Full time equivalent. 2) "Users" and "workers" exclude medical care aid institutions. 3) "Users" excludes homes of living assistance for mothers and children, and maternity homes; "workers" excludes maternity homes, and children's playgrounds. 4) "Users" excludes those of homes for the visually impaired, and facilities for medical treatment that is free of charge or low-cost; "workers" excludes those of facilities for medical treatment that is free of charge or low-cost.
Source: Ministry of Health, Labour and Welfare.

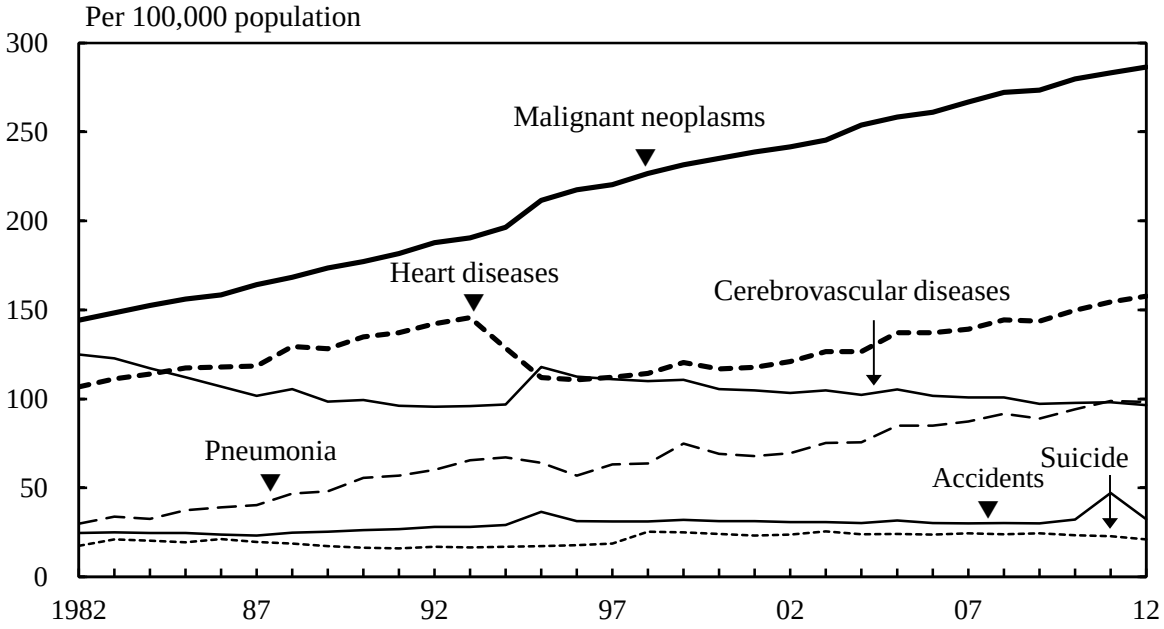
2. Health Care and Public Hygiene

Japan has a universal health insurance regime to ensure that anyone can receive necessary medical treatment. Under this regime, every citizen enters a publicly regulated medical insurance system, such as employees' health insurance or national health insurance.

This medical care system has contributed to Japan's achieving the highest life expectancy in the world, as well as a high standard of healthcare along with improvements in the living environment and better nutrition. 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 86.4 years for women and 79.9 years for men in 2012. Japan's life expectancy remains the highest level in the world. Japan's infant mortality rate was 2.2 per 1,000 births in 2012.

Figure 15.3
Death Rates by Major Cause



Source: Ministry of Health, Labour and Welfare.

The death rate was 997.4 per 100,000 population in 2012. The leading cause of death was malignant neoplasms (286.4 per 100,000 population), followed by lifestyle diseases such as heart diseases (157.7; excluding hypertensive diseases), in which people's daily diet and behavior are significant factors therefore, and pneumonia (98.3). Malignant neoplasms became the leading cause of death in 1981. The death rate by malignant neoplasms has continued to increase since, reaching 28.7 percent of all deaths in 2012.

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 was 26,400 in 2012, and had remained at the same level of around 30,000 a year since 1998. In 2012, suicide became the leading cause of deaths for people aged between 15 and 39.

In the past, humanity faced the threat of epidemic diseases such as smallpox and bubonic plague. Today, infectious diseases that especially require countermeasures are new strains of influenza. Japan has taken measures to combat such new strains in Japan and abroad, including R&D on vaccines against them, through steps such as establishing the Influenza Virus Research Center (a WHO-designated center) inside the National Institute of Infectious Diseases.

In terms of healthcare provision, Japan had 292,338 physicians engaged in medical care, or 228.3 physicians per 100,000 population, in 2010. 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	2002	2004	2006	2008	2010
Number					
Physicians	260,500	267,943	275,127	283,915	292,338
Dentists	91,783	94,022	95,944	98,063	100,161
Pharmacists	212,720	223,564	234,429	249,251	258,713
Nurses and Assistant nurses	1,097,326	1,146,181	1,194,121	1,252,224	1,320,871
Rates per 100,000 population					
Physicians	204.3	209.7	215.1	221.7	228.3
Dentists	72.0	73.6	75.0	76.6	78.2
Pharmacists	166.9	175.0	183.3	194.6	202.0
Nurses and Assistant nurses	860.7	896.9	933.6	977.7	1,031.5

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

The number of hospital beds in Japan (excluding those in medical clinics and dental clinics) totaled 1,238.7 per 100,000 population in 2011.

Table 15.4
Number of Medical Care Institutions and Beds

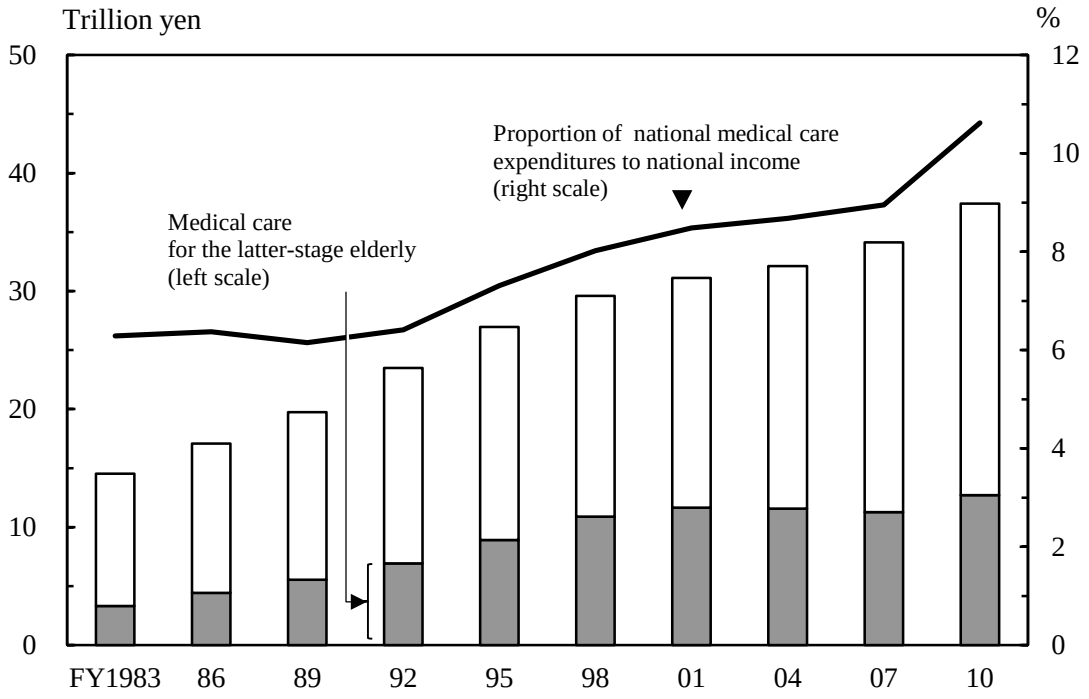
Type of Institution	2002	2005	2008	2010	2011
Institutions					
Number					
Total	169,079	173,200	175,656	176,878	176,308
Hospitals	9,187	9,026	8,794	8,670	8,605
Medical clinics	94,819	97,442	99,083	99,824	99,547
Dental clinics	65,073	66,732	67,779	68,384	68,156
Rates per 100,000 population					
Total	132.7	135.6	137.6	138.1	138.0
Hospitals	7.2	7.1	6.9	6.8	6.7
Medical clinics	74.4	76.3	77.6	78.0	77.9
Dental clinics	51.1	52.2	53.1	53.4	53.3
Beds					
Number					
Total	1,839,376	1,798,637	1,756,115	1,730,339	1,712,539
Hospitals	1,642,593	1,631,473	1,609,403	1,593,354	1,583,073
Medical clinics	196,596	167,000	146,568	136,861	129,366
Dental clinics	187	164	144	124	100
Rates per 100,000 population					
Total	1,443.4	1,407.7	1,375.3	1,351.2	1,340.0
Hospitals	1,289.0	1,276.9	1,260.4	1,244.3	1,238.7
Medical clinics	154.3	130.7	114.8	106.9	101.2
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 2010, the expenditures totaled 37.4 trillion yen or 10.71 percent of Japan's national income. The cost of medical care per person averaged 292,200 yen in fiscal 2010.

Medical costs for treating the latter-stage elderly in fiscal 2010 were 12.7 trillion yen, or about one-third of national medical care expenditure, and accounted for 3.61 percent of the national income. The per-capita cost of medical care for the latter-stage elderly averaged 904,795 yen for the year. Rising medical costs for the latter-stage 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

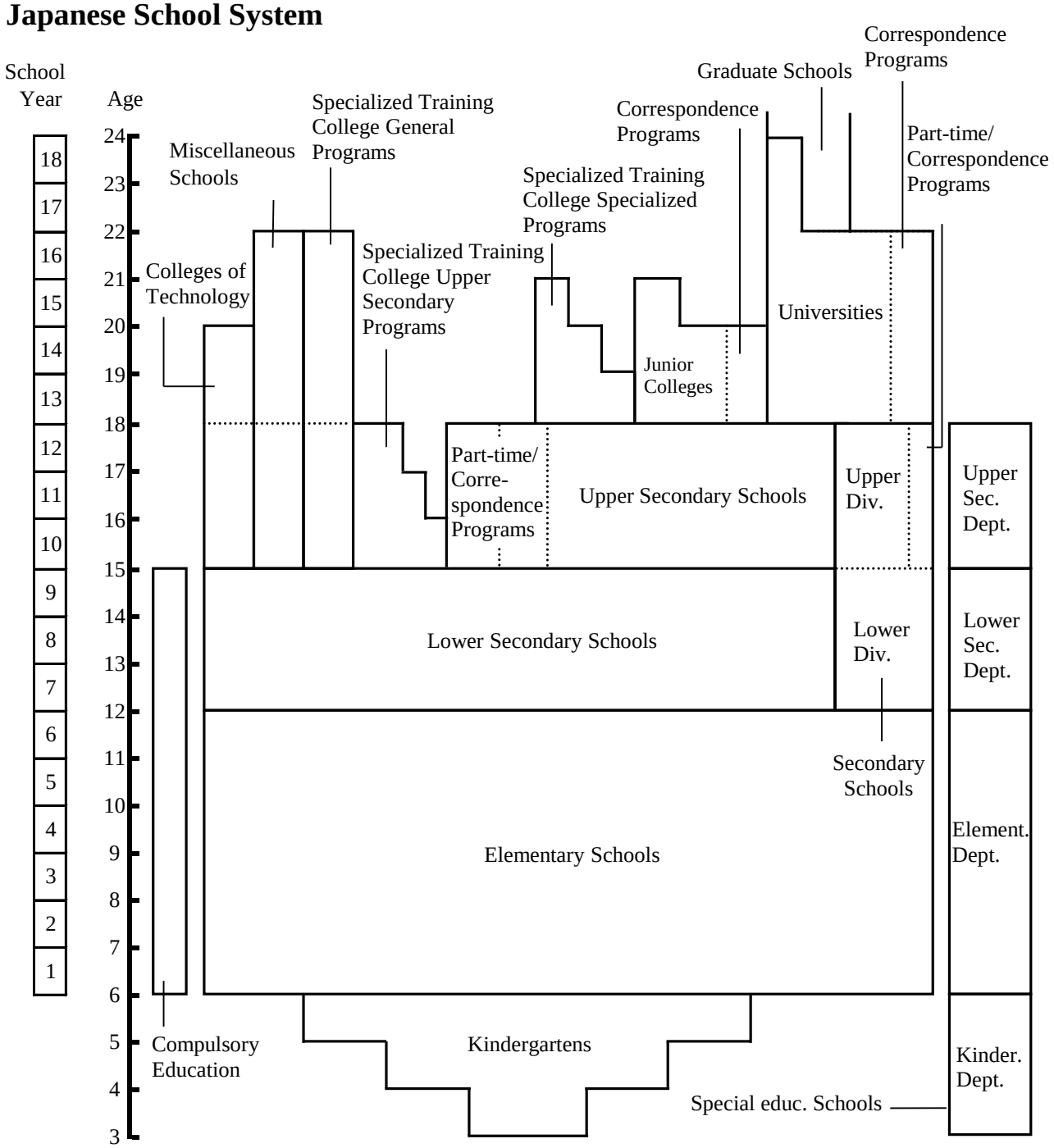
Japan's primary and secondary education is based on a 6-3-3 system: 6 years in elementary school, 3 years in lower secondary school, and 3 years in upper secondary school. The period of compulsory schooling is the 9 years at elementary and lower secondary schools. Higher education institutions are universities, junior colleges, and colleges of technology. Other education establishments include kindergartens, which provide pre-school education, and schools for special needs education. 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, 2012)

Type of institution	Schools				Full-time teachers (1,000)	Students (1,000)	
	Total	National	Public	Private		Males	Females
Kindergartens	13,170	49	4,924	8,197	111	814	791
Elementary schools	21,460	74	21,166	220	419	3,462	3,303
Lower secondary schools	10,699	73	9,860	766	254	1,816	1,737
Upper secondary schools	5,022	15	3,688	1,319	237	1,692	1,664
Secondary schools	49	4	28	17	2	14	15
Schools for special needs education [1)]	1,059	45	1,000	14	76	85	45
Colleges of technology	57	51	3	3	4	49	10
Junior colleges	372	-	22	350	9	17	125
Universities	783	86	92	605	178	1,670	1,206
Graduate schools	621	86	75	460	105	183	80
Specialized training colleges	3,249	10	199	3,040	40	292	358
Miscellaneous schools	1,392	-	9	1,383	9	61	59

1) Schools for mentally and/or physically challenged children, inclusive of kindergarten to upper secondary school levels.
Source: Ministry of Education, Culture, Sports, Science and Technology.

Figure 16.1
Japanese School System



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

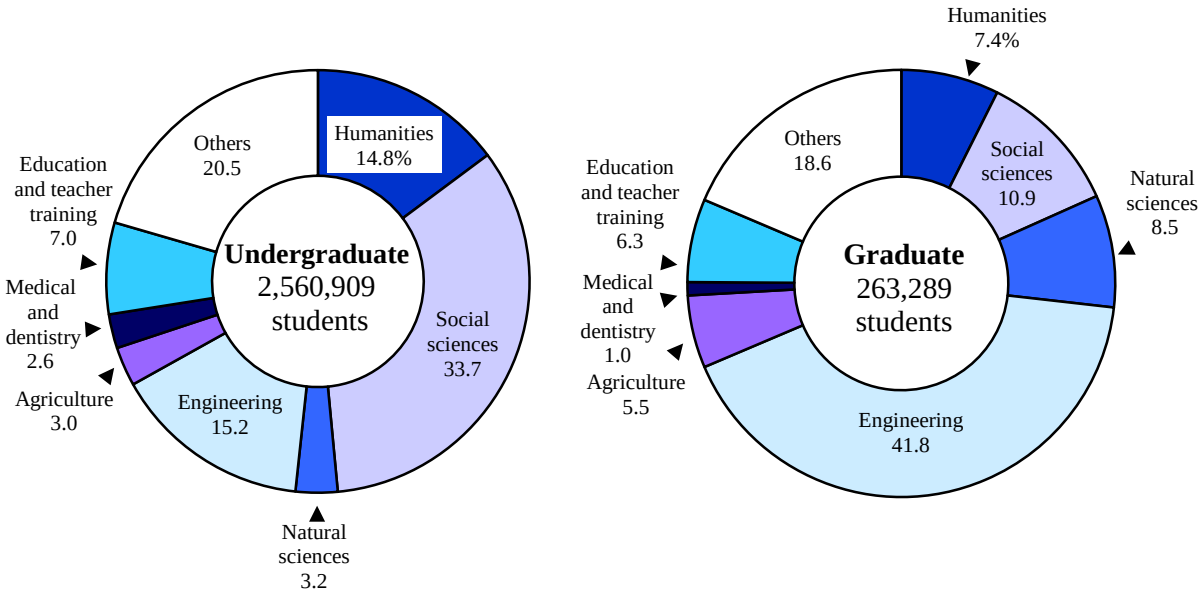
Of the March 2012 upper secondary school graduates, 53.6 percent went straight on to enter a university or junior college. The ratio of upper secondary school graduates who entered a university, junior college, etc. in 2012 was 56.2 percent (56.8 percent of male and 55.6 percent of female graduates), including graduates from previous years.

Table 16.2
Number of University Students (as of May 1)

	2000	2005	2010	2011	2012
Total	2,740,023	2,865,051	2,887,414	2,893,489	2,876,134
Undergraduate	2,471,755	2,508,088	2,559,191	2,569,349	2,560,909
Graduate schools	205,311	254,480	271,454	272,566	263,289
Others [1)]	62,957	102,483	56,769	51,574	51,936
Females	992,312	1,124,900	1,185,580	1,200,182	1,206,134
Undergraduate	913,222	1,009,217	1,077,782	1,094,283	1,101,644
Graduate schools	54,216	75,734	82,133	82,534	80,460
Others [1)]	24,874	39,949	25,665	23,365	24,030
National	624,082	627,850	625,048	623,304	618,134
Public	107,198	124,910	142,523	144,182	145,578
Private	2,008,743	2,112,291	2,119,843	2,126,003	2,112,422

1) Auditing students, non-degree students, research students, etc.
Source: Ministry of Education, Culture, Sports, Science and Technology.

Figure 16.2
University Students by Major Subject (as of May 1, 2012)

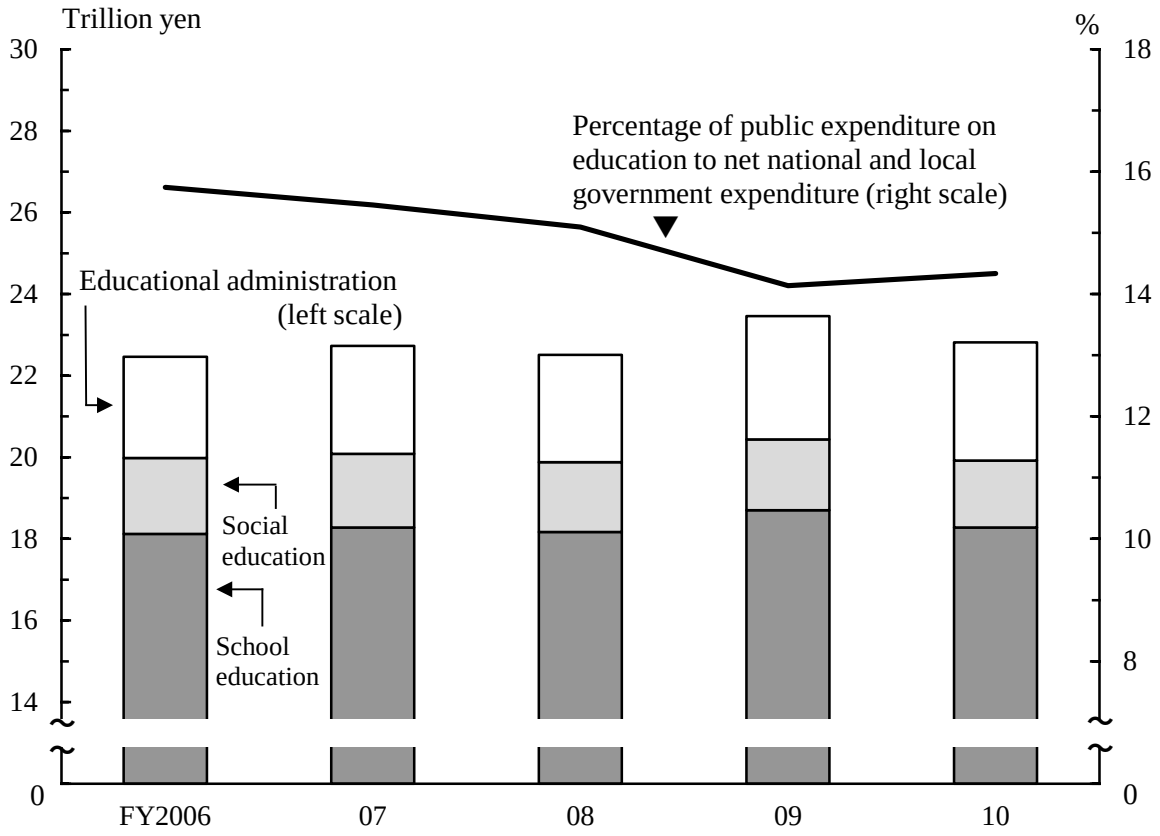


Source: Ministry of Education, Culture, Sports, Science and Technology.

As of May 1, 2012, a total of 110,518 foreign students were enrolled in Japanese junior colleges, universities, and graduate schools. Of the total foreign students, 91.0 percent were from Asia, including 69,117 from China, 14,097 from the Republic of Korea and 3,042 from Taiwan.

Fiscal 2010 public expenditure on education in Japan was 22.8 trillion yen, which was equivalent to 14.3 percent of the net expenditure of national and local governments. Fiscal 2010 school expenditure by households with children attending public school averaged 54,929 yen per elementary school pupil, 131,501 yen per lower-secondary school student and 237,669 yen per upper-secondary school student.

Figure 16.3
Public Expenditures on Education



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

2. Lifelong Learning

In recent years, people's demands for learning are increasing and the contents are becoming more diverse and advanced. This has raised more and more expectations over the realization of a "Lifelong Learning Society" in which people are able to utilize their learning outcomes.

Table 16.3
Social Education Facilities
(as of October 1, 2011)

Facilities	Number
Citizens' public halls	14,681
Libraries	3,274
Museums	1,262
General museums	143
Science museums	109
Historical museums	448
Art museums	452
Outdoor museums	18
Zoological gardens	32
Botanical gardens	10
Zoological and botanical gardens	8
Aquariums	42
Centers for children and youths	1,048
Women's education centers	375
Culture halls	1,866
Lifelong learning centers	409

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

Table 16.4
Sports Facilities
(as of October 1, 2011)

Facilities	Public	Private
Total	47,571	15,532
Fields and tracks	913	17
Baseball grounds	6,279	143
Other ball game grounds	1,415	325
Playgrounds	7,346	240
Swimming pools, indoor	1,615	1,607
Swimming pools, outdoor	2,093	87
Gymnasiums	6,949	356
Judo and *Kendo* gyms	2,364	405
Tennis courts, indoor	194	322
Tennis courts, outdoor	4,963	886
Physical training gyms	1,681	1,479
Dance halls	113	1,269
Golf courses	162	2,182
Golf practice ranges	28	1,641
Camping sites	1,565	379
Gate ball and croquet fields	2,030	139

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

Today, in order to develop a society where people have the freedom to continue learning throughout their lives, efforts are being made to develop learning opportunities such as school education, social education, cultural activities, sports activities, recreational activities, volunteer activities, and corporate in-house education. 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.

3. Leisure Activities

The results of the 2011 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 27 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 14 minutes of free time was spent on hobbies, sports, learning for personal development, volunteer activities, etc.

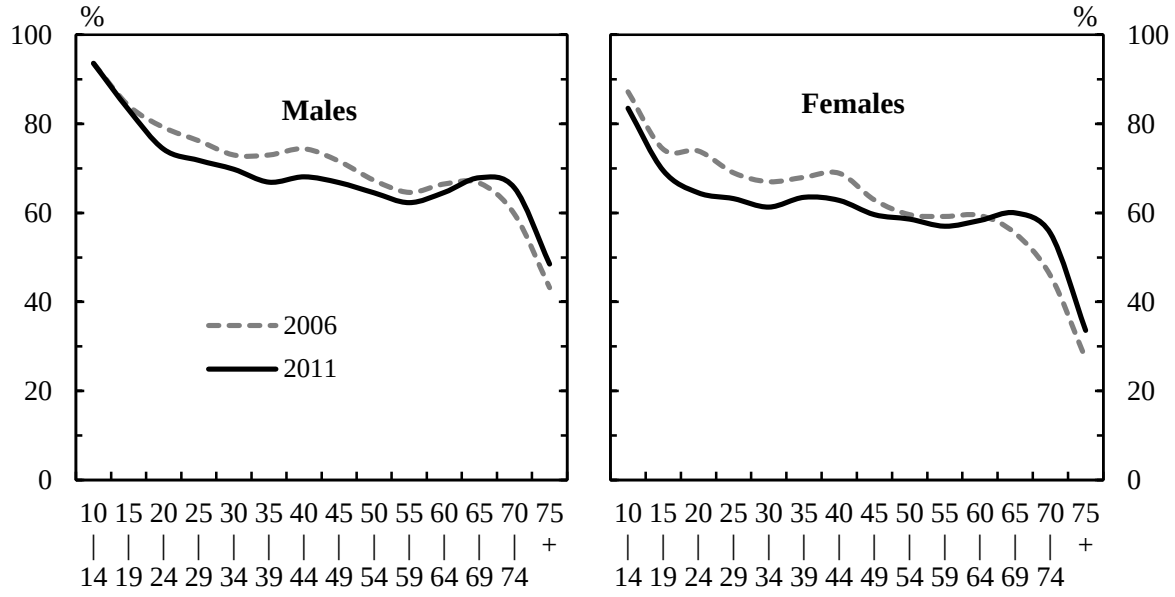
Table 16.5
Major Leisure Activities by Gender (10 years old and over) (2011)

Leisure Activities	Total	Males	Females
Free time per day (hours and minutes)	6:27	6:38	6:16
Active leisure time (hours and minutes)	1:14	1:28	1:04
Participation rate (%) [1]			
Hobbies and amusements	84.8	84.8	84.9
Sports [2]	63.0	67.9	58.3
Learning, self-education and training [2]	35.2	34.3	36.1
Travel (domestic) [3]	57.9	57.2	58.6
Travel (abroad) [3]	8.9	8.5	9.2
Volunteer activities	26.3	24.5	27.9

1) Total participants / Population (10 years old and over) × 100 2) Excluding school and professional activity. 3) 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 63.0 percent. The most popular sport for both genders was "walking or light physical exercise" (men: 31.1 percent; women: 39.2 percent). Other popular sports for men were "bowling" (15.1 percent) and "golf (including golf practice range)" (13.7 percent). For women, such sports were "bowling" (10.6 percent) and "swimming" (9.7 percent). The participation rate for "learning, self-education, and training (excluding school and professional activities)" was 35.2 percent. Men preferred "computing etc." (14.8 percent) and "foreign language" (11.0 percent), while women preferred "cooking, sewing or home management, etc." (12.6 percent), as well as "arts and culture" (12.3 percent).

Figure 16.4
Participation Rates for Sports by Gender and Age Group



Source: Statistics Bureau, MIC.

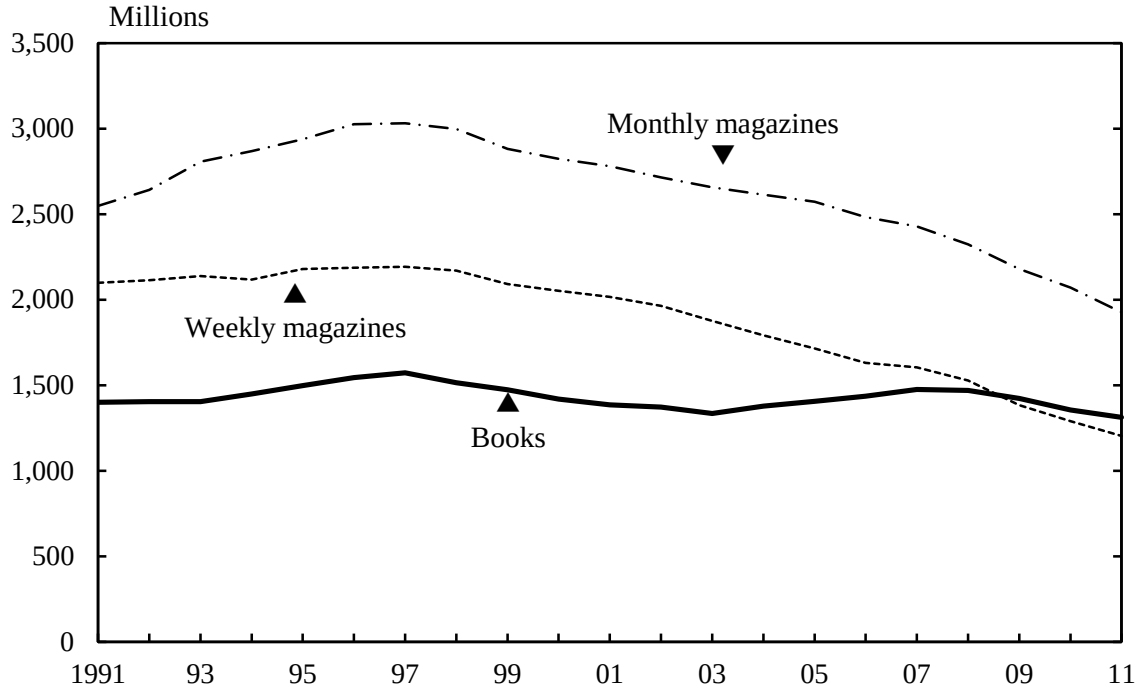
4. Publishing and Mass Media

The total number of books and magazines published in Japan during 2011 was 1.31 billion and 3.13 billion, respectively, of which 1.93 billion were monthlies and 1.20 billion were weeklies.

A total of 78,863 new book titles were released in 2011. The number of magazine titles published was 3,949 (including 2,202 monthlies and 108 weeklies) at the end of March 2011. In recent years, the spread of electronic media, such as the Internet and e-books, that compete with traditional print media has had a heavy impact. The publishing industry is facing a major turning point.

A total of 118 daily newspapers were in circulation, and the penetration was 0.88 newspapers per household as of October 2012.

Figure 16.5
Trends in Number of Publications



Source: Shuppan News Co., Ltd.

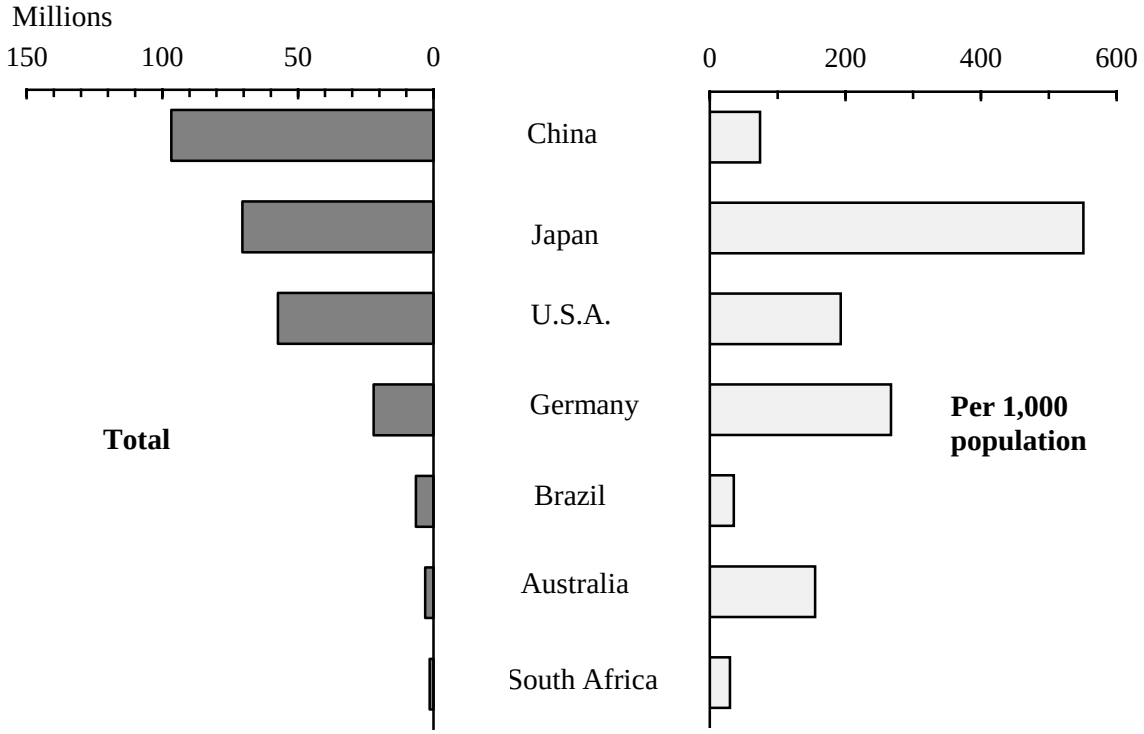
Table 16.6
Number of New Publications

(Titles)

Subject	1995	2000	2005	2010	2011
Total	58,310	65,065	78,304	77,773	78,863
General works	2,794	2,587	2,551	2,080	1,912
Philosophy	2,731	2,997	3,763	4,381	4,292
General history	3,917	4,634	5,102	4,969	4,655
Social sciences	12,578	14,099	16,201	15,757	15,732
Natural sciences	4,460	5,218	6,226	6,780	6,668
Technology and engineering	4,774	6,105	8,104	8,499	8,583
Industry and commerce	2,160	3,000	3,337	3,478	3,456
Art	7,540	8,895	10,884	11,535	12,454
Languages	1,391	1,766	2,063	1,884	1,948
Literature	11,427	11,484	13,595	12,879	12,989
Children's books	3,510	3,334	5,064	4,675	4,592
School textbooks	1,028	946	1,414	856	1,582

Source: Shuppan News Co., Ltd.

Figure 16.6
Newspaper Circulation by Country (2004)

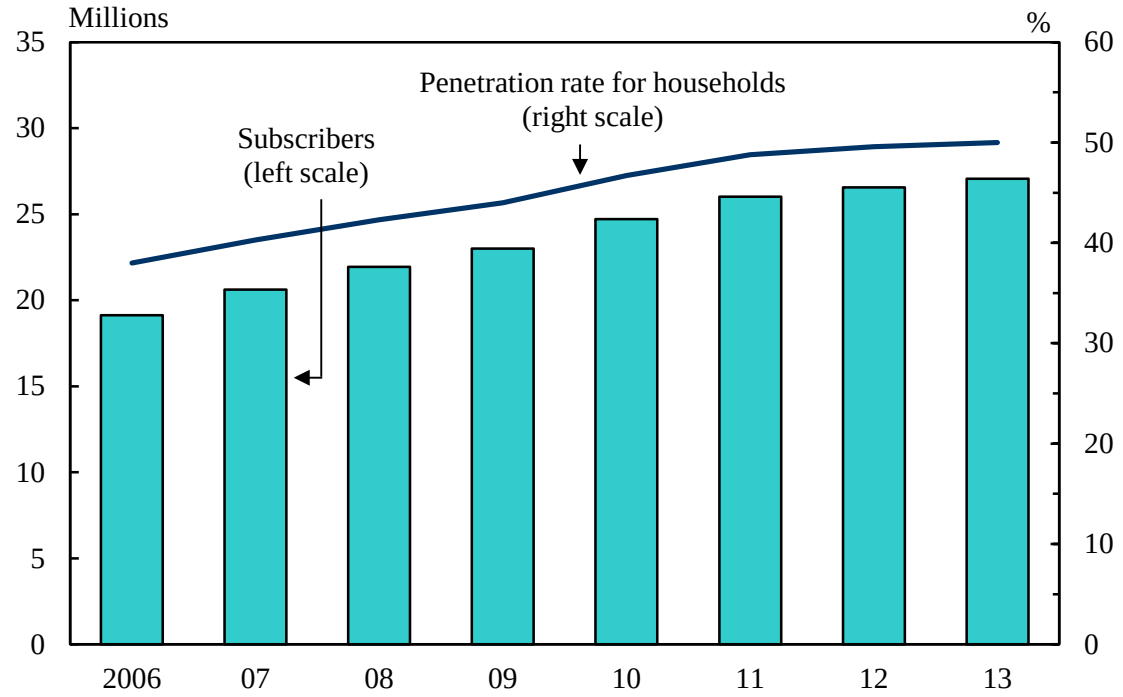


Source: UNESCO; World Association of Newspapers.

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. As of March 31, 2012, analog broadcasting ended and was completely replaced with terrestrial digital broadcasting in all parts of Japan. Satellite broadcasters offer an increasing number of channels through, for example, new digital broadcasting which began in March 2002.

Figure 16.7
Subscribers of Cable Television Service
(Self-originating broadcasting using licensed facilities) 1)



1) As of March each year.
Source: Ministry of Internal Affairs and Communications.

Subscribers of cable television services (self-originating broadcasting using licensed facilities) have increased to 27.1 million households, or 50.0 percent of all households in March 2013.

In 2012, advertising expenditures on the four major media types in Japan (newspapers, magazines, radio and television) totaled 2.8 trillion yen, recording the first increase in eight years. This accounted for 47.2 percent of total 2012 advertising expenditures, which were 5.9 trillion yen. Internet advertising expenditure made up 14.7 percent, up 7.7 percent from the previous year.

Table 16.7
Advertising Expenditures by Medium

Year	Total	News-papers	Maga-zines	Radio	Tele-vision	Satellite media-related	Internet	Others
Advertising expenditures (billion yen)								
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
2010	5,842.7	639.6	273.3	129.9	1,732.1	78.4	774.7	2,214.7
2011	5,709.6	599.0	254.2	124.7	1,723.7	89.1	806.2	2,112.7
2012	5,891.3	624.2	255.1	124.6	1,775.7	101.3	868.0	2,142.4
Percentage distribution (%)								
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
2010	100.0	11.0	4.7	2.2	29.6	1.3	13.3	37.9
2011	100.0	10.5	4.4	2.2	30.2	1.6	14.1	37.0
2012	100.0	10.6	4.3	2.1	30.2	1.7	14.7	36.4

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 May 1, 2013)

Type of cultural properties	Number	
Designated important cultural properties	12,874	a) 1,085
Fine and applied arts	10,476	a) 868
Buildings	2,398	a) 217
Historic sites, places of scenic beauty and natural monuments	3,088	b) 172
Historic sites	1,709	b) 61
Places of scenic beauty	374	b) 36
Natural monuments	1,005	b) 75
Important tangible folk cultural properties	213	
Important intangible folk cultural properties	281	
Important intangible cultural properties		
Recognized individuals	79	
Performing arts	38	
Craft techniques	41	
Recognized holding groups	26	
Performing arts	12	
Craft techniques	14	
Traditional building preservation areas	102	

a) National treasures only. b) Specially designated places only.
Source: Ministry of Education, Culture, Sports, Science and Technology.

As of May 1, 2013, 12,874 items were assigned as designated important cultural properties, of which 1,085 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 June 2011, Ogasawara Islands, Tokyo, was inscribed as the 15th World Heritage Site in Japan. Located approximately 1,000 kilometers south of the heart of Tokyo, Ogasawara Islands comprise a group of approximately 30 islands that vary in size. Every one of those islands is an oceanic island that has never been connected to any continent since its formation and is, therefore, the habitat of a great number of living creatures native to it, a fact that gave the islands the nickname "Galapagos of the Orient."

This was then followed by "Hiraizumi - Temples, Gardens and Archaeological Sites Representing the Buddhist Pure Land" being named as the 16th World Heritage Site in June 2011. It consists of temples, former temple sites, gardens and other sites. All those temples were built with the involvement of the Oshu Fujiwara clan, which flourished in the Tohoku region in the 12th century throughout four generations.

In June 2013, "Fujisan [Mt. Fuji], Sacred Place and Source of Artistic Inspiration" straddling the border between Yamanashi and Shizuoka Prefectures, was designated Japan's 17th World Heritage Site. A graceful, conical stratovolcano, Mt. Fuji is Japan's highest mountain. It is famed worldwide as a symbol of Japan. The mountain's majestic, sublime form has inspired the development of the Japanese faith in nature and Japan's unique artistic culture. The mountain inspired the development of Japanese belief in sacred mountains, as well as unique Japanese artistic culture with outstanding universal value, such as *ukiyo-e* by KATSUSHIKA Hokusai and UTAGAWA Hiroshige, which were influential far beyond Japan's borders in the late 19th century. Across many centuries, Mt. Fuji has not only shown a profound relationship with various aspects of one country's culture and expressed the cultural tradition of the sacred mountain, it has become famed as a striking example of the pattern for the world's "great mountains." It is thus a mountain with outstanding universal value.

Table 16.9
Heritage Sites Inscribed on the World Heritage List (as of June 22, 2013)

Year	Type of heritage	World heritage	Prefecture
1993	Cultural	Buddhist Monuments in the Horyu-ji Area	Nara
	Cultural	Himeji-jo (castle)	Hyogo
	Natural	Yakushima (island)	Kagoshima
	Natural	Shirakami-Sanchi (mountains)	Aomori, Akita
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
2011	Natural	Ogasawara Islands	Tokyo
	Cultural	Hiraizumi-Temples, Gardens and Archaeological Sites Representing the Buddhist Pure Land	Iwate
2013	Cultural	Fujisan, Sacred Place and Source of Aristic Inspiration	Shizuoka, Yamanashi

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

In 2006, the UNESCO Convention for the safeguarding of the intangible cultural heritage entered into force. As of April 2013, Japan has 21 entries on its list, including: *nogaku* theater, *ningyo johruri bunraku* puppet theater and *kabuki* theater (the kind of *kabuki* performed by a traditional method of acting and directing).

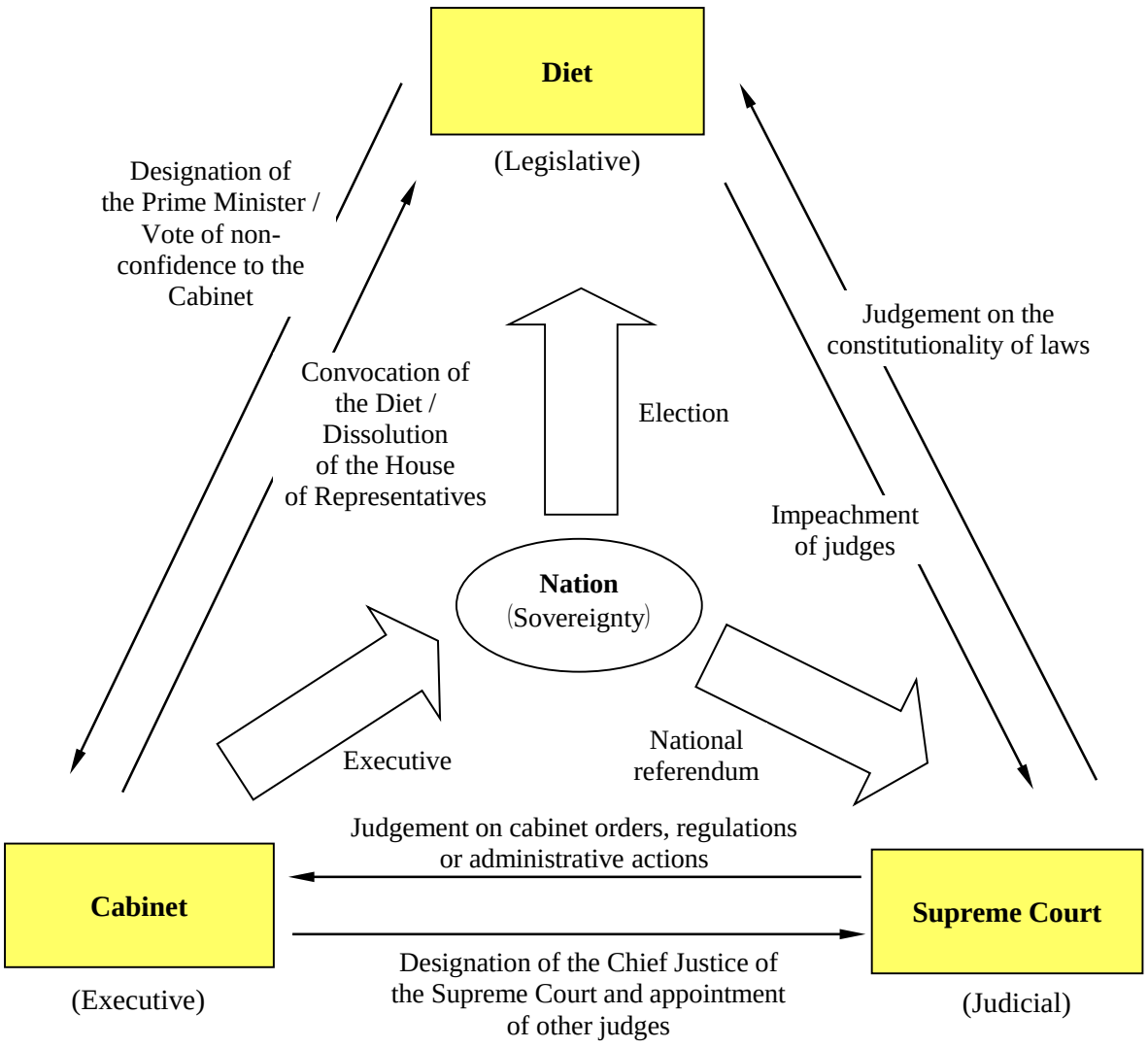
Chapter 17

Government System

1. Division of Powers

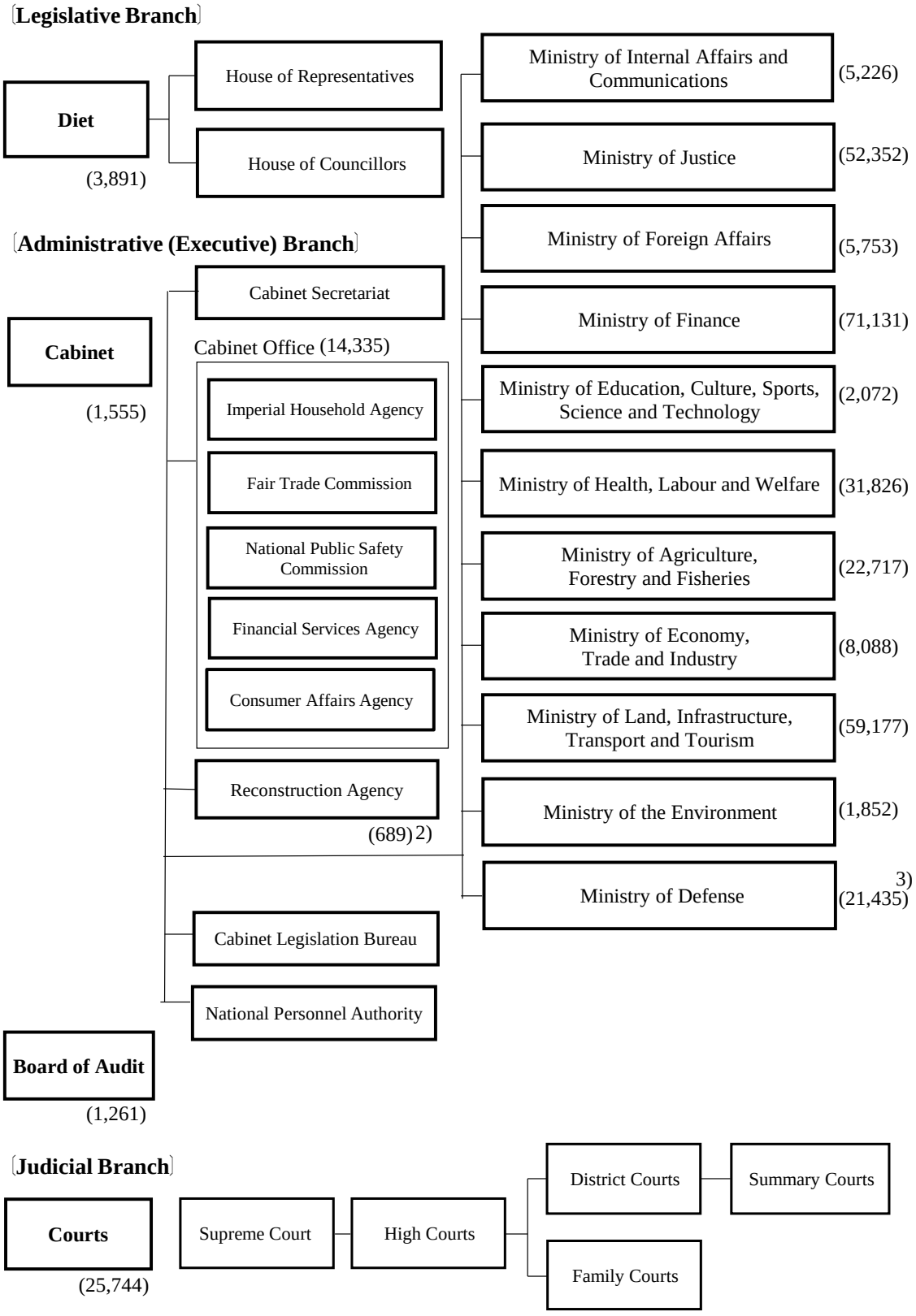
The Japanese Constitution, which went into effect on May 3, 1947, is based on three core principles: sovereignty of the people, respect for fundamental human rights and pacifism. To control governmental power effectively through checks and balances, governmental power is separated into three independent 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



Source: Prime Minister of Japan and His Cabinet.

Figure 17.2
Government Organization of Japan [1] (FY2013)



1) Figures in parentheses refer to budgetary fixed number of national government employees. 2) Of the 689 employees, 160 are from the Reconstruction Agency and 529 are from other ministries. 3) Excluding the number of the personnel of the Self-Defense Forces.
Source: Ministry of Internal Affairs and Communications; Ministry of Finance.

2.The Legislative Branch

The Diet is the highest organ of state power, and is the sole law-making organ of the State. The Diet consists of the House of Representatives and the House of Councillors. Both Houses consist of elected members, representative of all the people.

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

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

The House of Representatives has 480 members. Of these, 300 are elected under a single-seat 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 December 2012. The House of Councillors has 242 members, of whom 96 are elected through proportional representation, and 146 are elected as representatives from 47 electoral districts of the nation, i.e. prefectures. The last regular election was held in July 2013.

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
Number of the Diet Members by Political Group

House of Representatives (as of June 3, 2013) Membership 480, Vacancies 0			House of Councillors (as of July 23, 2013) Membership 242, Vacancies 5		
Name	Males	Females	Name	Males	Females
Incumbents	441	39	Incumbents	193	44
Liberal Democratic Party	271	23	The Democratic Party of Japan, and The Shin-Ryokufukai	72	14
The Democratic Party of Japan, and Club of Independents	53	3	Liberal Democratic Party	68	15
Japan Restoration Party	48	5	New Komeito	16	3
New Komeito	28	3	Your Party	12	1
Your Party	18	0	People's Life Party	5	3
Japanese Communist Party	7	1	Japanese Communist Party	4	2
People's Life Party	5	2	Green Wind	1	3
Social Democratic Party	2	0	Social Democratic Party	3	1
			Japan Restoration Party	2	1
			New Renaissance Party	2	0
Independents	9	2	Independents	8	1

Source: House of Representatives; House of Councillors.

3. The Executive Branch

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

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

Table 17.2
Successive Prime Ministers

Date [1)]	Name	Date [1)]	Name
Dec. 26, 2012	Shinzo ABE	Apr. 26, 2001	Junichiro KOIZUMI
Sep. 2, 2011	Yoshihiko NODA	Apr. 5, 2000	Yoshiro MORI
Jun. 8, 2010	Naoto KAN	Jul. 30, 1998	Keizo OBUCHI
Sep. 16, 2009	Yukio HATOYAMA	Jan. 11, 1996	Ryutaro HASHIMOTO
Sep. 24, 2008	Taro ASO	Jun. 30, 1994	Tomiichi MURAYAMA
Sep. 26, 2007	Yasuo FUKUDA	Apr. 28, 1994	Tsutomu HATA
Sep. 26, 2006	Shinzo ABE	Aug. 9, 1993	Morihiro HOSOKAWA

1) Date of initial cabinet formation.
Source: Prime Minister of Japan and His Cabinet.

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 Act 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, Japan uses a three-tiered judicial system. 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 system allows a case to be heard and ruled on up to three times in principle, should a party involved in the case so desire. The Summary Courts and Family Courts handle simple cases, domestic relations and cases involving juveniles as first instances.

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

A new *saiban-in* (lay judge) system began in May 2009. This is a system under which citizens participate in criminal trials as judges to determine, together with professional judges, whether the defendant is guilty or not and, if found guilty, what sentence should apply. What is hoped for is that the public's participation in criminal trials will make citizens feel more involved in the justice process and make the trials easier to understand,

thus leading to the public's greater trust in the justice system. A total of 3,173 people were tried in *saiban-in* trials held between the start of the system and December 2011.

Table 17.3
Judicial Cases Newly Commenced, Terminated or Pending (All courts)

(Thousands)

Year	Civil and administrative cases			Criminal cases [1]		
	Commenced	Terminated	Pending	Commenced	Terminated	Pending
1995	2,411	2,390	697	1,555	1,555	31
2000	3,052	3,062	780	1,638	1,636	43
2005	2,713	2,827	576	1,568	1,572	47
2010	2,179	2,241	536	1,158	1,161	36
2011	1,985	2,046	476	1,106	1,107	35

Year	Domestic cases			Juvenile cases [1]		
	Commenced	Terminated	Pending	Commenced	Terminated	Pending
1995	412	414	66	296	299	49
2000	561	555	78	286	288	49
2005	718	713	99	237	238	32
2010	815	815	106	165	168	25
2011	816	815	107	153	153	25

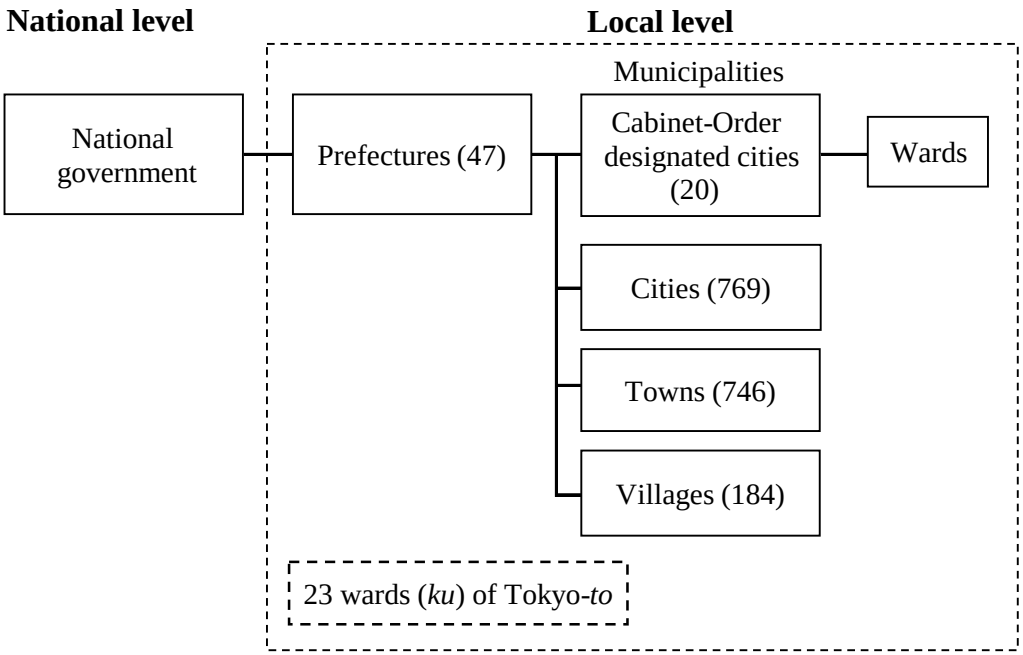
1) Persons involved.
Source: Supreme Court.

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 January 1, 2013, Japan has 47 prefectures, within which there are 1,719 municipalities, plus the 23 wards (*ku*) in metropolitan Tokyo. In order to strengthen the administrative and fiscal foundation of the municipalities, municipal mergers were promoted by law. Consequently, the number of municipalities was reduced by nearly half from the 3,232 existing at the end of March 1999.

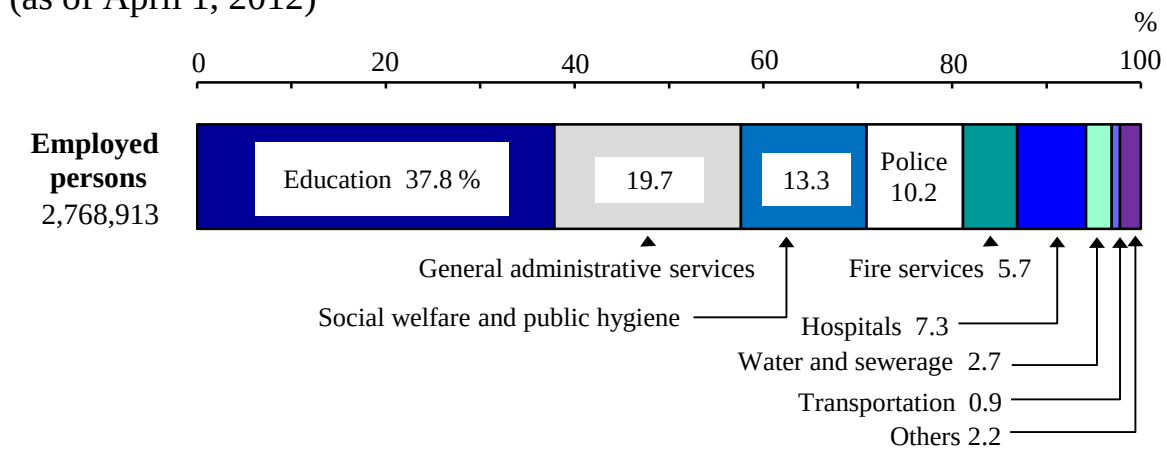
Municipalities that satisfy certain population criteria (i.e., 500,000 people or more) are eligible for designation as "Cabinet-Order designated cities." This designation gives them administrative and fiscal authority equivalent to those of prefectures. With the addition of Kumamoto-*shi* in April 2012, there are presently 20 cities that have earned this designation. (See the map on the inside back cover.)

Figure 17.3
Government System by Level [1] (as of January 1, 2013)



1) Figures in parentheses indicate number.
Source: Ministry of Internal Affairs and Communications.

Figure 17.4
Local Government Employees by Type of Administrative Services
(as of April 1, 2012)



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)	
				Total area	Inhabitable	Total area	Inhabitable
		2010 [1]	2012 [2]	2012	2011	2011	2011
Japan		128,057	127,515	377,960	122,151	343	1,046
Hokkaido	Sapporo-*shi*	5,506	5,460	83,457	22,207	70	247
Aomori-*ken*	Aomori-*shi*	1,373	1,350	9,645	3,233	141	422
Iwate-*ken*	Morioka-*shi*	1,330	1,303	15,279	3,694	86	356
Miyagi-*ken*	Sendai-*shi*	2,348	2,325	7,286	3,145	319	740
Akita-*ken*	Akita-*shi*	1,086	1,063	11,636	3,194	92	337
Yamagata-*ken*	Yamagata-*shi*	1,169	1,152	9,323	2,855	125	407
Fukushima-*ken*	Fukushima-*shi*	2,029	1,962	13,783	4,229	144	471
Ibaraki-*ken*	Mito-*shi*	2,970	2,943	6,096	3,982	485	743
Tochigi-*ken*	Utsunomiya-*shi*	2,008	1,992	6,408	2,982	312	671
Gunma-*ken*	Maebashi-*shi*	2,008	1,992	6,362	2,301	315	870
Saitama-*ken*	Saitama-*shi*	7,195	7,212	3,798	2,574	1,898	2,800
Chiba-*ken*	Chiba-*shi*	6,216	6,195	5,157	3,532	1,205	1,760
Tokyo-*to*	Tokyo (*ku*-area)	13,159	13,230	2,189	1,392	6,029	9,479
Kanagawa-*ken*	Yokohama-*shi*	9,048	9,067	2,416	1,467	3,749	6,174
Niigata-*ken*	Niigata-*shi*	2,374	2,347	12,584	4,504	188	524
Toyama-*ken*	Toyama-*shi*	1,093	1,082	4,248	1,853	256	587
Ishikawa-*ken*	Kanazawa-*shi*	1,170	1,163	4,186	1,388	279	840
Fukui-*ken*	Fukui-*shi*	806	799	4,190	1,074	192	748
Yamanashi-*ken*	Kofu-*shi*	863	852	4,465	952	192	900
Nagano-*ken*	Nagano-*shi*	2,152	2,132	13,562	3,314	158	646
Gifu-*ken*	Gifu-*shi*	2,081	2,061	10,621	2,200	195	941
Shizuoka-*ken*	Shizuoka-*shi*	3,765	3,735	7,781	2,753	482	1,362
Aichi-*ken*	Nagoya-*shi*	7,411	7,427	5,165	2,975	1,436	2,493
Mie-*ken*	Tsu-*shi*	1,855	1,840	5,777	2,044	320	904
Shiga-*ken*	Otsu-*shi*	1,411	1,415	4,017	1,297	352	1,091
Kyoto-*fu*	Kyoto-*shi*	2,636	2,625	4,613	1,177	571	2,236
Osaka-*fu*	Osaka-*shi*	8,865	8,856	1,901	1,318	4,666	6,721
Hyogo-*ken*	Kobe-*shi*	5,588	5,571	8,396	2,775	665	2,011
Nara-*ken*	Nara-*shi*	1,401	1,390	3,691	851	378	1,640
Wakayama-*ken*	Wakayama-*shi*	1,002	988	4,726	1,096	211	908
Tottori-*ken*	Tottori-*shi*	589	582	3,507	911	167	642
Shimane-*ken*	Matsue-*shi*	717	707	6,708	1,288	106	553
Okayama-*ken*	Okayama-*shi*	1,945	1,936	7,113	2,227	273	871
Hiroshima-*ken*	Hiroshima-*shi*	2,861	2,848	8,480	2,291	337	1,246
Yamaguchi-*ken*	Yamaguchi-*shi*	1,451	1,431	6,114	1,716	236	840
Tokushima-*ken*	Tokushima-*shi*	785	776	4,147	1,024	188	762
Kagawa-*ken*	Takamatsu-*shi*	996	989	1,877	1,003	529	989
Ehime-*ken*	Matsuyama-*shi*	1,431	1,415	5,679	1,667	251	854
Kochi-*ken*	Kochi-*shi*	764	752	7,105	1,161	107	653
Fukuoka-*ken*	Fukuoka-*shi*	5,072	5,085	4,979	2,775	1,020	1,830
Saga-*ken*	Saga-*shi*	850	843	2,440	1,333	347	635
Nagasaki-*ken*	Nagasaki-*shi*	1,427	1,408	4,106	1,634	345	867
Kumamoto-*ken*	Kumamoto-*shi*	1,817	1,807	7,405	2,732	245	664
Oita-*ken*	Oita-*shi*	1,197	1,185	6,340	1,746	188	682
Miyazaki-*ken*	Miyazaki-*shi*	1,135	1,126	7,736	1,846	146	613
Kagoshima-*ken*	Kagoshima-*shi*	1,706	1,690	9,189	3,270	185	520
Okinawa-*ken*	Naha-*shi*	1,393	1,409	2,277	1,168	615	1,200

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	Argentina	Australia	Brazil	Canada
Population (thousands)	2010	128,057	40,374	22,404	195,210	34,126
	2011	127,799	40,729	22,741	196,935	34,487
	2012	127,515	41,087	23,050	198,656	34,838
Projection (medium variant)	2050	97,076	51,024	33,735	231,120	45,228
Employed persons (1,000)	2008	a 62,890	b 10,304	10,740	c 90,786	17,126
Unemployed persons (1,000)	2008	a 3,020	b 883	471	c 8,060	1,119
Unemployment rates (%)	2008	a 4.6	b 7.9	4.2	c 8.2	6.1
Hours of work per week (manufacturing)	2008	a 42.1	bd 45.3	37.7	c 43.6	37.2
Industrial production index (2005=100)	2011	91.1	…	101.8	…	92.8
	2012	91.9	…	#e 107.2	…	93.9
Gross domestic product (US$ billion)	2010	5,511	370	1,283	2,143	1,577
	2011	5,905	448	1,515	2,477	1,737
Wholesale price index (2005=100)	2011	f 101.5	g 197.5	h 119.2	139.7	j 110.5
	Dec. 2012	f 100.4	g 239.3	eh 118.3	154.1	j 110.9
Consumer price index (2005=100)	2011	f 99.7	168.9	119.7	134.0	112.0
	2012	f 99.7	185.9	121.8	141.3	113.7
Broad money						
Percent changes from the previous year (%)	End of 2011	2.9	26.0	8.0	18.5	…
	End of 2012	2.2	34.8	7.1	15.9	…
Imports, CIF (US$ billion)	2012	885.6	68.5	260.9	228.4	469.6
Exports, FOB (US$ billion)	2012	798.6	75.2	a 271.7	242.6	461.8
Gold and foreign exchange reserves (US$ million)	End of 2011	1,259,494	43,333	42,922	350,415	65,657
	End of 2012	1,228,471	40,028	45,081	369,682	66,893
Foreign exchange rates (national currency per US$)		Yen	Pesos	Australian dollars	Reais	Canadian dollars
End of year	2012	86.32	4.8611	0.9558	2.0772	0.9897
End of period average	Mar. 2013	94.04	5.0645	0.9676	1.9832	1.0248

a) 2011. b) Urban agglomerations. c) 2007. d) 2005. e) Third quarter. f) 2010=100. g) Producer prices. h) Manufacturing output. j) Industry selling.

Appendix 2
Main Economic Indicators of Selected Countries (Continued)

Item	Year	China	Euro Area	France	Germany	India
Population (thousands)	2010	1,359,821	501,085	63,231	83,017	1,205,625
	2011	1,368,440	502,369	63,582	82,893	1,221,156
	2012	1,377,065	503,930	63,937	82,800	1,236,687
Projection (medium variant)	2050	1,384,977	…	73,212	72,566	1,620,051
Employed persons (1,000)	2008	774,800	…	25,913	38,880	a 368,966
Unemployed persons (1,000)	2008	b 8,860	…	2,070	3,141	a 16,634
Unemployment rates (%)	2008	b 4.2	…	7.4	7.3	a 4.3
Hours of work per week (manufacturing)	2008	b 47.9	…	36.7	38.4	c 46.9
Industrial production index (2005=100)	2011	…	100.5	92.6	113.3	158.9
	2012	…	d 96.2	90.5	112.6	160.1
Gross domestic product (US$ billion)	2010	5,951	…	2,566	3,306	1,678
	2011	7,204	…	2,776	3,604	1,898
Wholesale price index (2005=100)	2011	…	e 118.4	e 113.0	e 115.9	145.8
	Dec. 2012	…	e 122.5	e 115.5	e 118.4	161.3
Consumer price index (2005=100)	2011	…	f 112.9	110.1	110.4	165.4
	2012	…	df 117.0	92.6	112.6	180.8
Broad money						
Percent changes from the previous year (%)	End of 2011	17.3	1.7	…	…	16.1
	End of 2012	14.4	3.4	…	…	…
Imports, CIF (US$ billion)	2012	1,817.8	2,016.6	663.6	1,168.7	488.5
Exports, FOB (US$ billion)	2012	2,048.9	2,077.7	556.6	1,410.4	294.7
Gold and foreign exchange reserves (US$ million)	End of 2011	3,204,609	g 335,343	52,819	72,796	272,249
	End of 2012	3,332,943	g 351,189	58,443	73,288	271,551
Foreign exchange rates (national currency per US$)		Yuan	Euros	Euros	Euros	Rupees
End of year	2012	6.2901	0.7623	0.7623	0.7623	54.648
End of period average	Mar. 2013	6.2746	0.7714	0.7714	0.7714	54.405

a) 2000. b) Urban areas. c) 2006. d) Dec. 2012. e) Producer prices. f) Harmonized CPI. g) Including European Central Bank.

Appendix 2
Main Economic Indicators of Selected Countries (Continued)

Item	Year	Indonesia	Italy	Korea, Rep. of	Mexico	Russia
Population (thousands)	2010	240,676	60,509	48,454	117,886	143,618
	2011	243,802	60,729	48,733	119,361	143,438
	2012	246,864	60,885	49,003	120,847	143,170
Projection (medium variant)	2050	321,377	60,015	51,034	156,102	120,896
Employed persons (1,000)	2008	102,553	23,405	23,577	43,867	70,965
Unemployed persons (1,000)	2008	9,395	1,692	769	1,593	4,791
Unemployment rates (%)	2008	8.4	6.7	3.2	3.5	6.3
Hours of work per week (manufacturing)	2008	43.8	35.9	43.7	46.4	a 6.8
Industrial production index (2005=100)	2011	b 117.8	87.8	147.4	109.7	117.4
	2012	bc 129.2	82.4	148.7	113.6	120.4
Gross domestic product (US$ billion)	2010	708	2,057	1,015	1,031	1,488
	2011	847	2,196	1,116	1,155	1,858
Wholesale price index (2005=100)	2011	182.8	d 117.7	d 122.1	136.6	…
	Dec. 2012	194.2	d 121.7	d 121.8	143.6	…
Consumer price index (2005=100)	2011	153.4	112.9	120.7	128.5	176.5
	2012	160.0	116.4	123.4	133.7	185.4
Broad money						
Percent changes from the previous year (%)	End of 2011	16.4	…	8.9	10.0	20.9
	End of 2012	14.9	…	5.1	10.2	12.1
Imports, CIF (US$ billion)	2012	191.0	487.2	461.8	389.3	369.0
Exports, FOB (US$ billion)	2012	188.5	501.0	547.9	370.9	529.3
Gold and foreign exchange reserves (US$ million)	End of 2011	106,664	53,421	304,349	144,174	455,473
	End of 2012	108,966	54,739	323,353	160,628	488,233
Foreign exchange rates (national currency per US$)		Rupiah	Euros	Won	Pesos	Rubles
End of year	2012	9,656.8	0.7623	1,076.4	12.867	30.740
End of period average	Mar. 2013	e 9,697.3	0.7714	1,103.8	12.575	30.798

a) Per day. b) Manufacturing production. c) Dec. 2012. d) Producer prices. e) Feb. 2013.

Appendix 2
Main Economic Indicators of Selected Countries (Continued)

Item	Year	Saudi Arabia	South Africa	Turkey	U.K.	U.S.A.
Population (thousands)	2010	27,258	51,452	72,138	62,066	312,247
	2011	27,762	51,949	73,059	62,427	314,912
	2012	28,288	52,386	73,997	62,783	317,505
Projection (medium variant)	2050	40,388	63,405	94,606	73,131	400,853
Employed persons (1,000)	2008	7,987	13,713	21,194	29,364	145,362
Unemployed persons (1,000)	2008	428	4,075	2,611	1,751	8,924
Unemployment rates (%)	2008	5.1	22.9	11.0	5.7	5.8
Hours of work per week (manufacturing)	2008	55.6	a 175.3	52.8	b 40.9	40.8
Industrial production index (2005=100)	2011	…	…	128.1	90.3	98.4
	2012	…	…	131.3	88.2	101.9
Gross domestic product (US$ billion)	2010	456	364	731	2,266	14,419
	2011	597	408	775	2,429	14,991
Wholesale price index (2005=100)	2011	122.9	c 156.9	c 159.8	d 124.5	c 127.7
	Dec. 2012	e 127.4	c 170.3	c 172.4	d 128.4	c 128.0
Consumer price index (2005=100)	2011	136.0	147.0	163.0	119.6	115.2
	2012	142.0	154.9	177.5	123.0	117.6
Broad money						
Percent changes from the previous year (%)	End of 2011	13.3	8.3	15.2	-4.4	6.6
	End of 2012	16.5	5.2	10.4	0.8	4.9
Imports, CIF (US$ billion)	2012	139.7	124.2	236.5	642.7	2,335.4
Exports, FOB (US$ billion)	2012	f 364.5	87.4	152.5	474.6	1,546.8
Gold and foreign exchange reserves (US$ million)	End of 2011	541,235	42,811	78,660	79,808	150,965
	End of 2012	657,023	44,213	100,565	89,132	153,200
Foreign exchange rates (national currency per US$)		Riyals	Rand	Liras	Pounds	U.S. dollars
End of year	2012	3.7500	8.6445	1.7839	0.6194	1.0000
End of period average	Mar. 2013	3.7500	9.1923	1.8087	0.6613	1.0000

a) Per month. 2002. b) 2007. c) Producer prices. d) Manufacturing output. e) Fourth quarter, 2012.
f) 2011.
Source: Statistics Bureau, MIC; Cabinet Office; Ministry of Health, Labour and Welfare; Bank of Japan; United Nations; International Labour Organization; International Monetary Fund; EUROSTAT.

Appendix 3
Foreign Exchange Rates [1)]

(Yen per U.S. dollar)

Year	Average	End of year
1995	94.06	102.91
1996	108.79	115.98
1997	121.00	129.92
1998	130.90	115.20
1999	113.91	102.08
2000	107.77	114.90
2001	121.53	131.47
2002	125.31	119.37
2003	115.93	106.97
2004	108.18	103.78
2005	110.16	117.48
2006	116.31	118.92
2007	117.76	113.12
2008	103.37	90.28
2009	93.54	92.13
2010	87.78	81.51
2011	79.81	77.57
2012	79.81	86.32

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 (℃)	5/9 (Fahrenheit-32)