STATISTICAL HANDBOOK OF

JAPAN

2015

Statistics Bureau,
Ministry of Internal Affairs
and Communications

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

Printed in Japan
ISSN 0081-4792

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

Preface

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

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

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

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 2015

Masato AIDA
Director-General
Statistics Bureau
Ministry of Internal Affairs
and Communications
Japan

Notes for Users

1. The present issue contains statistics that became available by May 31, 2015.
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 2015, 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 earthquakes in the country is quite high, 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 (2014)
(Square kilometers)

District	Area
Japan	377,972
Honshu	231,231
Hokkaido	83,424
Kyushu	42,233
Shikoku	18,804
Okinawa	2,281

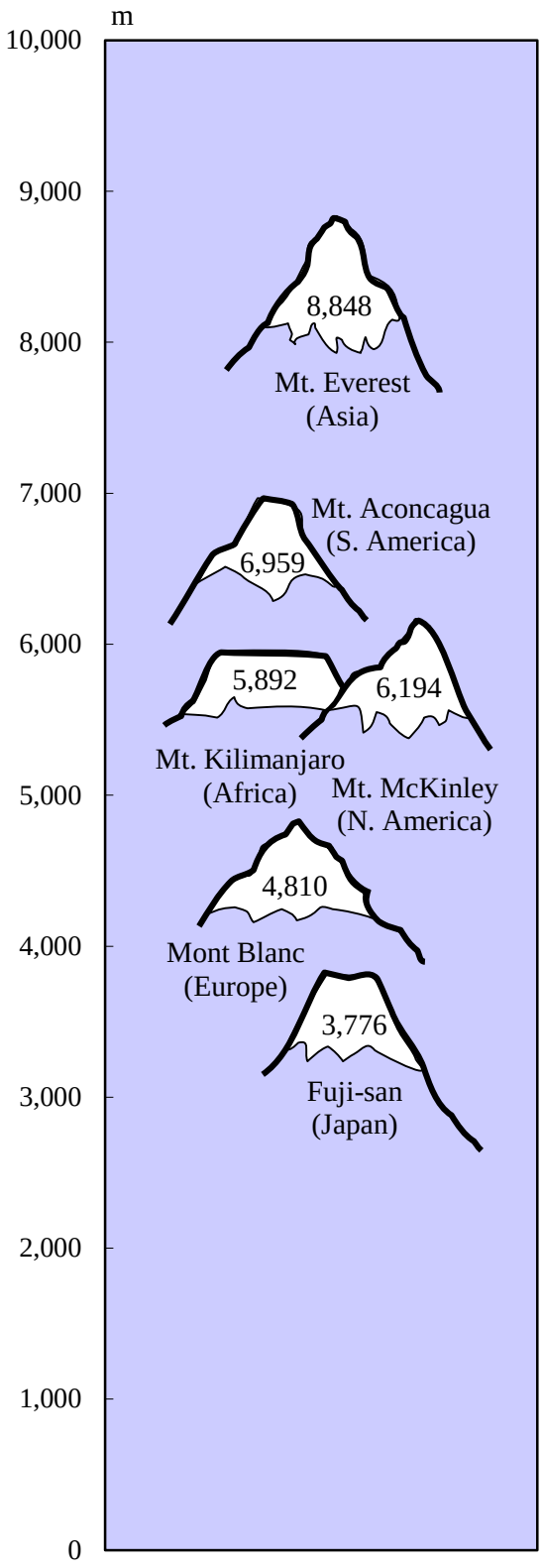
Source: Ministry of Land, Infrastructure, Transport and Tourism.

Table 1.2
Top 10 Countries According to Surface Area (2013) [1)]
(1,000 square kilometers)

Country	Area
World	136,162
Russia	17,098
Canada	9,985
U.S.A.	9,834
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 (2014)

(Meters)

Name	Height
Fuji-san	3,776
Kita-dake	3,193
Aino-dake	3,190
Okuhotaka-dake	3,190
Yari-ga-take	3,180
Higashi-dake	3,141
Akaishi-dake	3,121
Karasawa-dake	3,110
Kitahotaka-dake	3,106
Obami-dake	3,101

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

Table 1.4
Rivers (2014)

(Kilometers)

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

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

Table 1.5
Lakes (2014)

(Square kilometers)

Name	Area
Biwa-ko	669.2
Kasumi-ga-ura	168.2
Saroma-ko	151.6
Inawashiro-ko	103.2
Naka-umi	85.7
Kussharo-ko	79.5
Shinji-ko	79.3
Shikotsu-ko	78.5
Toya-ko	70.7
Hamana-ko	64.9

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

Forestland and fields account for the largest portion of the nation's surface area. There are approximately 250,000 square kilometers of forestland and fields (which equates to 67 percent of the nation's surface area), followed by approximately 50,000 square kilometers of agricultural land (12 percent). Together, forestland, fields and agricultural land thus cover approximately 80 percent of the nation. There are approximately 20,000 square kilometers of land for buildings (5 percent).

Table 1.6
Surface Area by Use

(1,000 square kilometers)

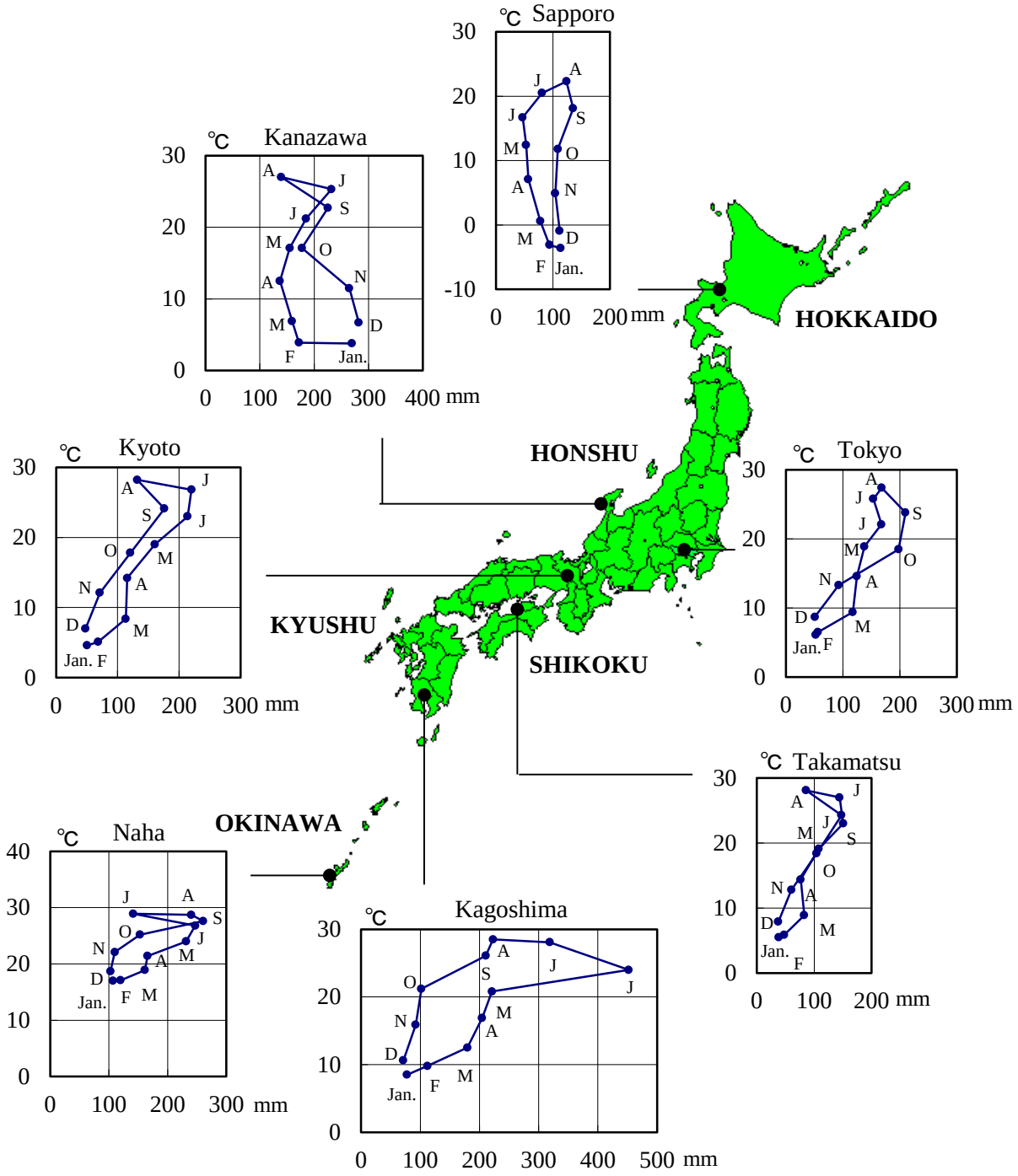
Year	Total	Forestland and fields	Agricultural land	Inland water	Roads [1)]	Building land [2)]	Others
1980	377.7	256.8	55.9	13.1	9.9	13.9	28.1
1990	377.7	255.2	53.3	13.1	11.4	16.0	28.7
2000	377.9	253.8	49.1	13.5	12.7	17.9	30.9
2010	377.9	253.5	46.7	13.3	13.6	19.0	31.9
Percentage distribution (%)							
2010	100.0	67.1	12.4	3.5	3.6	5.0	8.4

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 the Sea of Japan side of Honshu 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 the 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
		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
		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
		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
		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
		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
		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
		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.

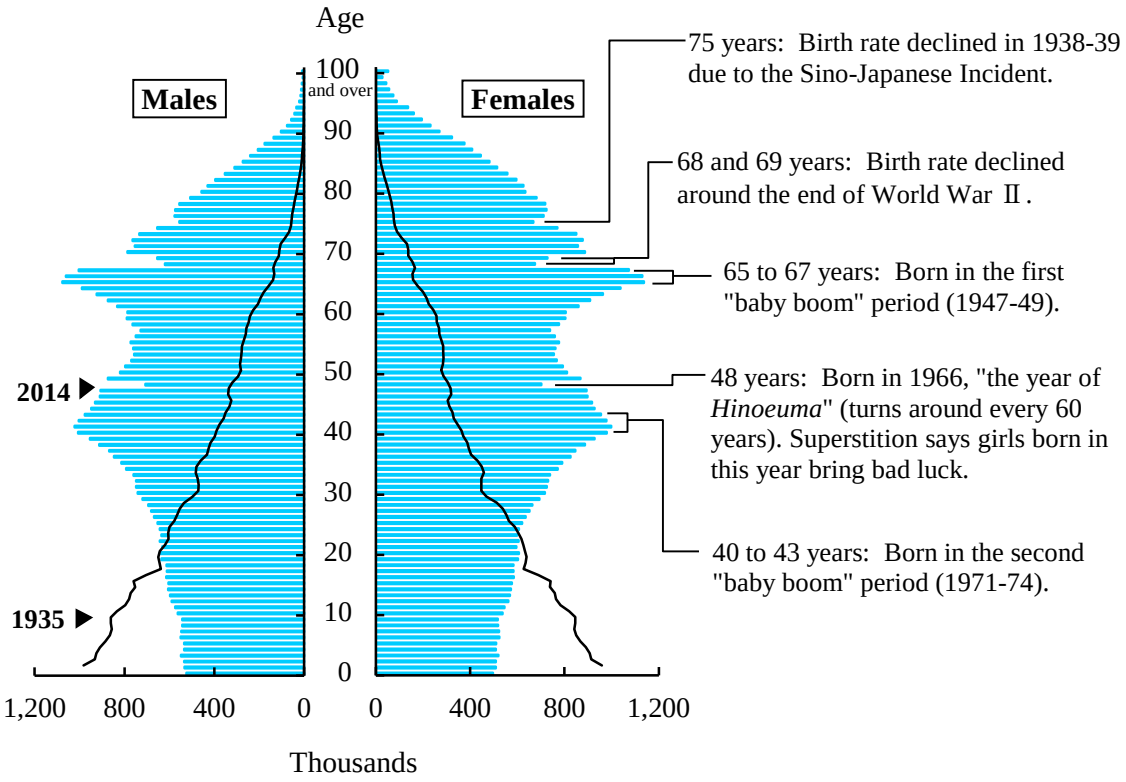
Chapter 2

Population

1. Total Population

Japan's total population in 2014 was 127.08 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.

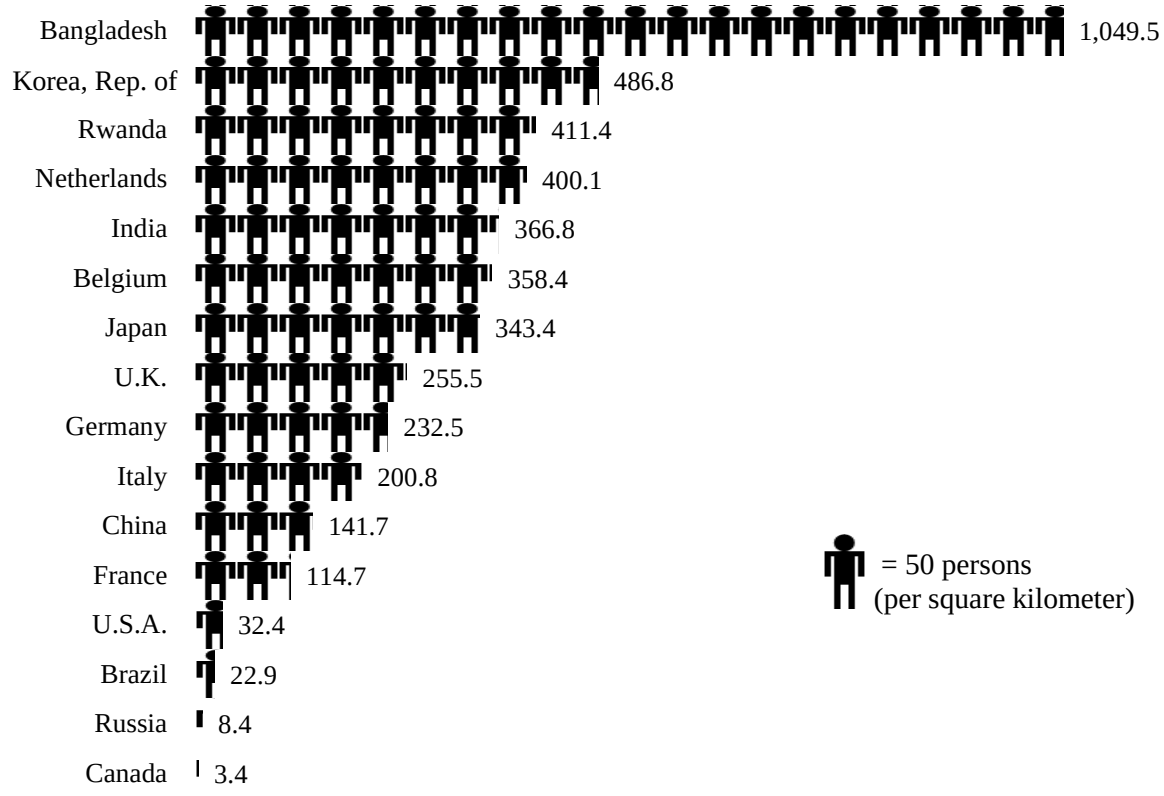
Table 2.1
Countries with a Large Population (2014)

(Millions)

Country	Population	Country	Population
World	7,244		
China	1,394	Pakistan	185
India	1,267	Nigeria	179
U.S.A.	323	Bangladesh	159
Indonesia	253	Russia	142
Brazil	202	Japan	127

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 since World War II. In 2014, it was 127.08 million, down by 215,000 from the year before.

Table 2.2
Trends in Population (as of October 1)

Year	Population (1,000)		Age composition (%)			Rate of population change (%)	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
2013	127,298	61,909	12.9	62.1	25.1	-0.17	341
2014	127,083	61,801	12.8	61.3	26.0	-0.17	341
(Projection, January 2012)							
2020	124,100	60,146	11.7	59.2	29.1	-0.42	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.

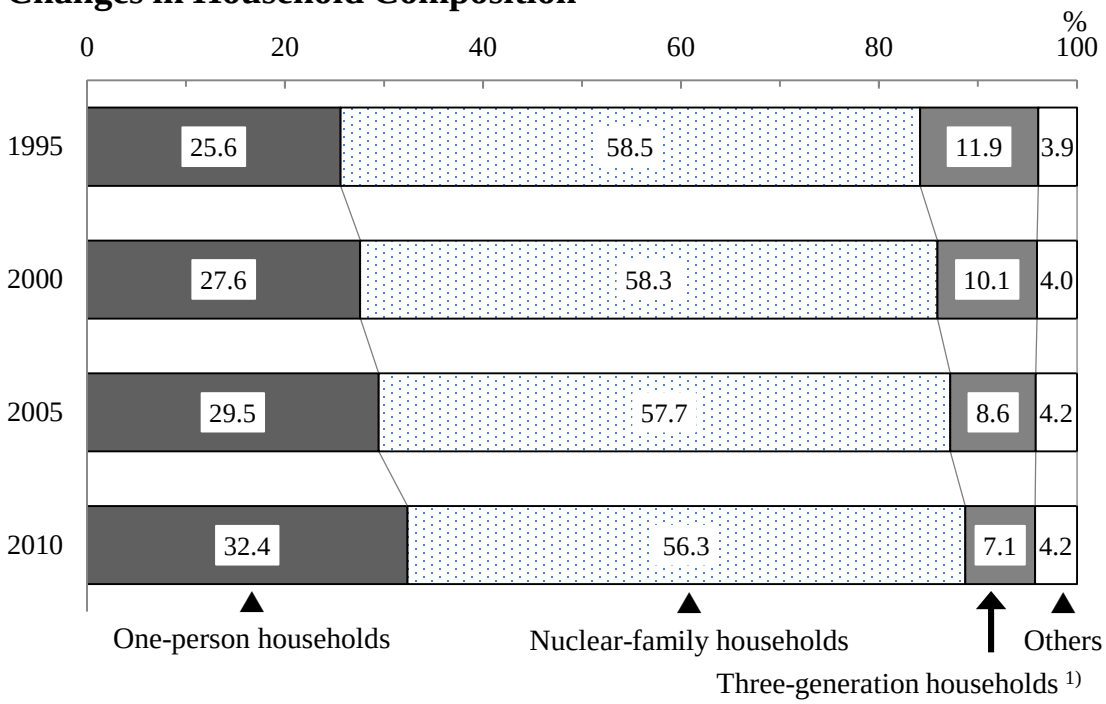
2. Households

(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, surpassing 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)	Rate of population change(%)	Private household members (1,000)	Members per household	Population (1,000)	Rate of population change(%)
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) Rate of population change 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 the 1960s, the average size of households was down significantly in 1970, to 3.41 members. The number of household members has continued to decline, dropping 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 approximately 2.5 times as many women as men. There were 5.25 million aged-couple households.

Table 2.4
Trends in Elderly Households

(Thousands)

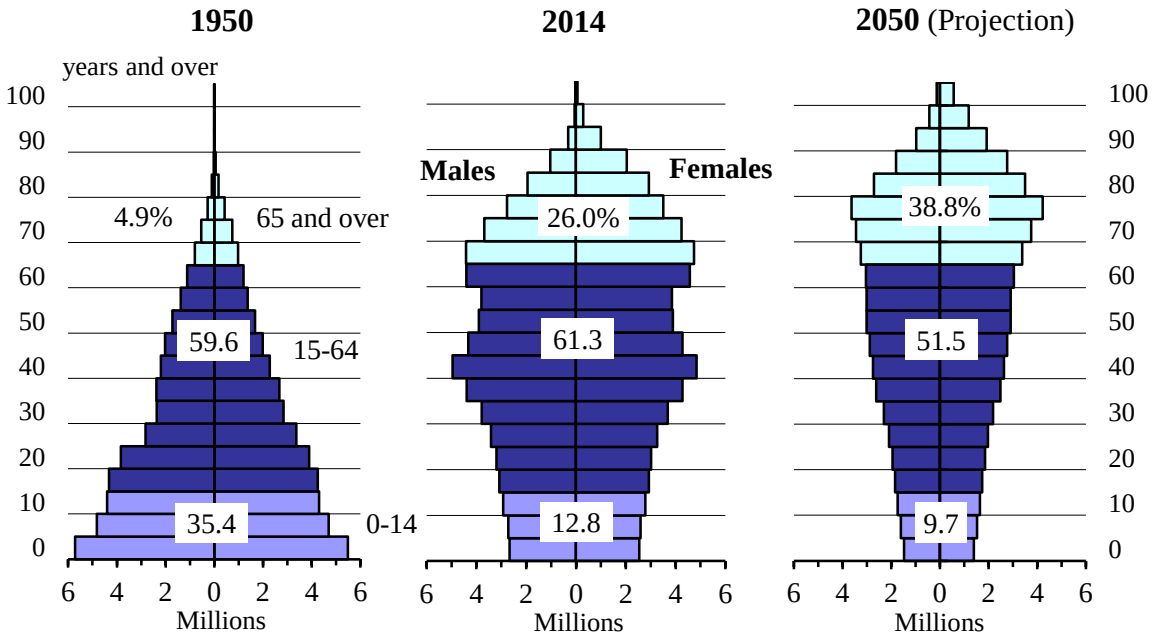
Type of households	1980	1985	1990	1995	2000	2005	2010
Private households	35,824	37,980	40,670	43,900	46,782	49,063	51,842
Elderly households [1]	8,124	9,284	10,729	12,790	15,057	17,220	19,338
(percentage)	22.7	24.4	26.4	29.1	32.2	35.1	37.3
One-person households	881	1,181	1,623	2,202	3,032	3,865	4,791
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 2014, the aged population (65 years and over) was 33.00 million, constituting 26.0 percent of the total population (i.e., one in every four persons) and marking a record high.

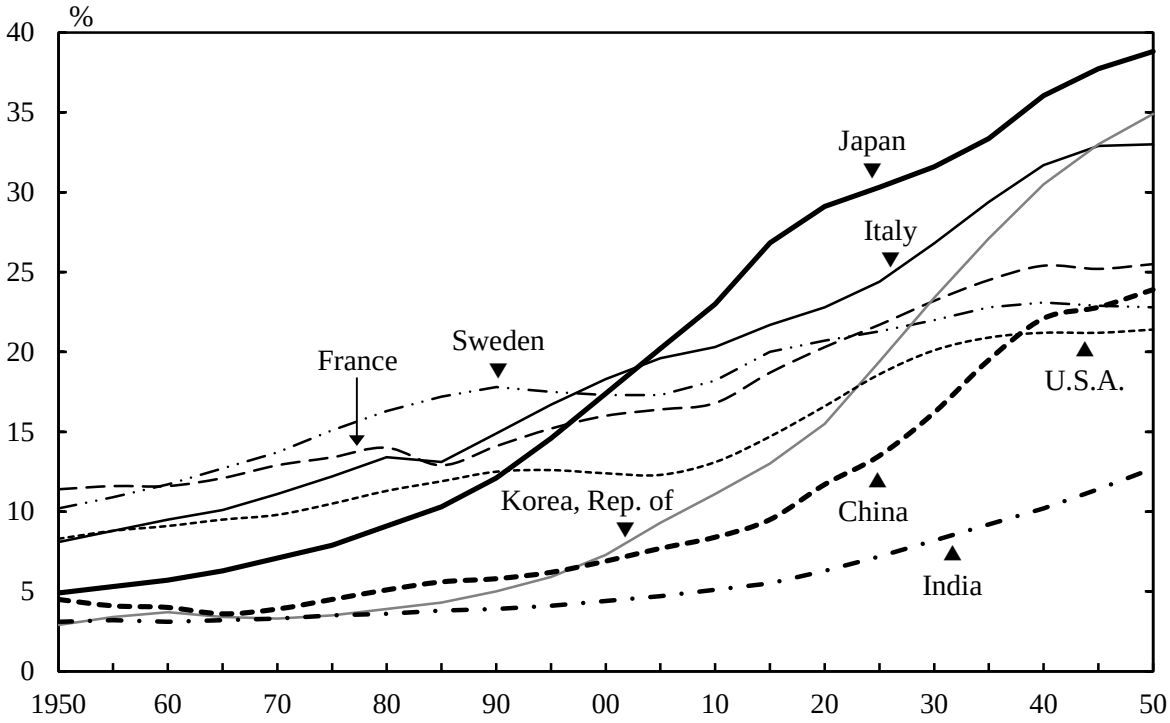
Figure 2.4
Changes in the Population Pyramid



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

In Japan, the period when the percentage of persons aged 65 and older exceeded 10% was 1985, but when looking at the U.S. and European countries, this occurred in 1940 in France, 1950 in Sweden, 1965 in Italy, and 1975 in the U.S., which are all earlier than in Japan. However, in 2010, the percentage of the population 65 and older in Japan was 23.0%, exceeding the U.S. (13.1%), France (16.8%), Sweden (18.2%), and Italy (20.4%), indicating that the aging society in Japan is progressing rapidly as compared to the U.S. and European countries.

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.

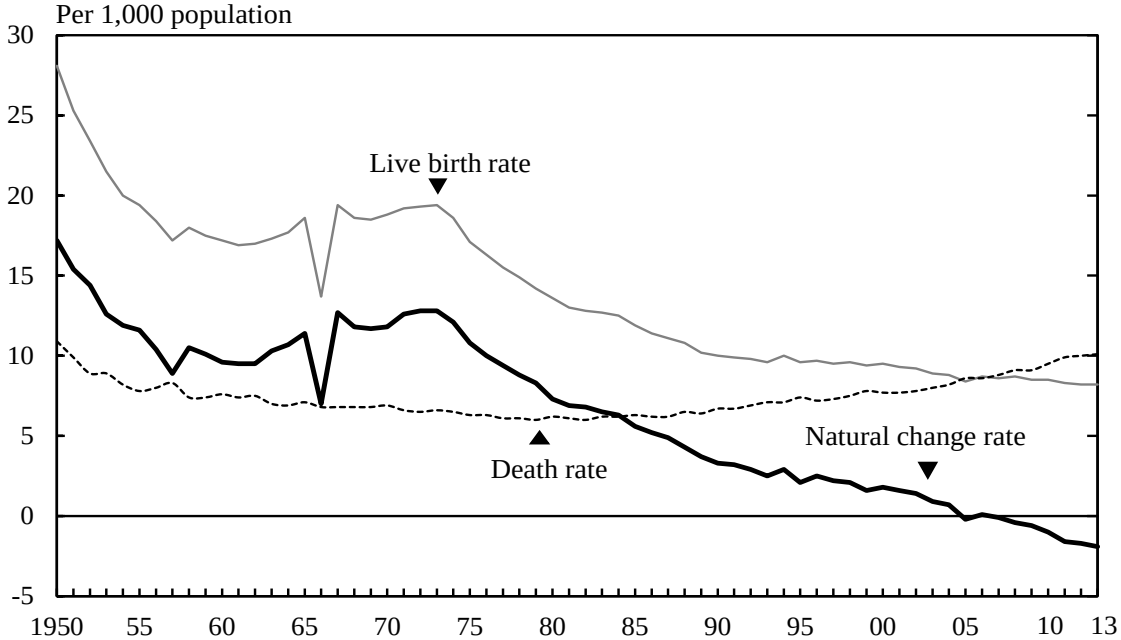
On the other hand, in 2014, the child population (0-14 years) in Japan amounted to 16.23 million, accounting for 12.8 percent of the total population, which was the lowest level on record. In terms of their proportion of the total population, the aged (65 years and over) have surpassed the child population since 1997. The productive-age population (15-64 years) totaled 77.85 million. In share terms, it accounted for 61.3percent 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 productive-age population) was 63.2 percent.

4. Births and Deaths

Population growth in Japan had primarily been driven by natural increase, while social increase played only a minor part. However, in 2005, the natural change rate (per 1,000 population) fell for the first time since 1899, and has since been on a declining trend. In 2013, the natural change rate was -1.9.

During the second baby boom, the live birth rate was at a level of 19 (per 1,000 population) between 1971 and 1973. Since the late 1970s, it has continued to fall. The rate for 2013 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
2013	8.2	10.1	2.1	-1.9	1.43	80.21	86.61

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 live 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 30.4 in 2013. 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 1.43 in 2013.

Table 2.7
Changes of Mothers' Age at Childbirth

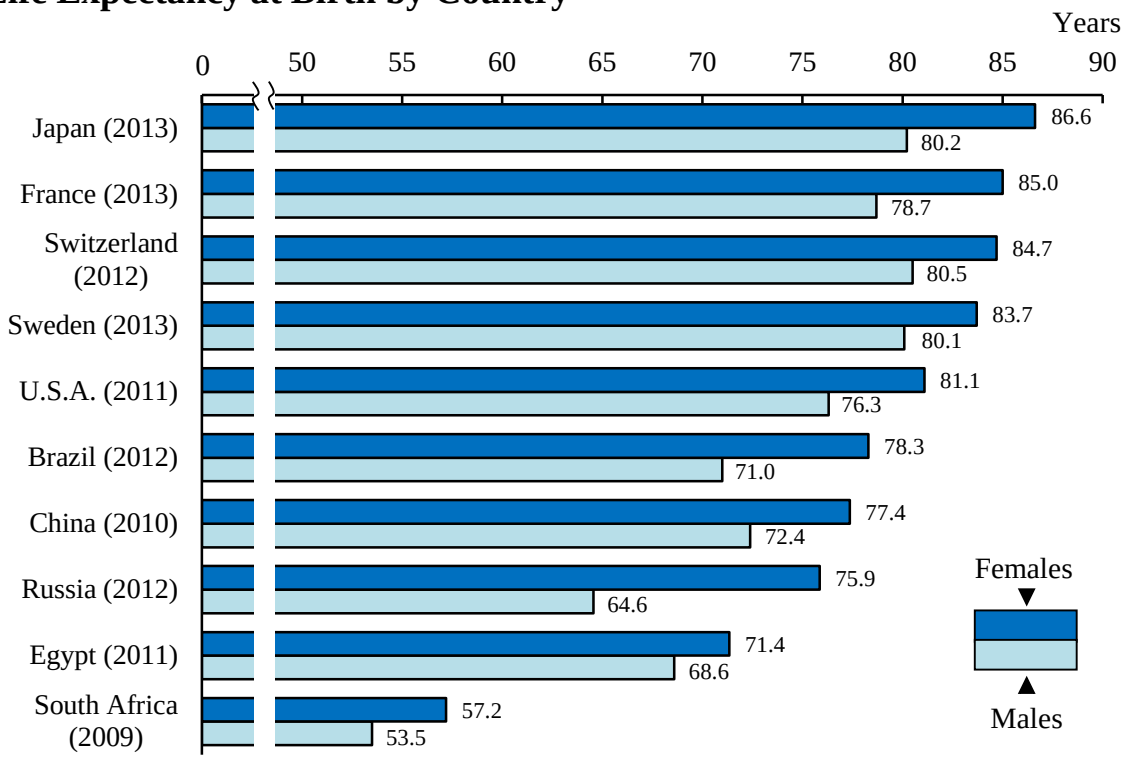
Year	Number of births (1,000)	Distribution of mothers' age (%)						Mean age bearing first child
		-19	20-24	25-29	30-34	35-39	40 and over	
1970	1,934	1.0	26.5	49.2	18.5	4.2	0.5	25.6
1975	1,901	0.8	25.2	53.4	16.8	3.3	0.5	25.7
1980	1,577	0.9	18.8	51.4	24.7	3.7	0.5	26.4
1985	1,432	1.2	17.3	47.7	26.6	6.5	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	35.5	21.7	4.1	30.3
2013	1,030	1.3	8.9	27.5	35.5	22.3	4.6	30.4

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 been on an uptrend, reflecting the increased percentage of the elderly in the overall population. The death rate was 10.1 in 2013.

Average life expectancy in Japan climbed sharply after World War II, and is today at the highest level in the world. In 2013, the life expectancy at birth was 86.6 years for women and 80.2 years for men. The life expectancy at birth for men exceeded 80 years for the first time, setting a new all-time record for both genders.

Figure 2.7
Life Expectancy at Birth by Country



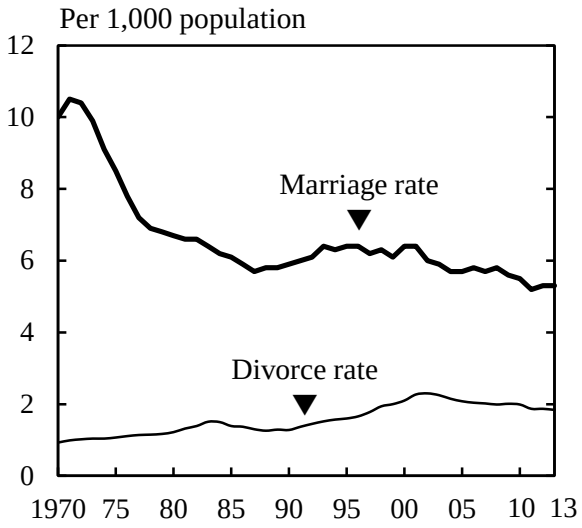
Source: Ministry of Health, Labour and Welfare.

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 of couples and the marriage rate started declining thereafter. They rose again in the late 1980s, but in recent years, they have been on a declining trend in general. In 2011, 662,000 couples married, marking the first time this number fell below 700,000 couples. In 2013, 661,000 couples married, and the marriage rate was 5.3.

The mean age of first marriage was 30.9 for men and 29.3 for women in 2013, a rise by 2.4 years and 3.1 years, respectively, over the past twenty years (in 1994: grooms, 28.5; brides, 26.2). 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
2013	30.9	29.3

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 couples in 2002. Subsequently, both the number of divorces and the divorce rate have been declining since 2003. In 2013, the number of divorces totaled 231,000 couples, and the divorce rate (per 1,000 population) was 1.84.

6. Population Density and Regional Distribution

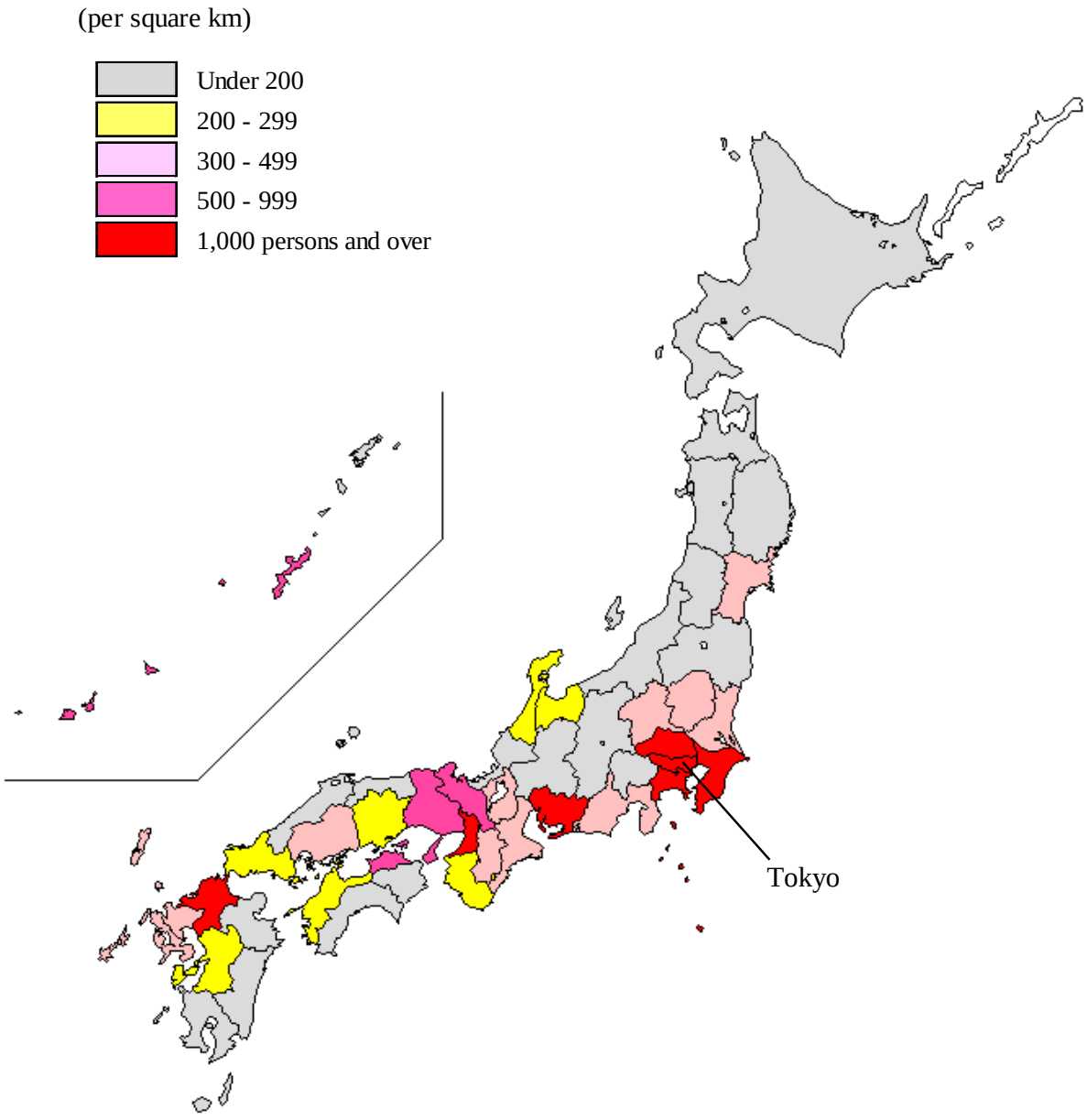
(1) Population Density

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.

In addition, 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 of 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, Chukyo, and Kinki major metropolitan areas. 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.

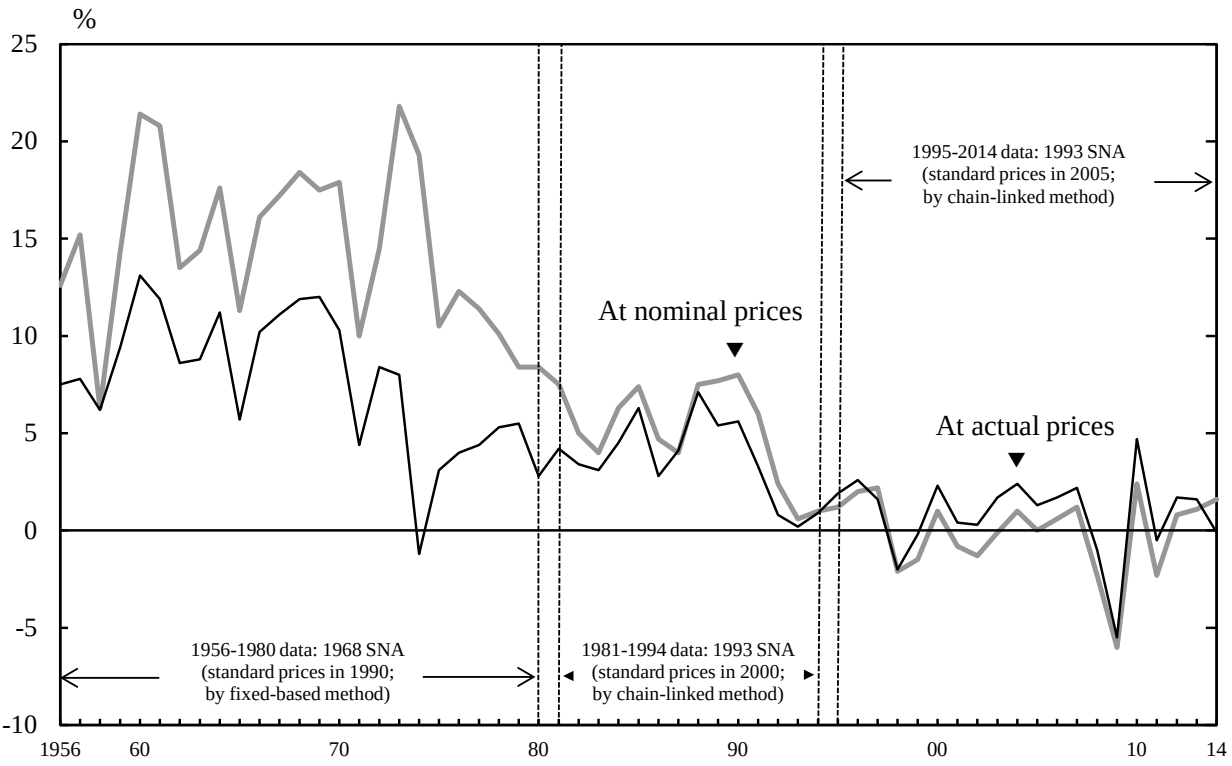
Chapter 3

Economy

1. Economic Development

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) the 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.

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.

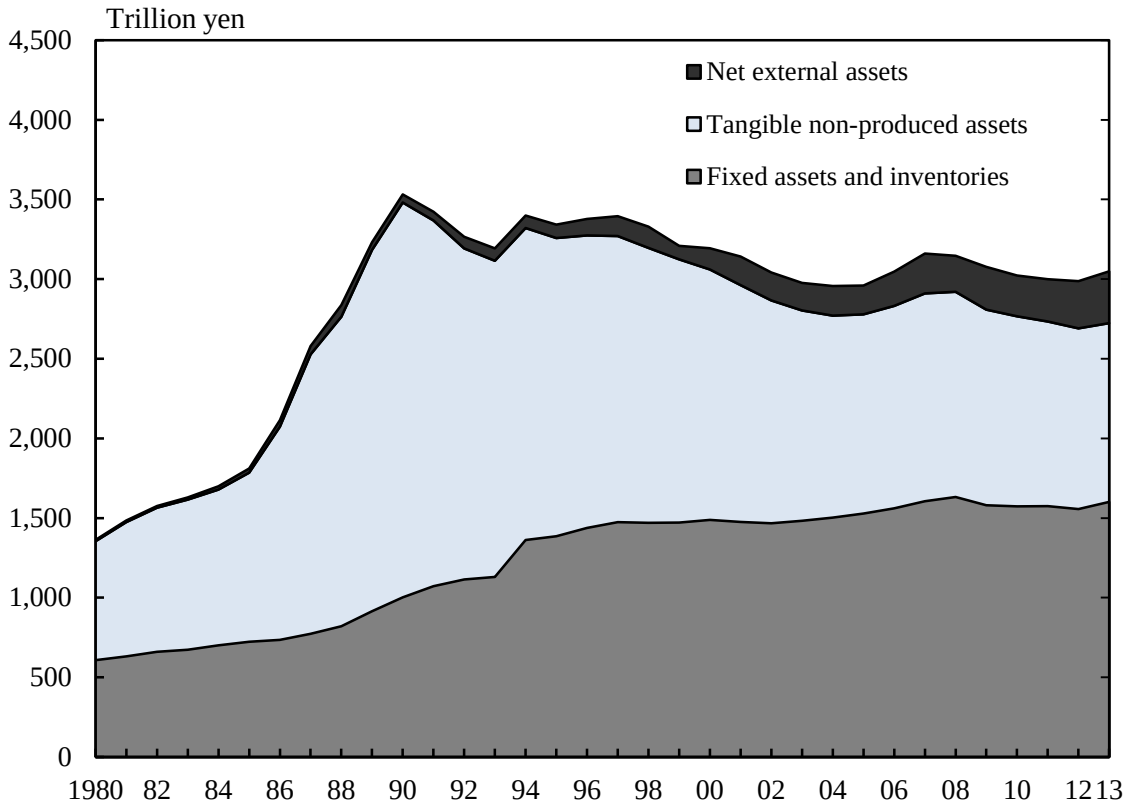
2. Bubble Economy and Its Collapse

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).

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. After that, however, Japan's national wealth began to decrease due to the collapse of the bubble economy. At the end of 2013, it was 3,049 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.

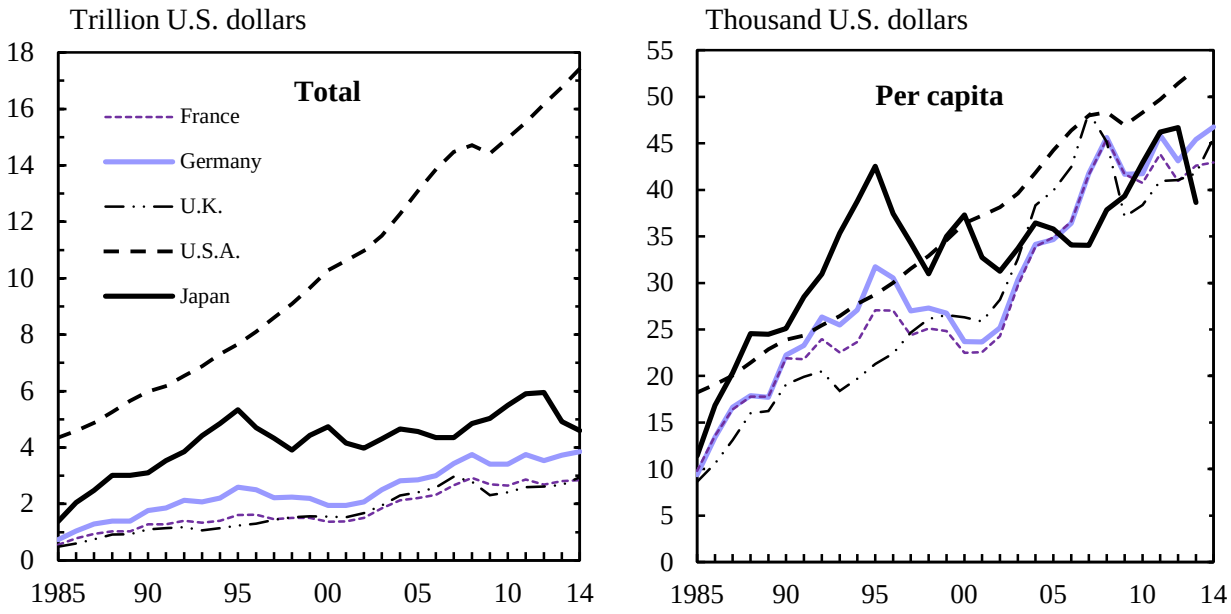
Figure 3.2
National Wealth [1)]



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

The Japanese economy began to make a moderate recovery in 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.

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



Source: OECD.

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.

During the phase of Japan's economic recovery from the beginning of 2002, there was a common trend whereby 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 petroleum and raw material prices and repercussions from the American subprime mortgage loan problem 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.

Table 3.1

Gross Domestic Product [1] (Expenditure approach)

(Billion yen)

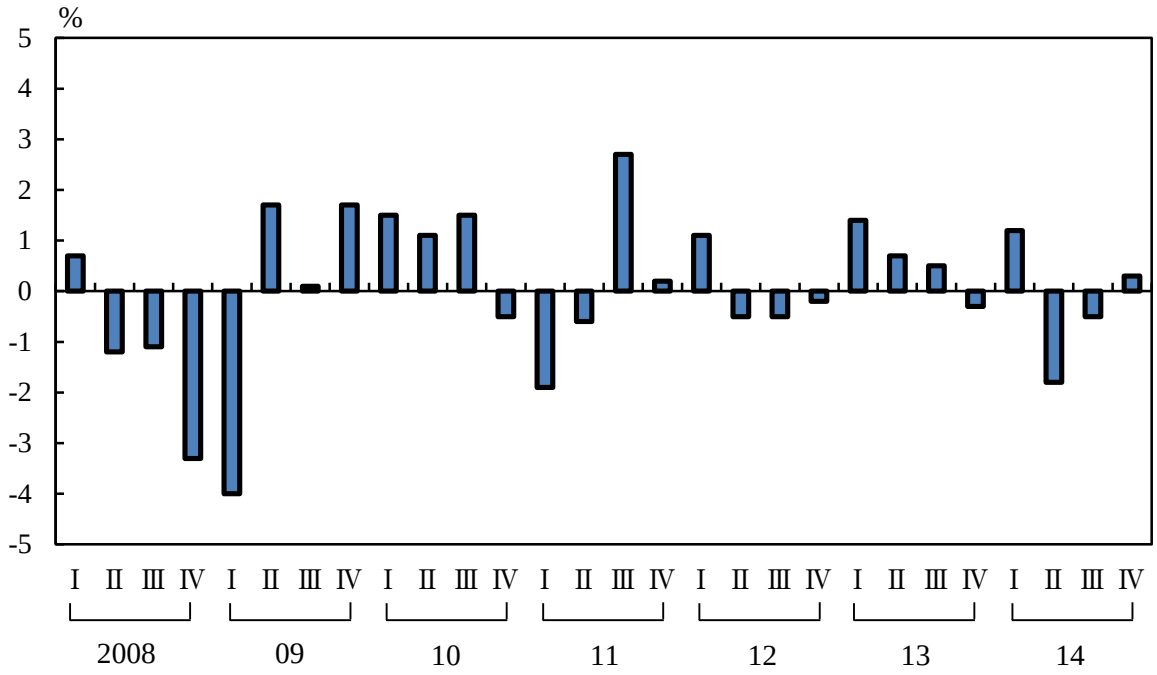
Item	2011	2012	2013	2014
Gross domestic product (GDP)	510,325.9	519,216.8	527,458.7	526,996.8
Domestic demand	496,709.1	509,637.1	519,258.5	518,981.7
Private demand	378,481.6	389,275.5	395,294.5	393,621.1
Private final consumption expenditure	301,219.0	308,072.2	314,588.7	310,579.2
Private Residential Investment	12,954.4	13,372.6	14,544.5	13,803.2
Private plant and equipment	66,698.1	69,160.9	69,460.1	72,195.1
Changes in inventories of private sectors	-1,812.0	-831.3	-2,737.8	-2,402.7
Public demand	118,196.5	120,366.5	123,914.1	125,249.6
Government final consumption expenditure	98,536.7	100,179.9	102,096.5	102,417.3
Gross capital formation by public sectors	19,796.9	20,322.3	21,953.5	22,788.0
Changes in inventories of public sectors	9.2	4.7	-41.3	41.2
Net exports of goods and services	13,207.5	9,353.9	8,094.2	9,596.3
Exports of goods and services	82,406.4	82,201.0	83,191.1	90,215.8
(less) Imports of goods and services	69,198.9	72,847.2	75,096.9	80,619.5
(Reference)				
Trading gains/losses	-17,321.1	-18,894.6	-20,862.0	-23,385.3
Gross domestic income	493,004.7	500,322.2	506,596.7	503,611.5
Net income from the rest of the world	15,361.5	15,869.7	18,597.0	20,370.4
Incomes from the rest of the world	21,305.6	22,337.5	25,946.3	29,608.9
(less) Incomes to the rest of the world	5,944.1	6,467.8	7,349.3	9,238.4
Gross national income (GNI)	508,366.2	516,191.8	525,193.7	523,981.9

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.

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



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

In order to achieve an early end to deflation and break free of economic stagnation, in January 2013, the government set forth its "*three-arrows*" strategy (also known as "*Abenomics*").

The first "arrow" is "aggressive monetary policy." 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." The BOJ also introduced "quantitative and qualitative monetary easing" to double the monetary base over two years.

The second "arrow" is "flexible fiscal policy." An emergency economic stimulus package with a scale of approximately 10 trillion yen was developed.

The third "arrow" is "growth strategy that promotes private investment." Efforts are being made in growth strategies such as encouraging investments by private corporations based on the easing of regulations.

Based on this, there are expectations that the Japanese economy will recover at a moderate pace as the effects of policy measures are realized.

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 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.

Table 3.2
Changes in Industrial Structure

(%)

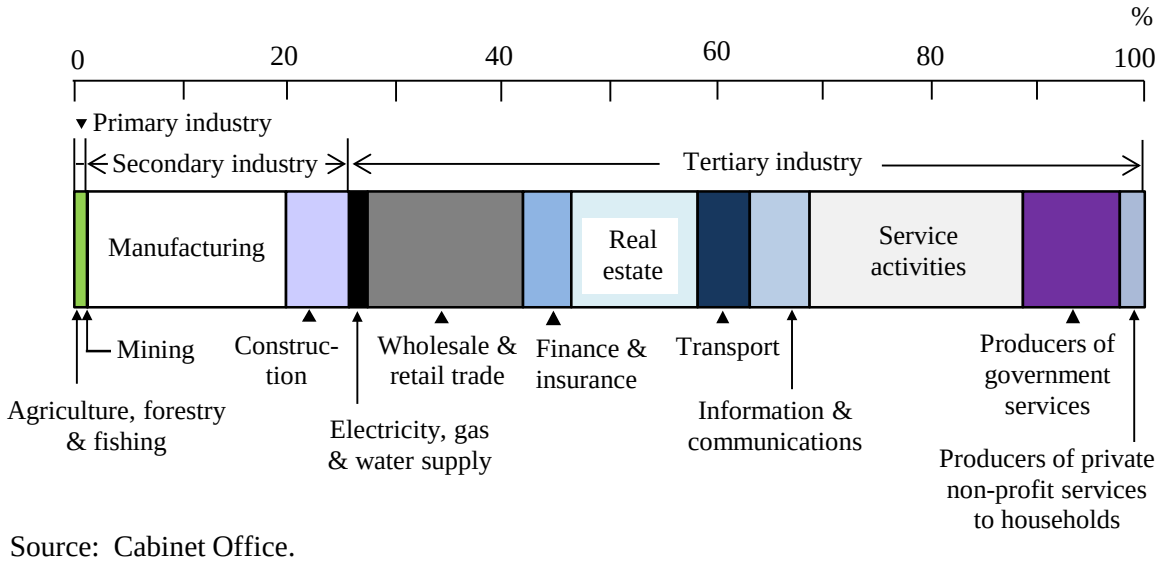
Year	Employed persons [1]			Gross domestic product (GDP) [2]		
	Primary industry	Secondary industry	Tertiary industry	Primary industry	Secondary industry	Tertiary industry
1950	48.6	21.8	29.7	-	-	-
1955	41.2	23.4	35.5	19.2	33.7	47.0
1960	32.7	29.1	38.2	12.8	40.8	46.4
1965	24.7	31.5	43.7	9.5	40.1	50.3
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	1.6	28.4	70.0
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 1994 and afterwards differs in the estimation method.
Source: Statistics Bureau, MIC; Cabinet Office.

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.

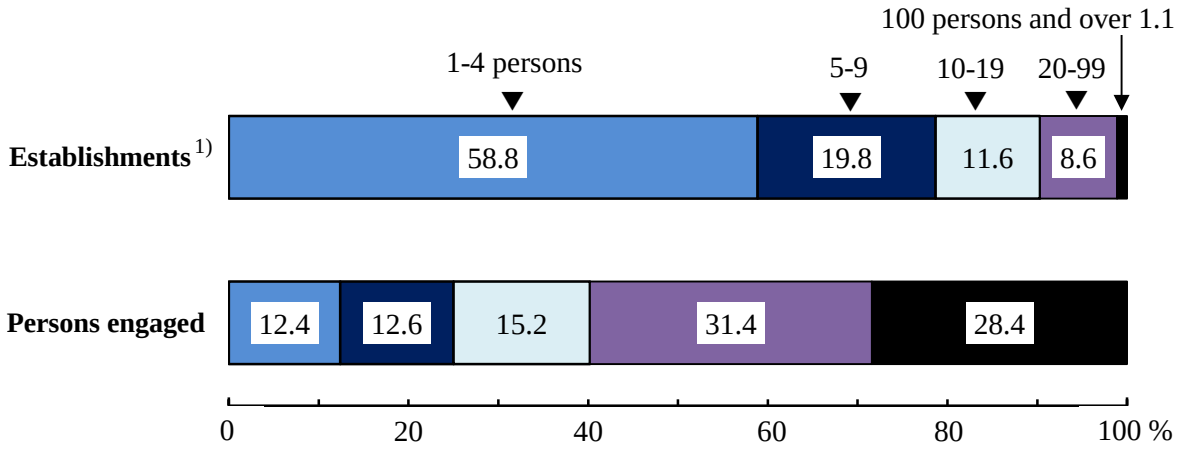
Figure 3.5
Gross Domestic Product by Type of Economic Activity (2013)



Source: Cabinet Office.

According to the "2012 Economic Census for Business Activity," there were 5.45 million establishments (excluding businesses whose operational details are unknown, national government services, and local government services) in Japan, at which a total of 55.84 million persons were employed. The average number of persons engaged per establishment was 10.2. Establishments with less than 10 persons accounted for 78.7 percent of the total.

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



1) 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 1.41 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 11.75 million persons, followed by "manufacturing" and "medical, health care and welfare."

Table 3.3
Number of Establishments and Persons Engaged [1] (2012)

Item	Number of establishments	Number of persons engaged
Total	5,453,635	55,837,252
By industry		
Primary industry		
Agriculture, forestry and fisheries	30,717	356,215
Secondary industry		
Mining and quarrying of stone and gravel	2,286	21,427
Construction	525,457	3,876,621
Manufacturing	493,380	9,247,717
Tertiary industry		
Electricity, gas, heat supply and water	3,935	201,426
Information and communications	67,204	1,627,310
Transport and postal activities	135,468	3,301,682
Wholesale and retail trade	1,405,021	11,746,468
Finance and insurance	88,831	1,589,449
Real estate and goods rental and leasing	379,719	1,473,840
Scientific research, professional and technical services	219,470	1,663,790
Accommodations, eating and drinking services	711,733	5,420,832
Living-related and personal services and amusement services	480,617	2,545,797
Education, learning support	161,287	1,721,559
Medical, health care and welfare	358,997	6,178,938
Compound services	33,357	342,426
Services, n.e.c.	356,156	4,521,755
By type of legal organizations		
Individual proprietorships	2,204,704	6,374,334
Corporations	3,218,023	49,327,187
Companies	2,839,291	41,921,403
Organizations other than corporations	30,908	135,731

1) Excluding businesses whose operational details are unknown, national government services, and local government services.
Source: Statistics Bureau, MIC; Ministry of Economy, Trade and Industry.

The manufacturing industry in Japan has continued to shrink. Overseas expansion by companies in the manufacturing industry is progressing against the background of the advancing appreciation of the yen following the Lehman Shock, the decentralization of production bases that occurred after the Great East Japan Earthquake, and the increases in energy charges, etc., that have occurred over the past few years.

According to the Ministry of Economy, Trade and Industry's "Survey of Overseas Business Activities," which surveys Japanese companies that have local affiliates overseas, the number of overseas affiliates in the manufacturing industry was 10,545 companies at the end of fiscal 2013, and the overseas production ratio was 22.9 percent in actual performance in fiscal 2013, indicating a 2.6 percentage point increase as compared to the previous fiscal year.

Table 3.4
Trends of Overseas Affiliated Company (Manufacturing Industries)

Fiscal year	Number of overseas affiliates	Value of Sales (Million yen)	Overseas production ratio [1] (%)	Value of capital investment (Million yen)	Ratio of overseas capital investment [2] (%)
2004	7,786	79,307,913	16.2	2,525,641	16.3
2005	8,048	87,418,663	16.7	3,491,812	19.6
2006	8,287	99,679,316	18.1	3,948,396	20.0
2007	8,318	111,040,510	19.1	4,231,847	19.5
2008	8,147	91,180,733	17.0	3,608,939	18.4
2009	8,399	78,305,761	17.0	2,058,685	15.9
2010	8,412	89,327,934	18.1	2,325,418	17.1
2011	8,684	88,289,996	18.0	3,082,273	21.5
2012	10,425	98,384,657	20.3	3,815,707	25.8
2013	10,545	116,997,649	22.9	4,646,055	29.4

1) Overseas production ratio = Sales of overseas affiliates/(Sales of overseas affiliates + Sales of domestic companies) × 100. 2) Ratio of overseas capital investment = Amount of capital investment in overseas affiliates/(Amount of capital investment in overseas affiliates + Amount of capital investment in domestic companies) × 100.
Source: Ministry of Economy, Trade and Industry.

In the future, it is anticipated that companies in the manufacturing industry in Japan will expand their overseas business. There are many companies that are planning on expanding their business to India, Indonesia, China, and Thailand.

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 independently of the general account. The number and particulars of special accounts change from year to year; for fiscal 2015, a total of 14 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
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	107,762,033	412,533,483	266,025,492	1,182,853
2013	106,044,664	422,850,542	271,710,284	1,147,384
2014 [2)]	103,925,748	419,369,915	253,805,559	a) 1,799,105
2015 [3)]	96,341,951	406,498,288	239,494,965	1,834,986
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
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	97,087,177	377,011,772	221,852,771	1,215,863
2013	100,188,879	382,716,983	227,684,454	1,133,335
2014 [2)]	103,573,276	409,420,004	245,195,421	a) 2,336,960
2015 [3)]	96,341,951	403,552,947	237,978,242	2,215,986

1) Net total deducting duplications of the general account and special accounts. 2) Final estimates as of January 15, 2015. 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, bond issues have exceeded tax revenues in most years, but since fiscal 2013, tax revenue exceeded borrowing (on an initial budget basis) in three consecutive years.

The size of the general account budget for fiscal 2015 was 96.34 trillion yen, an increase of 0.46 trillion yen (0.5 percent) from the initial budget of fiscal 2014. This is equivalent to 19.1 percent of the fiscal 2015 GDP, forecasted by the government at 504.9 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
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	97,087	59,192	29,198	5,961	570	4,762	5,776
2013	100,189	61,342	29,232	6,161	504	4,792	7,975
2014 [1)]	99,000	59,395	30,536	5,642	444	5,089	6,406
2015 [2)]	96,342	57,356	31,530	5,361	393	4,980	5,971

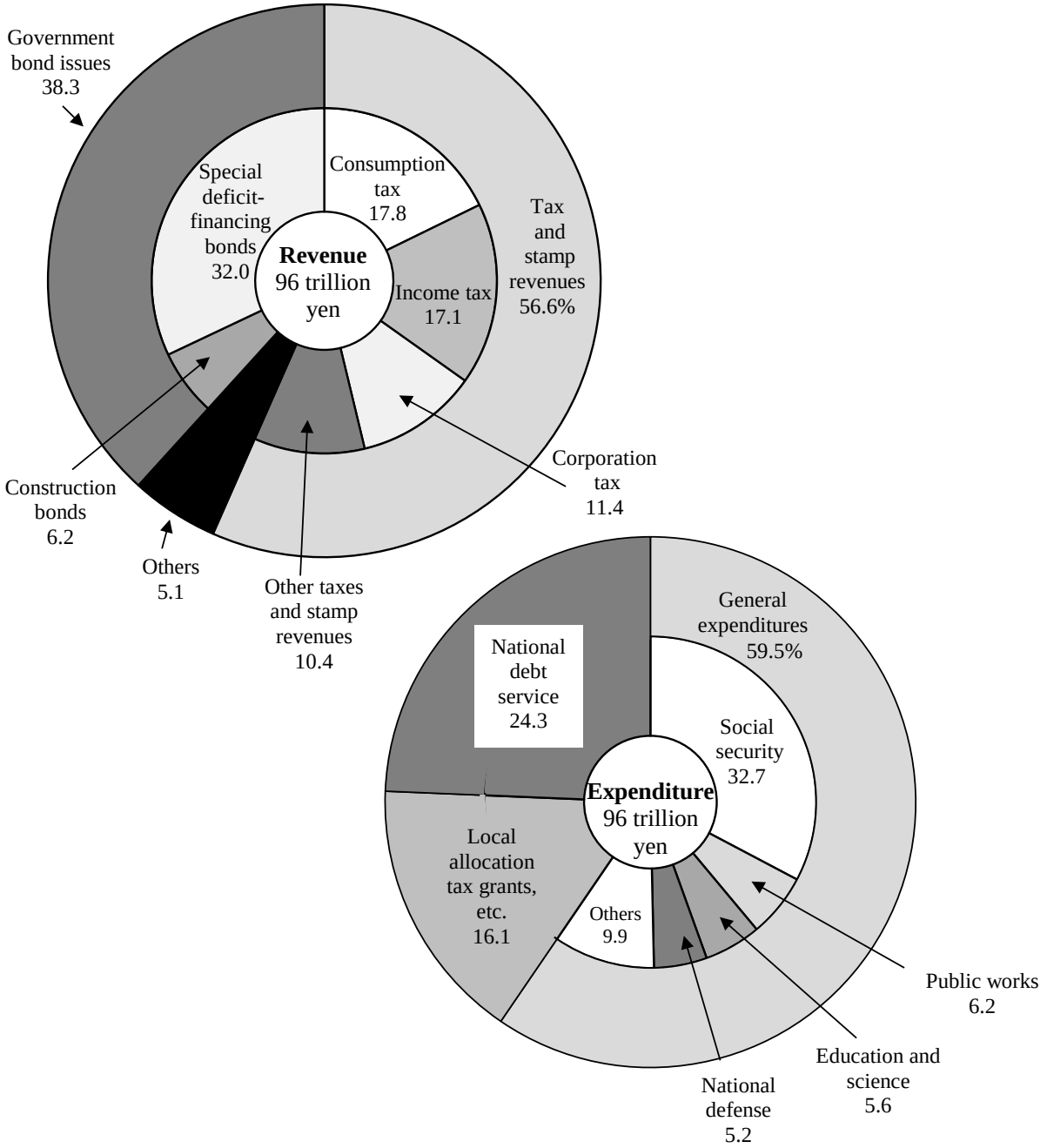
Fiscal year	Economic cooperation	Small- and medium-sized business promotion	Energy measures	Food stable supply	Others	National debt service (B)	Local allocation tax grants, etc. (C)
1995	1,034	623	708	269	7,751	12,820	12,302
2000	1,012	933	677	247	6,434	21,446	15,829
2005	784	237	493	657	6,536	18,736	17,441
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	624	825	847	1,353	9,277	21,011	16,885
2013	651	504	963	1,172	9,387	21,294	17,554
2014 [1)]	661	488	1,296	1,184	7,650	22,510	17,096
2015 [2)]	506	186	899	1,042	6,488	23,451	15,536

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

In fiscal 2015, major expenditures from the initial general account budget include social security (32.7 percent), national debt service (24.3 percent), local allocation tax grants, etc. (16.1 percent), public works (6.2 percent), education and science (5.6 percent), and national defense (5.2 percent).

With regard to revenue sources for the fiscal 2015 initial general account budget, income tax, consumption tax and corporation tax account for 46.3 percent. Even with the addition of other taxes and stamp revenues, these revenue sources only amount to 56.7 percent of the total revenue.

Figure 4.1
Composition of Revenue and Expenditure of General Account Budget
(Initial budget, FY2015)



Source: Ministry of Finance.

(2) Local Government Finance

There are two budget categories in 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 2012 (net) revenues came from local taxes, accounting for 34.5 percent of the total. The second-largest source, 18.3 percent, was local allocation tax grants.

Table 4.3

Local Government Finance [1] (Ordinary accounts)

(Million yen)

Item	FY2008	FY2009	FY2010	FY2011	FY2012
Revenues	92,213,459	98,365,695	97,511,501	100,069,646	99,842,882
Local taxes	39,558,526	35,182,954	34,316,330	34,171,416	34,460,760
Local allocation tax	15,406,082	15,820,237	17,193,551	18,752,268	18,289,826
Treasury disbursements	11,582,745	16,732,772	14,201,018	15,927,963	15,425,766
Local government bonds	9,922,067	12,396,036	12,969,520	11,760,270	12,337,932
Expenditures	89,691,477	96,106,449	94,775,014	97,002,646	96,418,554
General administration	8,919,649	10,718,365	9,999,758	9,345,975	9,961,845
Public welfare	17,821,099	19,767,874	21,316,337	23,182,534	23,152,326
Labor	663,040	918,764	808,224	993,750	768,688
Sanitation	5,390,177	5,971,517	5,812,417	6,743,245	5,993,241
Civil engineering work	12,871,235	13,292,043	11,959,157	11,284,876	11,242,282
Education	16,146,676	16,438,041	16,446,685	16,176,813	16,147,943

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 government 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 2014, the gross total of national government expenditure was 510 trillion yen, the net total was 239 trillion yen after eliminating duplications. Furthermore, the local public finance plan, which consists of the estimated sum of ordinary accounts for the following fiscal year for all local governments, amounted to 86 trillion yen. Therefore, after eliminating duplications between national and local accounts (35 trillion yen), the net total of both national and local government expenditures combined was 290 trillion yen.

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

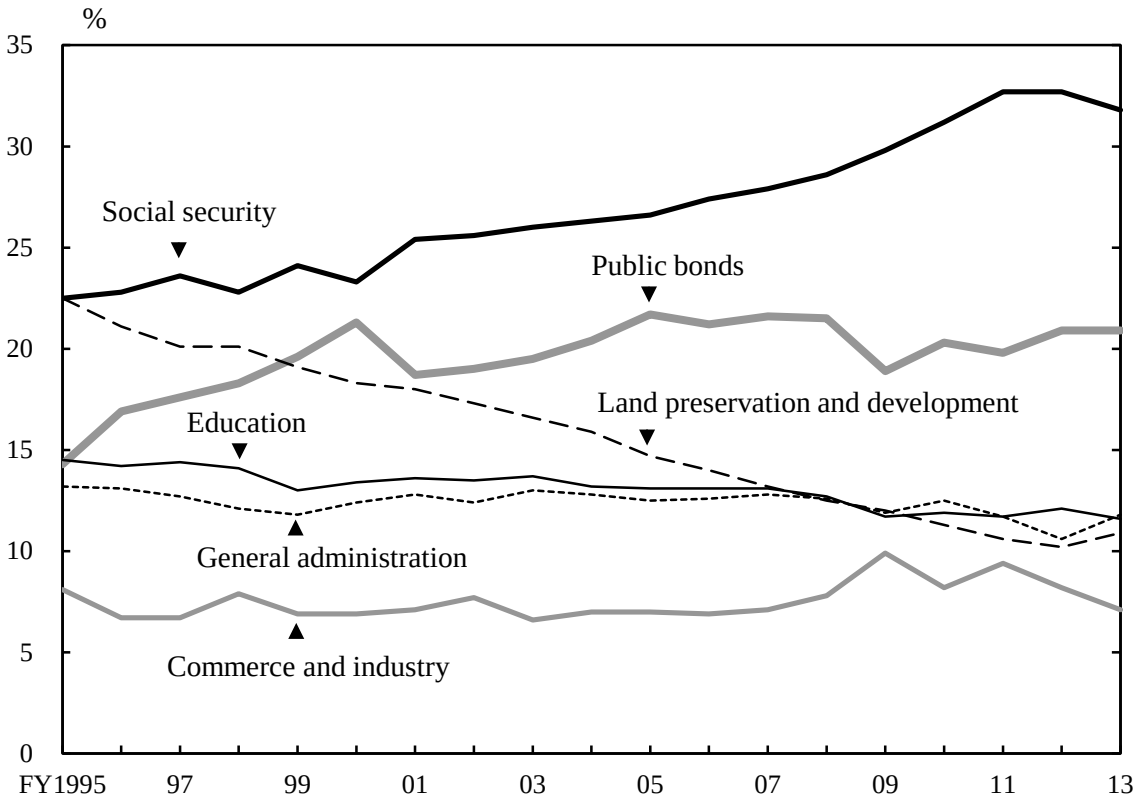
(Billion yen)

Item	Expenditures					
	FY1995	FY2000	FY2005	FY2010	FY2013	FY2014
General account	70,987	84,987	82,183	92,299	92,612	95,882
Special accounts	241,718	318,689	411,944	367,074	386,630	411,426
Government-affiliated agencies	8,086	7,661	4,678	3,135	2,510	2,337
Gross total (national)	320,792	411,337	498,805	462,508	481,751	509,645
Duplications	160,054	200,435	257,490	244,744	256,566	270,220
Net total (national)	160,738	210,902	241,316	217,764	225,185	239,426
Local public finance plan	82,509	88,930	83,769	82,127	84,453	85,575
Gross total (national + local)	243,247	299,832	325,084	299,891	309,639	325,000
Duplications	32,035	37,216	32,689	31,563	34,514	34,866
Net total (national + local)	211,213	262,616	292,395	268,328	275,125	290,134

Source: Ministry of Finance.

The settlement amount for fiscal 2013, the net total of national and local government expenditures was 166 trillion yen. The national government disbursed 42 percent of this amount, while the local governments disbursed 58 percent.

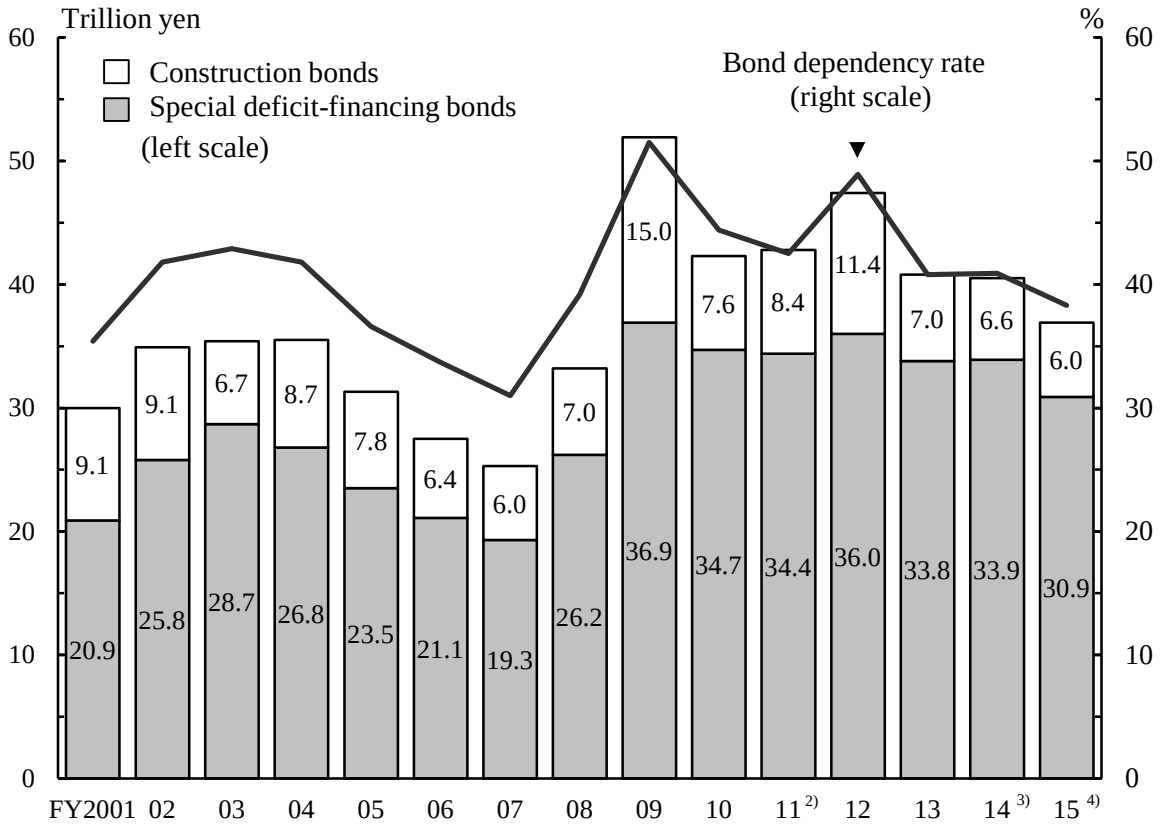
Figure 4.2
Trends in Ratio of Net Total National and Local Expenditures by Function



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 (31.8 percent), followed by public bonds (20.9 percent), general administration (11.8 percent), education (11.6 percent), and then land preservation and development (10.9 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 after the bubble economy ended at the beginning of 1990. A rising amount of public bond redemptions and an increase in social security expenditures associated with the progression of an aging society in recent years has resulted in public bonds and social security expenditures making up a high percentage of government expenditures net of overlaps. Issuance of government bonds increased after fiscal 2009 in comparison to years leading up to then, due to the effects of the "Lehman shock," but has decreased in recent years.

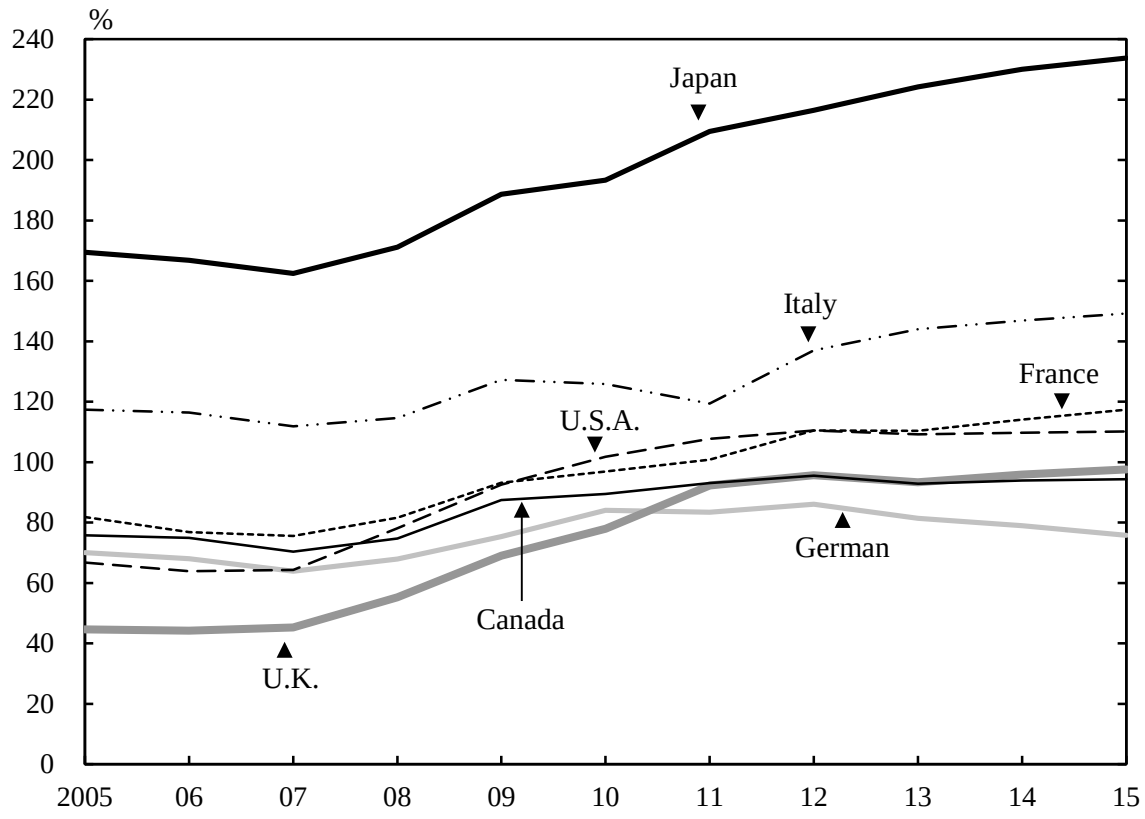
Figure 4.3
Trends in National Government Bond Issue [1)]



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 increasing 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

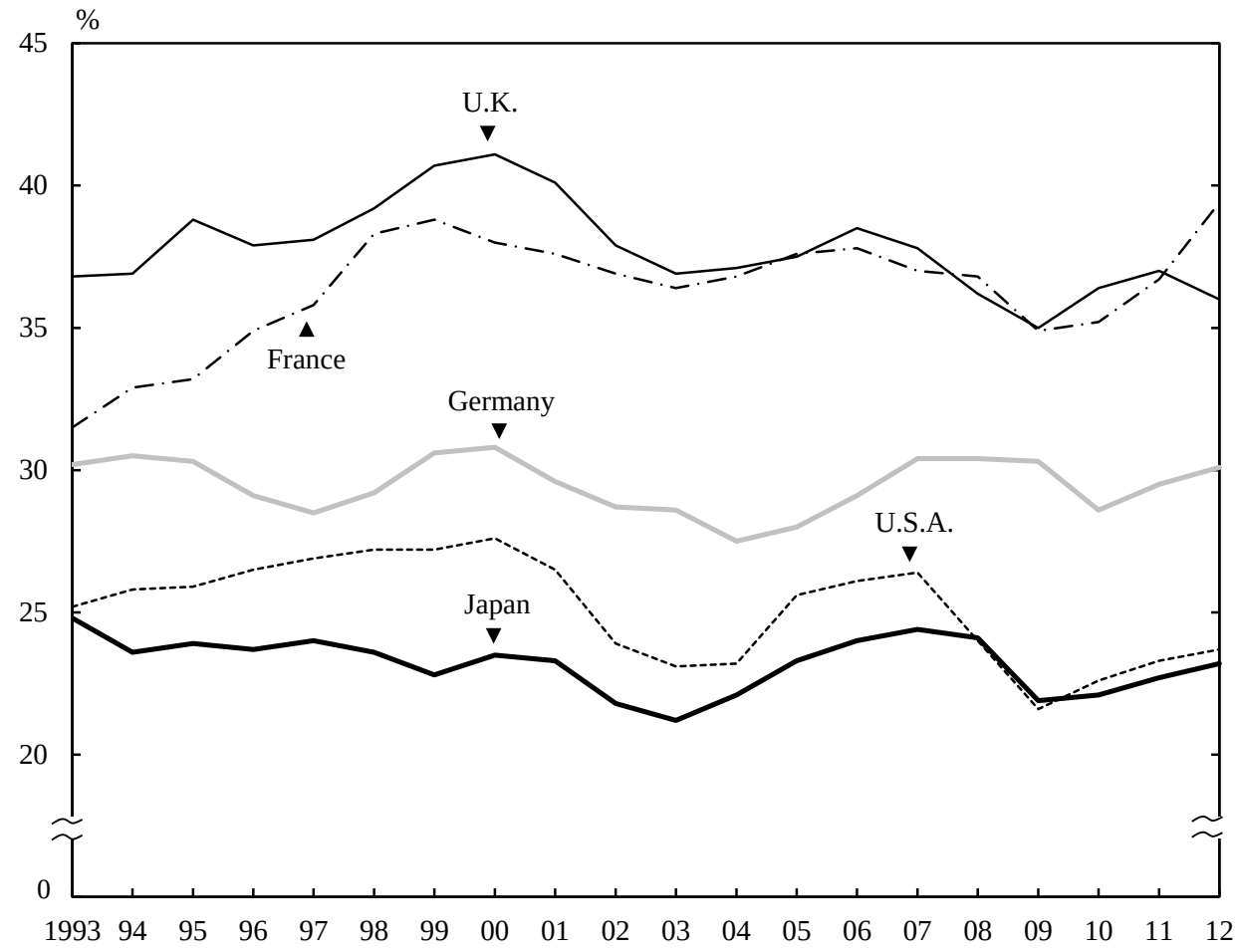


Source: Ministry of Finance.

(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. The ratio subsequently decreased due to the decline in tax revenue arising from the recession that ensued after the bubble economy ended, reaching 21.2 percent in fiscal 2003. In fiscal 2015, it was 25.6 percent in terms of national and local taxes combined (15.4 percent for national tax and 10.2 percent for local tax). Japan's ratio is lower in comparison with other major industrial countries. However, the consumption tax rate was raised from 5 to 8 percent on April 1, 2014. This was the first increase in 17 years. Hereafter, 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 (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 provides 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 the sound development of the economy.

At the end of 2014, currency in circulation totaled 97.74 trillion yen (93.08 trillion yen in Bank of Japan notes and 4.66 trillion yen in coins), up 3.1 percent from the year before.

Table 4.5

Currency in Circulation (Outstanding at year-end)

(Billion yen)

Item	2010	2011	2012	2013	2014
Total	86,856	88,547	91,231	94,770	97,738
Bank of Japan notes	82,314	83,997	86,653	90,143	93,082
Coins	4,541	4,550	4,578	4,627	4,656

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 in 2014 was 587 trillion yen in M1 and 875 trillion yen in M2.

Table 4.6

Money Stock [1)] (Average amounts outstanding)

(Billion yen)

Year	M2	M3	M1	Quasi-money	CDs	Broadly-defined liquidity
2010	775,391	1,075,188	492,401	553,070	29,717	1,435,898
2011	796,610	1,098,857	515,781	552,348	30,728	1,449,327
2012	816,530	1,122,568	534,555	555,606	32,406	1,460,398
2013	845,971	1,155,364	560,311	561,426	33,627	1,507,439
2014	874,836	1,187,430	586,757	564,803	35,871	1,558,474

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 monetary easing measures that were adopted in April 2013, the monetary base was 305.88 trillion yen as of the end of April 2015 (up 35.6 percent from the same month of the previous year), exceeding the 300 trillion yen mark for the first time.

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' newly issued Govt. bonds yields
2005	0.10	0.004	1.375	1.270	1.470
2006	0.40	0.275	1.625	1.450	1.675
2007	0.75	0.459	1.875	1.673	1.500
2008	0.30	0.103	1.675	1.494	1.165
2009	0.30	0.094	1.475	1.256	1.285
2010	0.30	0.079	1.475	1.187	1.120
2011	0.30	0.075	1.475	1.102	0.980
2012	0.30	0.076	1.475	1.034	0.795
2013	0.30	0.068	1.475	0.880	0.740
2014	0.30	0.066	1.475	0.850	0.320

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 24,182 offices. This was followed by domestically licensed banks, including city banks and regional banks, with a combined

total of 13,713 offices and branches. Securities companies operated at 2,112 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 efforts to their expand operations bases through corporate mergers, but there have been 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. 2014	2,860	5	2,719	136
Regional banks	Sep. 2014	7,516	64	7,437	15
Regional banks II	Sep. 2014	3,056	41	3,014	1
Trust banks	Sep. 2014	281	4	267	10
Financial institutions for small business					
Credit depositories	Feb. 2015	7,397	267	7,130	-
Credit cooperatives	Feb. 2015	1,709	154	1,555	-
Securities companies [1)]	Feb. 2015	2,112	253	1,859	-
Agricultural cooperatives	Mar. 2014	8,303	-	-	-
Post offices	Mar. 2015	24,182	-	-	-

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.

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 6,434 trillion yen according to figures at the end of March 2014. Of these assets, those of the domestic nonfinancial sector were 3,205 trillion yen. The household sector (including the business funds of individual proprietorships) had assets of 1,624 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 2013	March 2014	Annual growth (%)
Financial assets			
Domestic sectors	6,135,549	6,434,478	4.9
Financial institutions	3,090,222	3,229,010	4.5
Domestic nonfinancial sector	3,045,327	3,205,468	5.3
Nonfinancial corporations	909,860	996,434	9.5
General government	508,887	534,412	5.0
Households (incl. individual proprietorships)	1,578,734	1,624,412	2.9
Private nonprofit institutions serving households	47,845	50,210	4.9
Overseas	436,509	481,376	10.3
Financial liabilities			
Domestic sectors	5,826,975	6,104,425	4.8
Financial institutions	3,002,702	3,124,230	4.0
Domestic nonfinancial sector	2,824,274	2,980,195	5.5
Nonfinancial corporations	1,313,188	1,427,536	8.7
General government	1,123,582	1,157,687	3.0
Households (incl. individual proprietorships)	360,536	366,921	1.8
Private nonprofit institutions serving households	26,968	28,050	4.0
Overseas	741,385	808,156	9.0

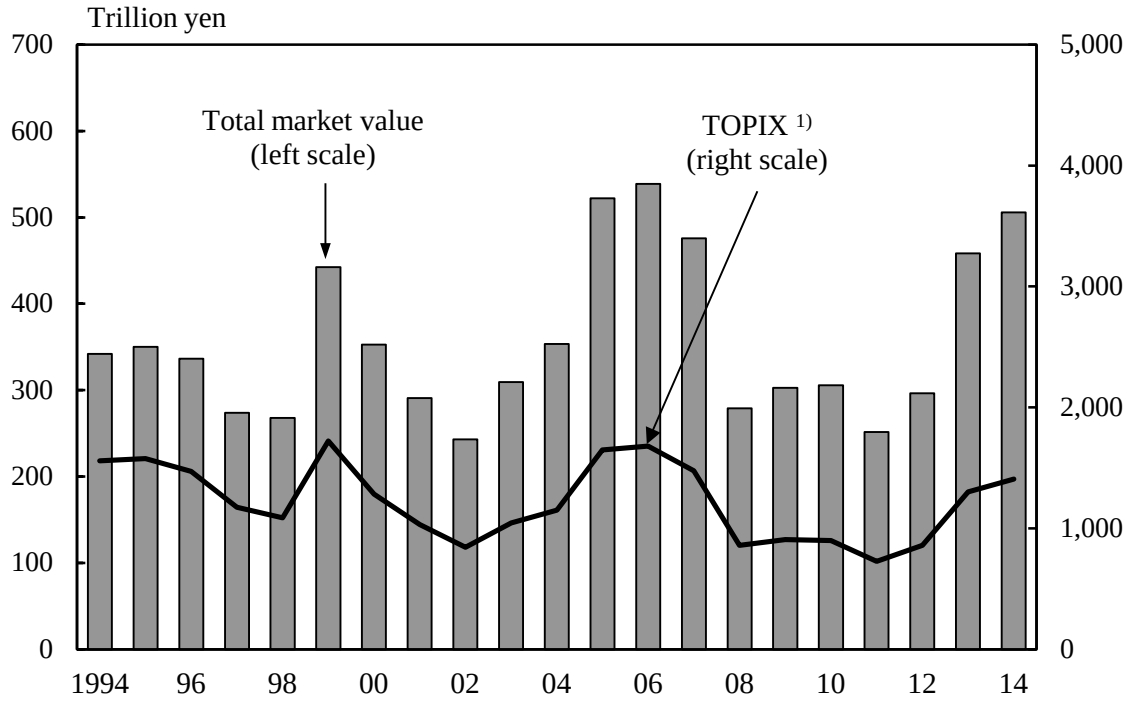
Source: Bank of Japan.

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 capitalization of the first section of the Tokyo Stock Exchange was 591 trillion yen, but only three years later, at the end of 1992, it had 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 then 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 total market capitalization, which amounted to 251 trillion yen at the end of 2011. In 2012, the high yen in Japanese economy was corrected due to expectations toward anti-deflationary economic and fiscal policies by the new government, and share prices soared. Afterwards,

changes in policies of the Bank of Japan in April 2013 were regarded as affecting stocks and markets, and the Nikkei Stock Average at the end of 2013 was 16,291.31 yen, representing an increase of 56.7 percent as compared to the end of 2012 (10,395.18 yen) and the first significant gain in 41 years.

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



1) Index of the total market capitalization 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: Tokyo Stock Exchange, Inc.

At the end of March 2014, the total number of individual stockholders (individuals of Japanese nationality and domestic groups without corporate status) in possession of stocks listed on the Tokyo/Nagoya/ Fukuoka/Sapporo Stock Exchanges totaled 45.8 million. In value terms, the ratio of stocks they possessed was 18.7 percent. The ratio of Japanese stocks held by foreign investors (total of corporations and individuals) was 30.8 percent in value terms, the highest ever recorded. Records also show that Internet trading remained on a strong growth path.

A survey conducted of 250 securities firms by the Japan Securities Dealers Association (JSDA) showed that 24.0 percent of those companies offered Internet trading at the end of September 2014. Internet trading thus accounted for 25.5 percent of the total value of stock brokerage transactions from the period of April 2014 to September 2014.

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

Year		Number of listed companies [1]	Total market capitalization [1] (million yen)	Total trading value (million yen)	TOPIX [1] [2] Tokyo stock price index, average	Nikkei Stock Average (225 issues) [1] (yen)
1998		1,340	267,783,547	96,001,269	1,086.99	13,842.17
1999		1,364	442,443,338	178,041,139	1,722.20	18,934.34
2000		1,447	352,784,685	242,632,346	1,283.67	13,785.69
2001		1,491	290,668,537	199,844,292	1,032.14	10,542.62
2002		1,495	242,939,136	190,869,955	843.29	8,578.95
2003		1,533	309,290,031	237,905,753	1,043.69	10,676.64
2004		1,595	353,558,256	323,918,214	1,149.63	11,488.76
2005		1,667	522,068,129	459,136,406	1,649.76	16,111.43
2006		1,715	538,629,548	644,308,788	1,681.07	17,225.83
2007		1,727	475,629,039	735,333,528	1,475.68	15,307.78
2008		1,715	278,988,813	568,538,950	859.24	8,859.56
2009		1,684	302,712,168	368,679,737	907.59	10,546.44
2010		1,670	305,693,030	354,598,763	898.80	10,228.92
2011		1,672	251,395,748	341,587,524	728.61	8,455.35
2012		1,695	296,442,945	306,702,280	859.80	10,395.18
2013		1,774	458,484,253	640,193,836	1,302.29	16,291.31
2014		1,858	505,897,342	576,525,070	1,407.51	17,450.77
2015	Jan.	1,862	510,004,356	47,593,832	1,415.07	17,674.39
	Feb.	1,859	547,883,283	55,265,534	1,523.85	18,797.94
	Mar.	1,875	556,220,164	63,518,928	1,543.11	19,206.99

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: Tokyo Stock Exchange, Inc.; Bank of Japan; Nikkei Inc.

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 13.40 million in 1960 (30.2 percent of the total workforce) to 2.33 million in 2013 (3.7 percent), and the GDP share of the industries fell from 12.8 percent in 1960 to 1.2 percent in 2013.

Table 5.1
Agricultural, Forestry and Fisheries Output

(Billion yen)

Item	2009	2010	2011	2012	2013
Total	10,073	10,026	10,082	10,335	10,339
Agriculture	8,190	8,121	8,246	8,525	8,467
Crops	5,590	5,513	5,639	5,879	5,703
Rice	1,795	1,552	1,850	2,029	1,781
Vegetables	2,085	2,249	2,134	2,190	2,253
Fruits and nuts	698	750	743	747	759
Livestock and its products	2,547	2,553	2,551	2,588	2,709
Beef cattle	482	464	463	503	519
Dairy cattle	791	773	751	775	778
Pigs	512	529	536	537	575
Chickens	709	735	753	724	784
Forestry	412	422	417	392	432
Fisheries	1,470	1,483	1,419	1,418	1,440

Source: Ministry of Agriculture, Forestry and Fisheries.

2. Agriculture

(1) Agricultural Production

Japan's total agricultural output in 2013 was 8.47 trillion yen, down 0.7 percent from the previous year. Crops yielded 5.70 trillion yen, down 3.0 percent from the previous year. This was due to the rice output decreasing despite outputs of vegetables and fruits and nuts increasing.

Table 5.2
Agricultural Production

(Thousand tons)

Products	2000	2005	2010	2012	2013
Cereal grains					
Rice	9,490	9,074	8,483	8,523	8,607
Wheat	688	875	571	858	812
Vegetables, potatoes and legumes					
Potatoes	2,898	2,752	2,290	2,500	2,408
Sweet potatoes	1,073	1,053	864	a) 876	a) 942
Soybeans, dried	235	225	223	236	200
Cucumbers	767	675	588	587	574
Tomatoes	806	759	691	722	748
Cabbages	1,449	1,364	1,360	1,443	1,440
Chinese cabbages	1,036	924	889	921	906
Onions	1,247	1,087	1,042	1,098	1,068
Lettuces	537	552	538	566	579
Japanese radishes	1,876	1,627	1,496	1,469	1,457
Carrots	682	615	596	613	604
Fruits					
Mandarin oranges	1,143	1,132	786	846	896
Apples	800	819	787	794	742
Grapes	238	220	185	198	190
Japanese pears	393	362	259	275	267
Industrial crops					
Crude tea	a) 85	100	85	a) 86	a) 85
Sugar beets [1)]	3,673	4,201	3,090	3,758	3,435

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

Source: Ministry of Agriculture, Forestry and Fisheries.

Table 5.3
Production of Meat, Milk and Eggs

(Tons)

Products	2000	2005	2010	2012	2013
Pork	1,270,685	1,244,963	1,292,451	1,296,971	1,309,433
Beef	529,674	498,428	514,078	517,844	507,293
Veal	629	1,042	881	806	693
Horse meat	7,215	7,129	5,880	4,896	5,465
Broilers	1,551,101	1,702,001	1,835,091	1,889,158	1,905,255
Cow milk	8,497,278	8,285,215	7,720,456	7,630,418	7,508,261
Eggs	2,540,075	2,481,000	2,515,323	2,506,768	2,521,974

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 or more) 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 engaged in farming as their principal occupation (commercial farmers) in 2010, of whom 61.6 percent were aged 65 years and over.

In 2013, the total income per commercial farm household was 4.73 million yen, down 0.7 percent from the previous year. Of that amount, 1.32 million yen was from farming income, 1.53 million yen from non-farming income, and 1.87 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 4.52 million hectares in 2014. In the one-year period of 2014, there were 6,930 hectares of new cultivation but also a 26,200-hectare decrease. The most common cause for the decrease was degraded farmland, accounting for approximately 50 percent of all cases,

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

3. Forestry

Japan's forest land area is 25.08 million hectares (approximately 70 percent of the entire surface area of the country). Of this, natural forests account for 54 percent while planted forests, most of which are conifer plantations, make up 41 percent. Meanwhile, Japan's forest growing stock is 4,901 million cubic meters, of which 3,042 million cubic meters are from planted forests.

In the forests, many planted forest resources have matured and are entering their harvest period. For forests to continuously exhibit their functions of soil conservation and prevention of global warming, it is necessary to smoothly follow the cycle of planting, tending and thinning planted forests.

Table 5.5
Forest Land Area and Forest Resources (2012)

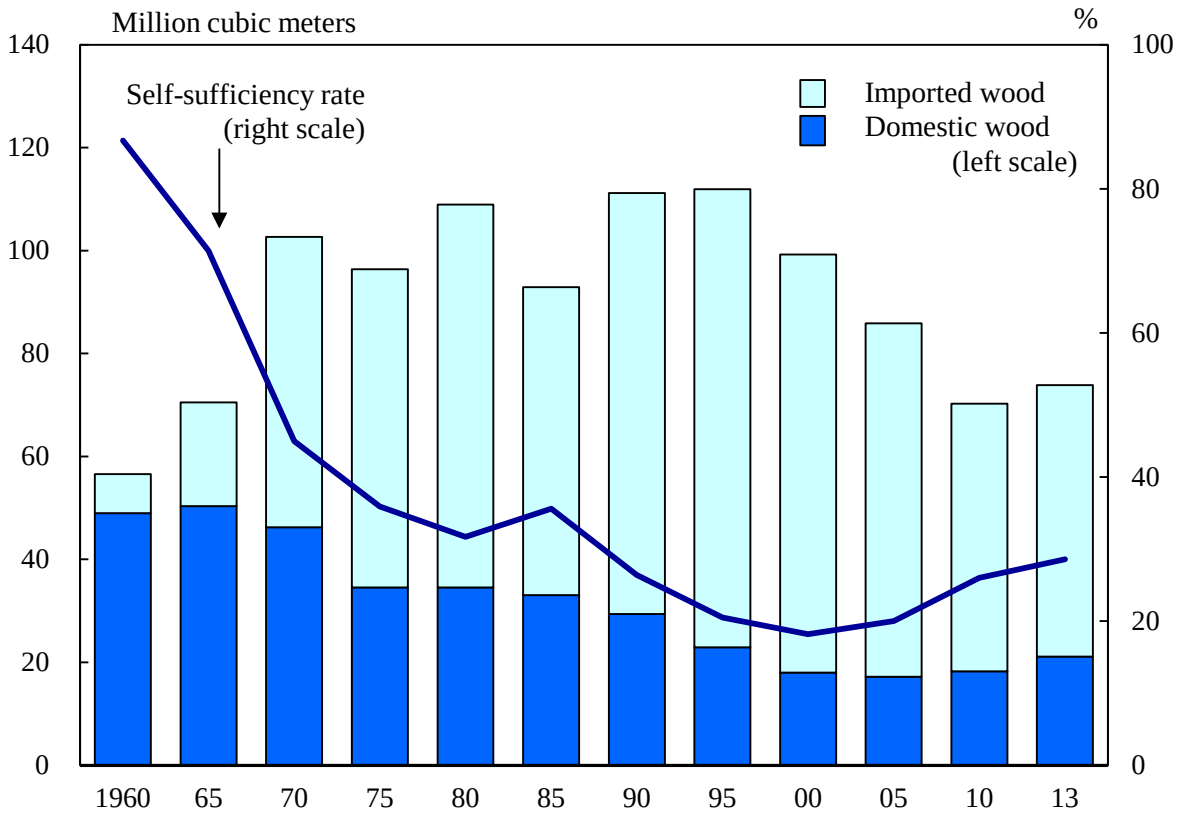
Item	Total	National forest	Non-national forest		
			Municipal	Private	Others
Forest land area (1,000 ha)	25,081	7,674	2,919	14,437	51
Forest growing stock (million m^3) ..	4,901	1,152	558	3,184	7
Planted forest					
Land area (1,000 ha)	10,289	2,327	1,287	6,662	14
Growing stock (million m^3)	3,042	467	350	2,221	3
Natural forest					
Land area (1,000 ha)	13,429	4,717	1,495	7,186	30
Growing stock (million m^3)	1,858	684	207	963	4

Source: Ministry of Agriculture, Forestry and Fisheries.

Domestic wood supply (log conversion) totaled 21.1 million cubic meters in 2013, which is equivalent to 40.0 percent of the peak in 1967 (52.7 million cubic meters). In 2013, Japan's self-sufficiency rate for lumber was 28.6 percent. Currently, Japan depends mostly on imported lumber for pulp, woodchip, and plywood materials.

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.

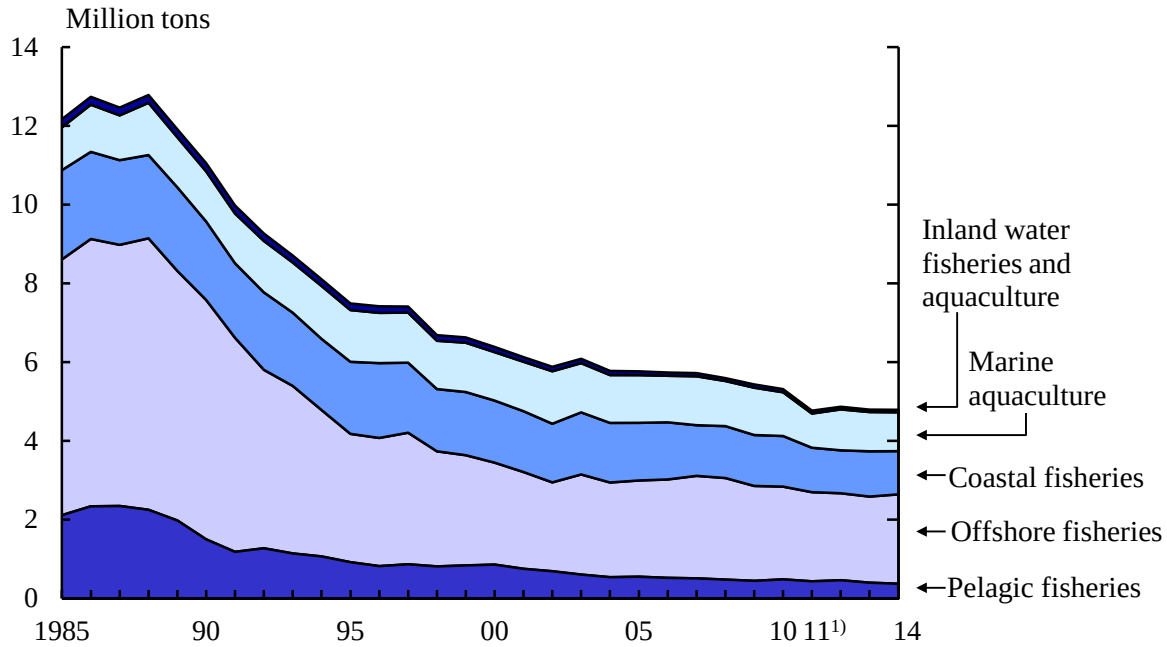
4. Fisheries

(1) Fishery Production

In Japan, a country surrounded by the ocean, the fishing industry has played an important role in supplying animal protein and bringing a healthy and rich diet to the population. However, in recent years, the consumption of seafood has decreased greatly due to changes in the environment surrounding food in Japan, and it has been pointed out that consumers are "shifting away from fish."

Japan's fishery output has been on the decline since 1989. Its 2014 fishery production totaled 4.79 million tons. Of this, marine fishery and aquaculture production amounted to 4.73 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	2013	2014*
Total	6,384	5,765	5,313	4,792	4,789
Marine fisheries	5,022	4,457	4,122	3,734	3,739
Tunas	286	239	208	189	187
Bonito	341	370	303	284	258
Sardine	150	28	70	218	202
Mackerels	346	620	492	386	502
Alaska pollack	300	194	251	230	198
Crabs	42	34	32	30	30
Squids	624	330	267	228	206
Marine aquaculture	1,231	1,212	1,111	997	987
Yellowtails	137	160	139	150	136
Oysters	221	219	200	164	184
Laver	392	387	329	316	267
Wakame Sea weed	67	63	52	51	44
Pearl (tons)	30	29	21	20	20
Inland water fisheries	71	# 54	# 40	31	# 31
Salmons and trouts	17	# 19	# 14	13	# 11
Sweetfish	11	# 7	# 3	2	# 2
Shellfishes	20	# 14	# 14	11	# 12
Inland water aquaculture	61	# 42	39	30	34
Eel	24	19	21	14	18
Trouts	15	12	9	8	8
Common carp	11	4	4	3	3

Source: Ministry of Agriculture, Forestry and Fisheries.

(2) Fishery Workers

The number of workers in the marine fishery industry (the workers who engage in work at sea for 30 days or more yearly) has been decreasing constantly. In 2014, there was a 4.4 percent decrease from the previous year, bringing the count to 173,000 workers. The number of workers in the fishery industry aged 44 years and younger was 43,000, representing a 1.0 percent increase from the previous year.

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
2013	94,510	89,470	5,040	180,990	109,250	71,740
2014	88,550	83,820	4,740	173,030	104,710	68,320

Source: Ministry of Agriculture, Forestry and Fisheries.

As the aging of fishing vessels progresses and the fishery workers aging increases, fisheries have been gaining attention as a place for employment, based on the diversification of values regarding work and life, and support is also being provided for new fishery workers.

5. Self-Sufficiency in Food

Japan's food self-sufficiency rate in terms of calories, although there is a downward trend over the long term, the ratio has been fluctuating at a level of around 40 percent since fiscal 1997. Whereas the ratio was 53 percent in fiscal 1980, the ratio was 39 percent in fiscal 2013. The principal cause for the drop in the food self-sufficiency rate is the fact that the diet of Japanese people changed significantly, leading to a lower consumption of rice, while there was an increase in the consumption amount of livestock products such as meat that domestic agricultural production alone cannot supply sufficiently.

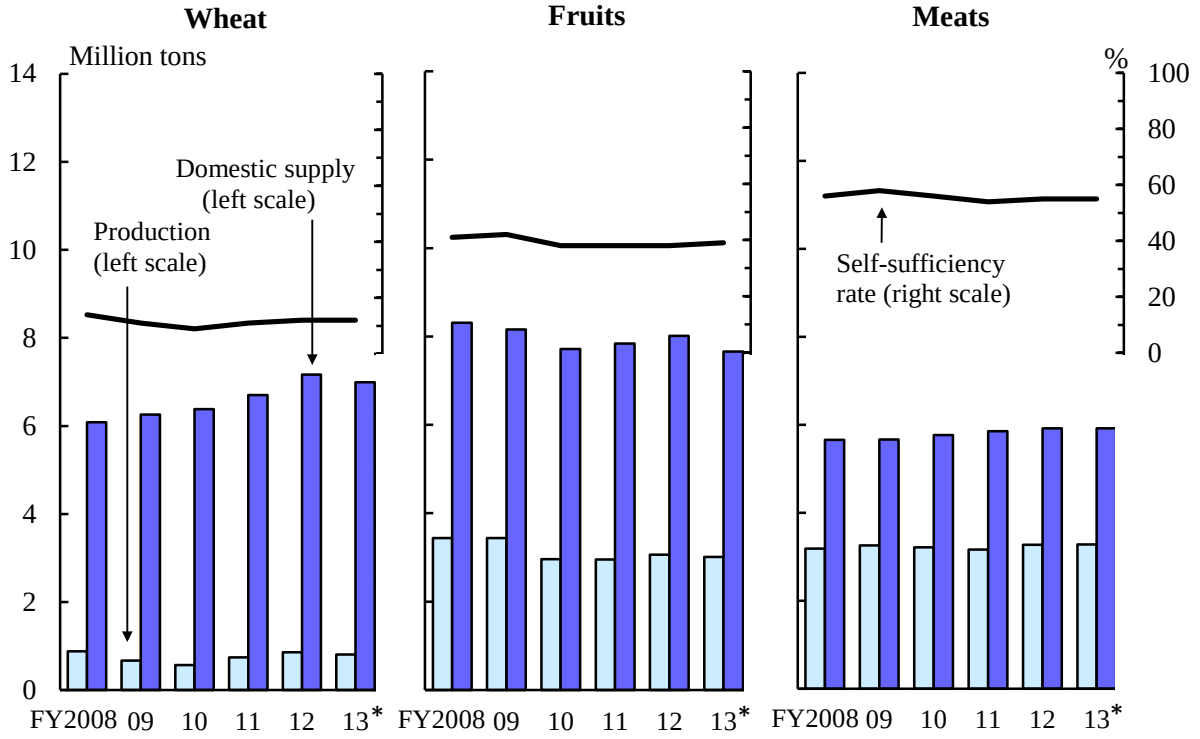
In fiscal 2013, the self-sufficiency rate (on an item-specific weight basis) was 100 percent for rice, 12 percent for wheat, 9 percent for beans, 79 percent for vegetables, 39 percent for fruits, 55 percent for meat, and 60 percent for seafood. Although completely self-sufficient in rice, the staple food of its people, Japan relied almost entirely on imports for the supply of wheat and beans.

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
2013*	1,599	8,718	5.45	833	8,697
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
2013*	210	812	3.86	5,737	6,992

Source: Ministry of Agriculture, Forestry and Fisheries.

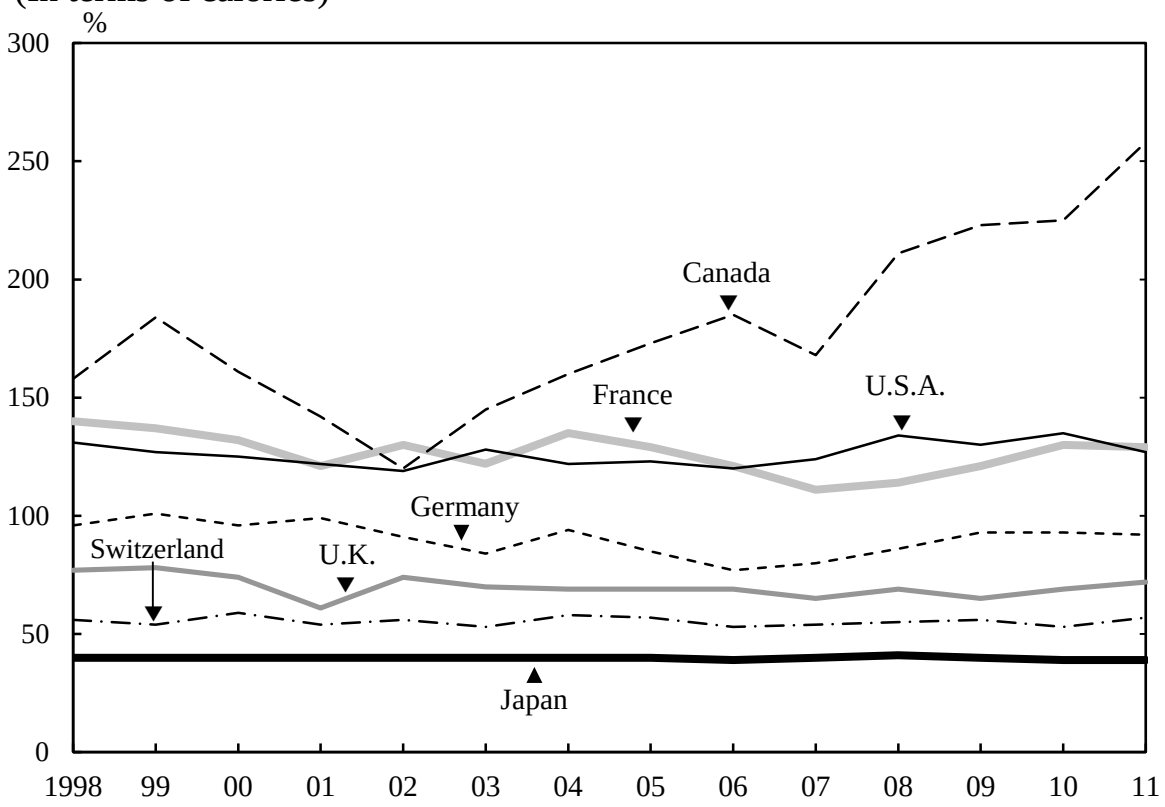
Figure 5.3
Self-Sufficiency Rates for Selected Categories of Agricultural Produce



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 leading net importer of agricultural products.

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

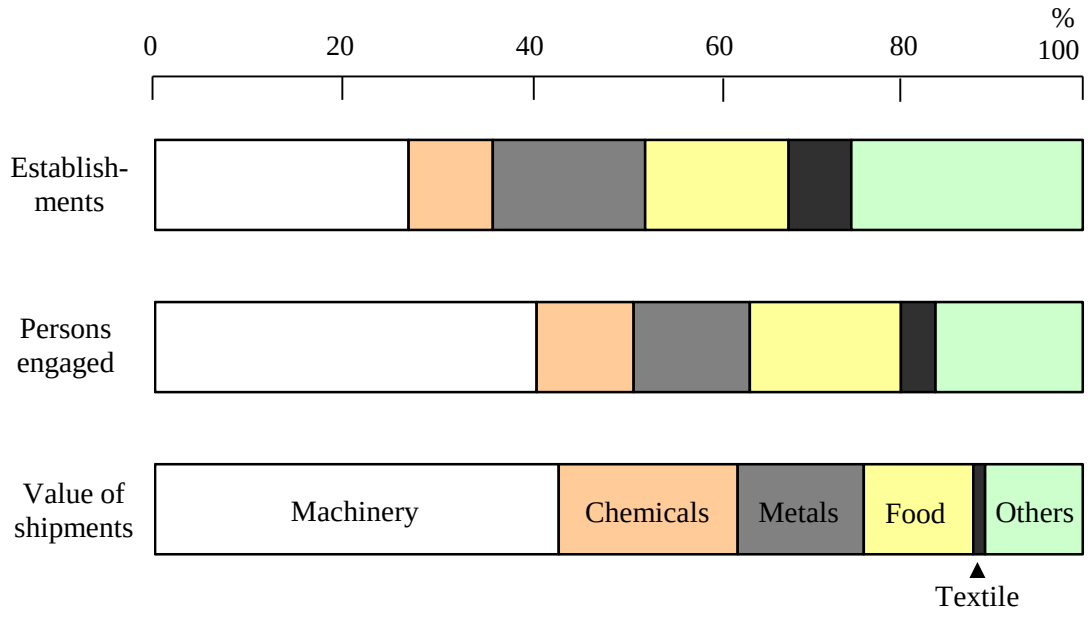
Manufacturing and Construction

1. Overview of the Manufacturing Sector

The proportion of added value produced in Japan's manufacturing sector to its nominal GDP has been around 20 percent recently, and 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. Against such background, the Japanese government announced an economic policy ("*Abenomics*") in January 2013, resulting in the Japanese economy shifting to a recovery. Afterwards, in April 2014, there were impacts caused by a response to last-minute demand associated with the increase in consumption tax. However, the economy has continued a gradual upward momentum, and improvements in earnings can also be seen in enterprises in the manufacturing industry.

Figure 6.1
Composition of Establishments, Persons Engaged and Value of Manufactured Goods Shipments by Sector [1] (2013)



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

Table 6.1
Number of Establishments, Persons Engaged and Value of Manufactured Goods Shipments of the Manufacturing Industry [1] (2013)

Industries	Number of establish-ments	Number of persons engaged	Value of manu-factured goods shipments (billion yen)
Manufacturing	208,029	7,402,984	292,092
Food	27,914	1,105,813	24,948
Beverages, tobacco and feed	4,254	100,371	9,500
Textile mill products	14,048	276,854	3,768
Lumber and wood products [2]	5,752	93,272	2,436
Furniture and fixtures	5,776	97,386	1,819
Pulp, paper and paper products	6,116	181,608	6,741
Printing and allied industries	12,200	276,620	5,421
Chemical and allied products	4,720	339,708	27,409
Petroleum and coal products	919	24,529	17,676
Plastic products [3]	13,245	409,136	11,237
Rubber products	2,586	111,826	3,113
Leather tanning, leather products and fur skins	1,467	23,056	350
Ceramic, stone and clay products	10,213	240,177	7,056
Iron and steel	4,368	216,280	17,905
Non-ferrous metals and products	2,737	137,964	8,806
Fabricated metal products	27,068	571,976	13,061
General-purpose machinery	7,236	315,928	10,231
Production machinery	19,400	543,449	15,155
Business oriented machinery	4,316	202,652	6,705
Electronic parts, devices and electronic circuits	4,440	388,209	12,943
Electrical machinery, equipment and supplies	9,207	472,547	15,458
Information and communication electronics equipment	1,591	157,425	8,427
Transport equipment	10,676	966,741	58,203
Miscellaneous manufacturing industries	7,780	149,457	3,723

1) 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: Ministry of Economy, Trade and Industry.

In 2013, there were 208,029 establishments (with four or more persons engaged) and a total of 7.40 million persons engaged in the manufacturing sector. These establishments shipped 292.1 trillion yen worth of manufactured products, with added value amounting to 90.1 trillion yen.

Based on the Indices on Mining and Manufacturing (2010 average=100), the production index for 2014 was 99.0, up 2.1 percent from the previous year, while shipments stood at 98.2, an increase of 1.3 percent from the year before.

Table 6.2

Indices on Mining and Manufacturing (2014)

(2010 average=100)

Industries	Production [1]		Shipments		Inventory [2]		Inventory Ratio [3]	
		Annual growth (%)		Annual growth (%)		Annual growth (%)		Annual growth (%)
Mining and manufacturing ..	99.0	2.1	98.2	1.3	112.3	6.2	109.8	0.7
Manufacturing	99.0	2.1	98.2	1.3	112.3	6.2	109.8	0.7
Food and tobacco	96.8	-1.0	95.6	-1.2	82.4	11.8	94.9	14.5
Textile	97.2	-1.2	96.1	-1.2	110.9	4.0	110.1	1.7
Pulp, paper and paper products	98.2	0.9	96.8	-0.3	99.3	5.8	108.4	1.3
Chemicals	96.0	-1.4	93.9	-2.5	104.7	-0.3	116.5	1.8
Chemicals (excl. Drugs)	93.4	-0.8	91.8	-2.3	104.7	-0.3	116.5	1.8
Petroleum and coal products	91.3	-3.7	93.6	-3.2	90.2	3.3	95.7	-2.2
Plastic products	98.6	0.4	97.2	0.3	105.5	0.7	108.9	1.2
Ceramic, stone and clay products	102.3	2.6	102.1	2.0	109.0	4.0	105.5	-2.1
Iron and steel	98.9	1.0	100.8	1.8	119.5	-4.6	113.5	-4.5
Non-ferrous metals	98.1	1.9	96.8	2.2	119.3	12.1	114.5	1.7
Fabricated metals	97.7	-1.2	98.0	-1.0	115.3	-1.5	127.4	1.1
General-purpose machinery .	107.2	6.1	105.7	8.0	120.6	9.9	116.9	2.3
Production machinery	122.2	15.1	124.1	13.9	142.0	8.7	90.0	-9.2
Business oriented machinery	99.7	4.5	103.2	2.5	103.2	-5.4	109.3	-3.8
Electronic parts and devices	96.5	9.0	106.5	9.3	112.9	9.5	129.4	-7.9
Electrical machinery	103.2	2.0	102.2	1.2	151.0	12.2	126.0	2.2
Information and communication electronics equipment	61.4	-10.5	53.7	-7.7	83.7	-1.9	147.0	18.5
Transport equipment	101.6	1.8	99.7	-0.1	118.5	52.3	99.2	14.0
Other manufacturing	96.7	-0.9	98.4	-0.6	100.5	0.1	96.4	-2.6
Mining	94.4	-2.3	92.0	-0.3	101.9	10.3	104.0	1.4
(Reference) Electricity, gas, heat supply and water	93.5	-1.4	94.4	-1.2	-	-	-	-

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)]

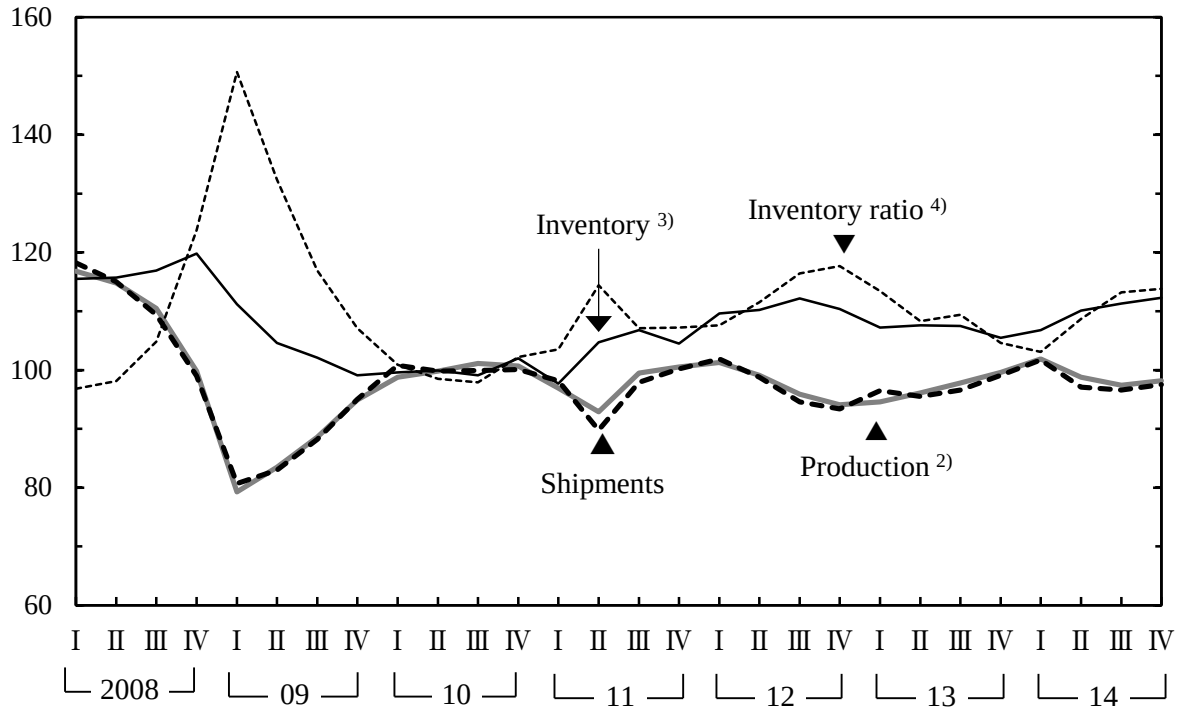
(2010 average=100)

Industries	2011	2012	2013	2014	Annual growth (%)
Mining and manufacturing	97.2	97.8	97.0	99.0	2.1
Manufacturing	97.2	97.8	97.0	99.0	2.1
Food and tobacco	95.6	97.7	97.8	96.8	-1.0
Textile	102.8	100.4	98.4	97.2	-1.2
Pulp, paper and paper products	97.8	96.2	97.3	98.2	0.9
Chemicals	98.6	96.4	97.4	96.0	-1.4
Chemicals (excl. Drugs)	97.0	92.7	94.2	93.4	-0.8
Petroleum and coal products	94.4	94.1	94.8	91.3	-3.7
Plastic products	97.2	98.3	98.2	98.6	0.4
Ceramic, stone and clay products	96.7	97.3	99.7	102.3	2.6
Iron and steel	97.3	97.5	97.9	98.9	1.0
Non-ferrous metals	96.1	98.2	96.3	98.1	1.9
Fabricated metals	98.3	99.8	98.9	97.7	-1.2
General-purpose machinery	108.4	100.7	101.0	107.2	6.1
Production machinery	115.5	109.8	106.2	122.2	15.1
Business oriented machinery	110.0	107.0	95.4	99.7	4.5
Electronic parts and devices	90.7	87.2	88.5	96.5	9.0
Electrical machinery	99.9	98.2	101.2	103.2	2.0
Information and communication electronics equipment	81.8	77.2	68.6	61.4	-10.5
Transport equipment	91.2	101.8	99.8	101.6	1.8
Other manufacturing	98.2	98.6	97.6	96.7	-0.9
Mining	100.0	101.0	96.6	94.4	-2.3
(Reference)					
Electricity, gas, heat supply and water	95.9	96.4	94.8	93.5	-1.4

1) Value added weights.

Source: Ministry of Economy, Trade and Industry.

Figure 6.2
Trends in Indices on Mining and Manufacturing [1] (2010 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 "Census of Manufactures 2013 (with four or more persons engaged)," and (b) is described by the "Indices on Mining and Manufacturing" (2010 average=100).

(1) Machinery Industry

(A) Transport Equipment Industry

(a) In 2013, a total of 10,676 establishments, employed 966,741 persons, and shipped 58.2 trillion yen worth of products.

(b) In 2014, production increased by 1.8 percent and shipments decreased 0.1 percent compared to the previous year production increased for the first time in two years, and shipments fell for a second year. Production

rose due to increases in production of passenger cars and trucks. Shipments fell due to decreases in shipments of passenger cars and motor vehicle parts.

(B) Electrical Machinery, Equipment and Supplies Industry

(a) In 2013, a total of 9,207 establishments, employed 472,547 persons, and shipped 15.5 trillion yen worth of products.

(b) In 2014, production and shipments increased year-on-year by 2.0 percent and 1.2 percent, respectively their second consecutive year of increase. This was due to an increase in the production and shipment of switching devices, etc.

(C) Production Machinery Industry

(a) In 2013, a total of 19,400 establishments, employed 543,449 persons, and shipped 15.2 trillion yen worth of products.

(b) In 2014, production and shipments increased year-on-year by 15.1 percent and 13.9 percent, respectively their first increase in three years. This was attributable to an increase in the production and shipment of semiconductor and flat-panel display manufacturing equipment, etc.

(D) Electronic Parts and Devices Industry

(a) In 2013, a total of 4,440 establishments, employed 388,209 persons, and shipped 12.9 trillion yen worth of products.

(b) In 2014, production and shipments increased by 9.0 percent and 9.3 percent, respectively, from the previous year their second consecutive year of increase. This was due to an increase in the production and shipment of electronic parts, integrated circuits, etc.

(E) Information and Communication Electronics Equipment Industry

(a) In 2013, a total of 1,591 establishments, employed 157,425 persons, and shipped 8.4 trillion yen worth of products.

(b) In 2014, production and shipments decreased by 10.5 percent and 7.7 percent, respectively, from the previous year their fourth consecutive year of decrease. This was due to a decrease in the production and shipments of all types of information and communication electronics equipment.

(2) Chemical Industry

(a) In 2013, a total of 4,720 establishments, employed 339,708 persons, and shipped 27.4 trillion yen worth of products.

(b) In 2014, production and shipments decreased by 1.4 percent and 2.5 percent, respectively, from the previous year their first decrease in two years. In 2014, production and shipments in the chemical industry (excluding drugs) decreased by 0.8 percent and 2.3 percent, respectively, from the previous year their first decrease in two years. This was attributable to a decrease in the production and shipment of plastic (materials), industrial organic chemicals, etc.

(3) Iron and Steel Industry

(a) In 2013, a total of 4,368 establishments, employed 216,280 persons, and shipped 17.9 trillion yen worth of products.

(b) In 2014, production and shipments increased by 1.0 percent and 1.8 percent, respectively, from the previous year production increased for the third consecutive year and shipments increased for the second consecutive year. This was attributable to a rise in the production and shipment of hot rolled steel, etc.

Table 6.4
Crude Steel Production in Selected Countries

(Thousand tons)

Country	2005	2010	2012	2013	2014*
China	355,790	638,743	731,040	822,000	822,698
Japan	112,471	109,599	107,232	110,595	110,666
U.S.A.	94,897	80,495	88,695	86,878	88,174
India	45,780	68,976	77,264	81,299	86,530
Korea, Rep. of	47,820	58,914	69,073	66,061	71,543
Russia	66,146	66,942	70,209	69,008	71,461
Germany	44,524	43,830	42,661	42,645	42,943
Turkey	20,965	29,143	35,885	34,654	34,035
Brazil	31,610	32,948	34,524	34,163	33,912
Ukraine	38,641	33,432	32,975	32,771	27,170

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

Table 6.5
Steel Production

(Thousand tons)

Products	2009	2010	2011	2012	2013
Pig iron	66,943	82,283	81,028	81,405	83,849
Ferroalloys	722	893	834	908	938
Crude steel	87,534	109,599	107,601	107,232	110,595
Semi-finished steel	85,359	106,960	104,594	104,571	107,991
Ordinary hot-rolled steel	63,417	77,260	74,492	74,911	77,006
Special hot-rolled steel	13,269	20,505	20,340	19,896	19,960

Source: Ministry of Economy, Trade and Industry.

(4) Fabricated Metal Products Industry

(a) In 2013, a total of 27,068 establishments, employed 571,976 persons, and shipped 13.1 trillion yen worth of products.

(b) In 2014, production and shipments decreased by 1.2 percent and 1.0 percent, respectively, from the previous year production decreased for the second consecutive year, while shipments recorded the first decrease in three years. A decrease in the production of metal products for building contributed to the total production decrease in the industry. The decrease in total shipments was caused by a fall in metal products for building and in fabricated structural metal products.

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. Construction investments at current prices had been on a declining trend after reaching a peak of 84 trillion yen in fiscal 1992, and fell to half of this peak (42 trillion yen) in fiscal 2010, but turned upward in fiscal 2011.

Construction investments in fiscal 2013 amounted to 48.7 trillion yen at current prices, which was a 10.2 percent increase compared to the previous fiscal year; it totaled 45.5 trillion yen at constant fiscal 2005 prices, which was a 7.7 percent increase from the previous fiscal year. This can be considered to be the impact of recovery from the Great East Japan Earthquake as well as improvements in the economic climate.

A breakdown of construction investment shows that building construction totaled 26.4 trillion yen (up 12.7 percent from the previous fiscal year), while civil engineering works amounted to 22.3 trillion yen (up 7.4 percent).

In terms of public and private construction investment in fiscal 2013, public investment amounted to 20.6 trillion yen (up 10.2 percent from the previous fiscal year), while private investment totaled 28.1 trillion yen (up 10.2 percent). Public investment accounted for 42.3 percent of total construction investment, while private investment accounted for 57.7 percent.

Table 6.6
Construction Investment (Current prices)

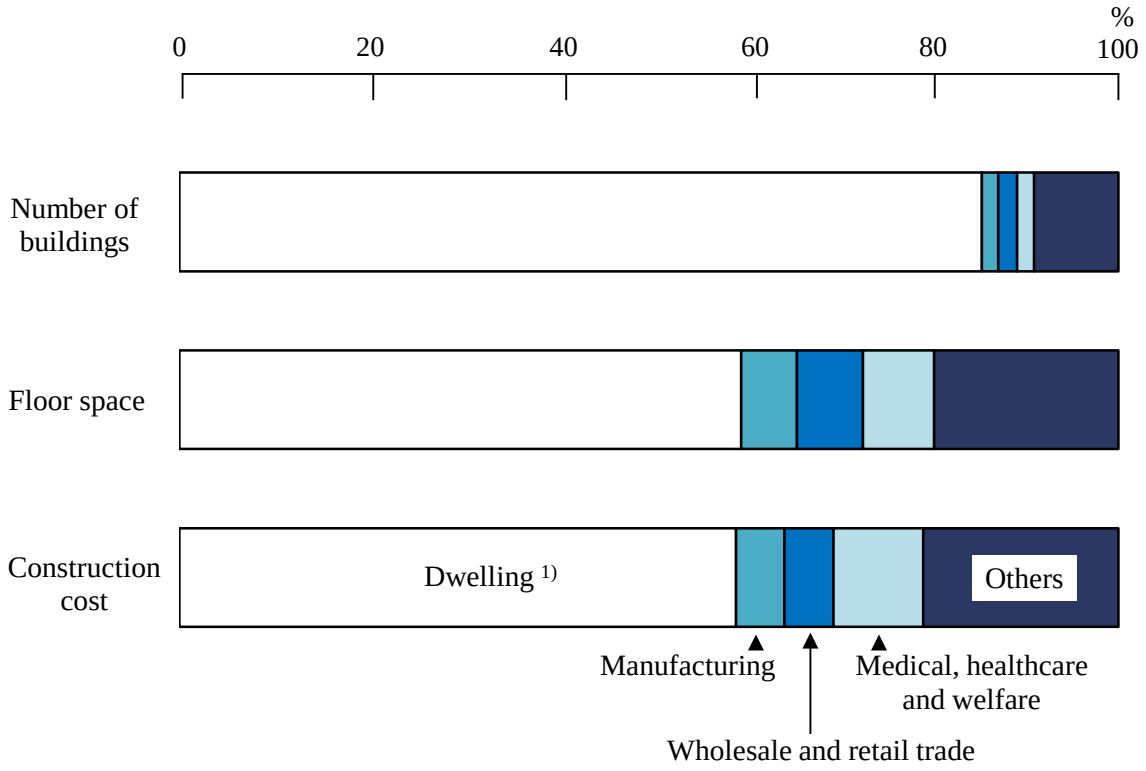
(Billion yen)

Item	FY2010	FY2011	FY2012*	FY2013*
Total	41,928	43,292	44,200	48,720
Building construction	22,099	22,480	23,430	26,410
Dwellings	13,493	13,840	14,570	16,430
Public sector	515	465	480	690
Private sector	12,978	13,375	14,090	15,740
Non-dwellings	8,606	8,640	8,860	9,980
Public sector	1,694	1,678	1,680	2,000
Private sector	6,912	6,962	7,180	7,980
Mining and manufacturing	1,067	1,155	…	…
Others	5,845	5,807	…	…
Civil engineering works	19,829	20,812	20,770	22,310
Public sector	15,772	16,468	16,530	17,910
Public works	13,020	13,854	13,970	15,330
Others	2,753	2,613	2,560	2,580
Private sector	4,057	4,345	4,240	4,400
Total				
Public investment	17,982	18,611	18,690	20,600
Private investment	23,946	24,682	25,510	28,120
Building construction				
Public investment	2,210	2,143	2,160	2,690
Private investment	19,890	20,337	21,270	23,720
Civil engineering works				
Public investment	15,772	16,468	16,530	17,910
Private investment	4,057	4,345	4,240	4,400

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

The 2014 total floor space of building starts was 134.02 million square meters, down 9.2 percent from the previous year. In particular, the floor space of buildings for finance and insurance use decreased by 46.4 percent compared to the previous year, to 0.37 million square meters. Meanwhile, the number of housing construction starts (in the case of apartment buildings, the number of apartment units was counted) decreased for owned houses and built-for-sale units alike, totaling 0.89 million housing units. This was a 9.0 percent decrease from the previous year, the first decrease in five years.

Figure 6.3
Building Construction Started by Use Objective (2014)



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 91.4 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 such as nuclear power, natural gas, coal, etc., and secure a stable supply of petroleum through stockpiling and other measures. As a result, its dependence on petroleum declined from 75.5 percent in fiscal 1973 to 43.5 percent in fiscal 2010. However, since the Great East Japan Earthquake, the percentage of fossil fuels has been increasing, as a substitute for nuclear power as fuel for power generation. The level of dependence on petroleum, which had been on a declining trend in recent years, increased to 47.2 percent in fiscal 2012.

In fiscal 2013, the total primary energy supply in Japan was 21,973 petajoules, up 1.1 percent from the previous fiscal year. Its breakdown was: 45.7 percent in petroleum, 24.2 percent in coal, 22.5 percent in natural gas, 3.1 percent in hydro power, and 0.4 percent in nuclear power. Other sources were also used, though only in small quantities, including energy from waste, geothermal, and natural energy (solar photovoltaic, 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:

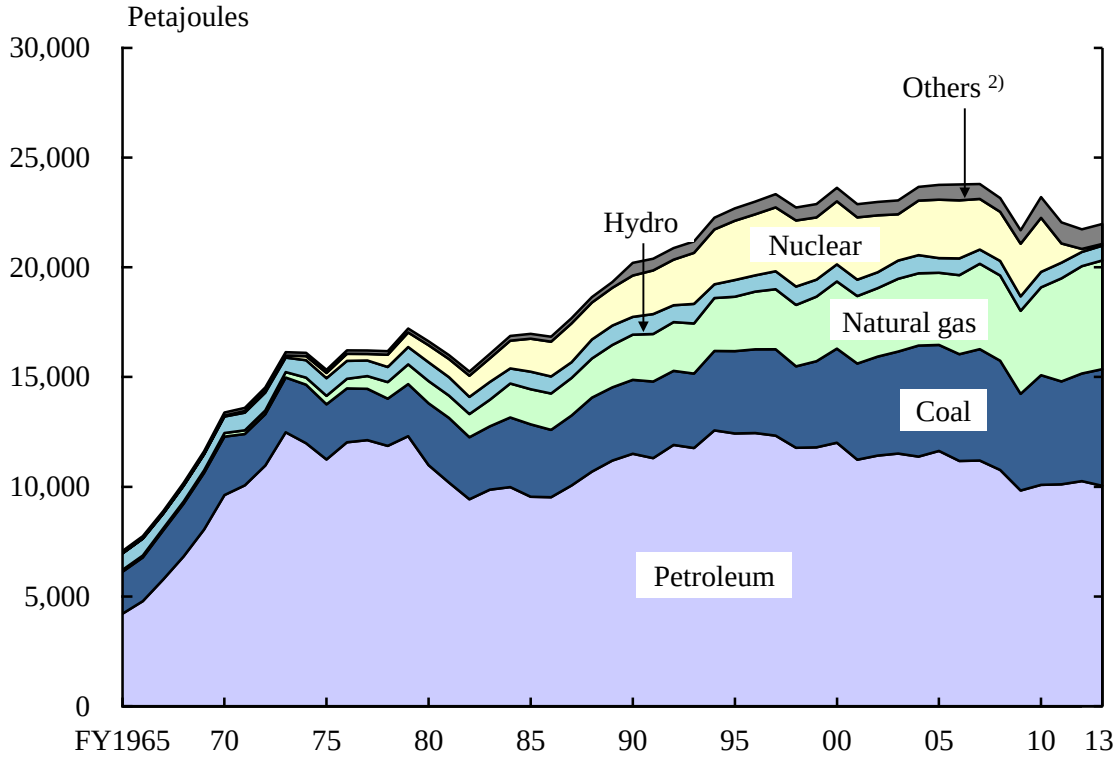
1 kiloliter of petroleum = 3.87×10^{10} joules
1 petajoule = 10^{15} joules

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

As a result, the government has been working to construct a new energy supply-demand structure oriented toward stable supply of energy and lowering energy costs. In this process, energy-saving and renewable energy that takes global warming into consideration has been introduced, and aims are being made toward reducing dependency on nuclear power.

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 2012 decreased by 1.3 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 41.9 percent over the 23 years from fiscal 1990 through fiscal 2012. 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 extension of opening hours.

Figure 7.1
Total Primary Energy Supply [1)]



1) A different statistical method was used for figures of FY1989 and prior. 2) Solar photovoltaic, wind power, geothermal energy, etc.
Source: Ministry of Economy, Trade and Industry.

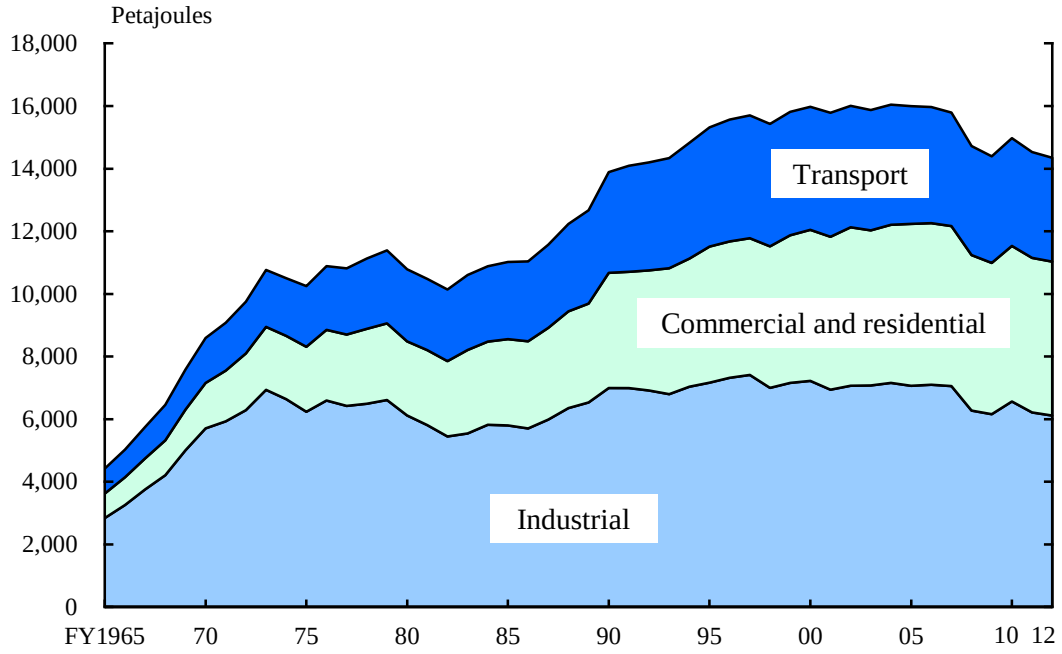
Table 7.1
Trends in Total Primary Energy Supply and Percentage by Energy Source

(Petajoules)

Item	FY2000	FY2005	FY2010	FY2012	FY2013
Total primary energy supply	23,622	23,755	# 23,200	21,730	21,973
Energy self-sufficiency (%) [1] ..	19.6	18.3	# 19.4	8.9	8.6
Petroleum	12,008	11,634	10,088	10,258	10,045
Coal	4,286	4,829	4,997	4,903	5,314
Natural gas	3,061	3,288	4,002	4,891	4,953
Hydro	778	668	703	648	672
Nuclear	2,873	2,662	2,465	137	80
Others [2]	616	674	# 944	893	909
Percentage					
Petroleum	50.8	49.0	43.5	47.2	45.7
Coal	18.1	20.3	21.5	22.6	24.2
Natural gas	13.0	13.8	17.2	22.5	22.5
Hydro	3.3	2.8	3.0	3.0	3.1
Nuclear	12.2	11.2	10.6	0.6	0.4
Others [2]	2.6	2.8	4.1	4.1	4.1

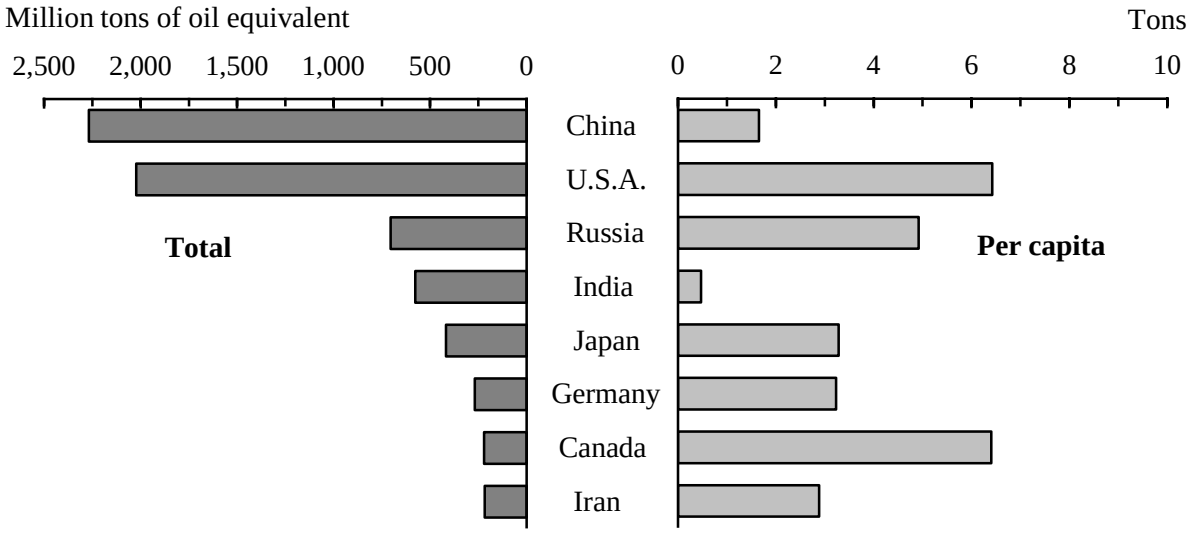
1) Domestic production of primary energy (including nuclear)/Domestic supply of primary energy × 100 2) Solar photovoltaic, wind power, geothermal energy, etc.
Source: Ministry of Economy, Trade and Industry.

Figure 7.2
Trends in Final Energy Consumption by Sector [1]



1) A different statistical method was used for figures of FY1989 and prior.
Source: Ministry of Economy, Trade and Industry.

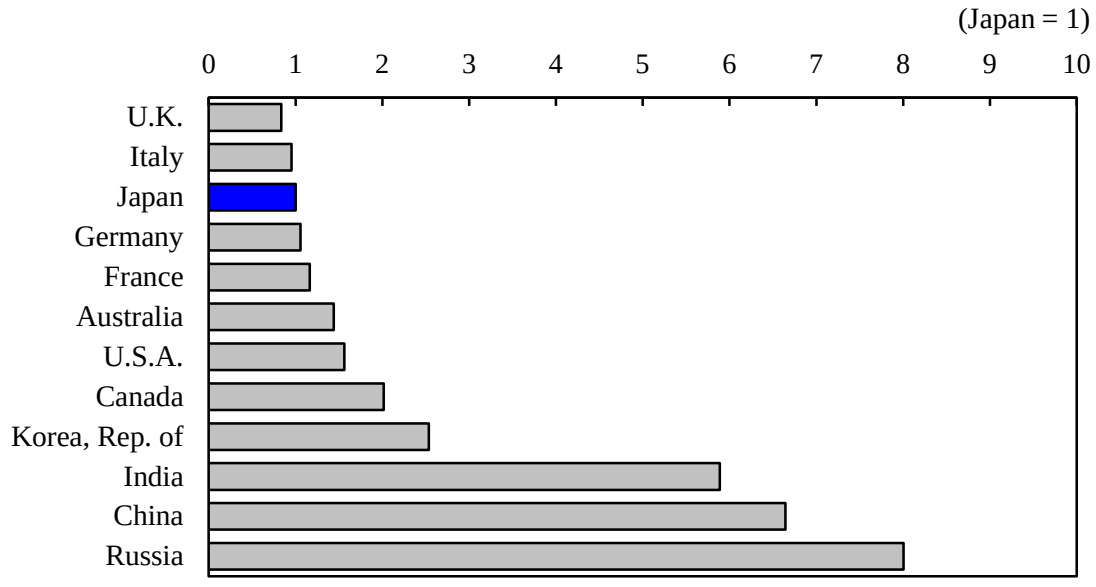
Figure 7.3
Consumption of Commercial Energy by Country (2011)



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)] (2012)



1) Total primary energy supply (tons of oil equivalent)/GDP (thousand 2005 U.S. dollars).
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 1,091 billion kWh in fiscal 2013, down 0.3 percent from the previous fiscal year. Of this total, thermal power accounted for 90.5 percent; hydro power, 7.8 percent; nuclear power, 0.9 percent.

Table 7.2
Trends in Electricity Output and Power Consumption [1)]

(Million kWh)

Item	FY2000	FY2005	FY2010	FY2012	FY2013
Electricity Output					
Total	1,091,500	1,157,926	1,156,888	1,093,950	1,090,723
Thermal	669,177	761,841	771,306	986,758	987,586
Hydro	96,817	86,350	90,681	83,645	84,885
Nuclear	322,050	304,755	288,230	15,939	9,303
Others [2)]	3,456	4,980	6,671	7,608	8,949
Percentage					
Total	100.0	100.0	100.0	100.0	100.0
Thermal	61.3	65.8	66.7	90.2	90.5
Hydro	8.9	7.5	7.8	7.6	7.8
Nuclear	29.5	26.3	24.9	1.5	0.9
Others [2)]	0.3	0.4	0.6	0.7	0.8
Power Consumption					
Total	982,066	1,043,800	1,056,441	991,612	992,627
Generated by electric power suppliers	858,078	918,265	931,059	875,276	876,032
Consumption of in-house generation	123,988	125,535	125,382	116,336	116,595

1) Including in-house generation. 2) Solar photovoltaic, wind power, geothermal energy, etc.
Source: Ministry of Economy, Trade and Industry.

3. Gas

Gas production was 1,352 petajoules in fiscal 2013, up 2.1 percent from the previous fiscal year. Of this total, natural gas plus liquefied natural gas (LNG) accounted for 96.0 percent; and the remaining 4.0 percent was made up of petroleum gases, such as volatile oil and liquefied petroleum gas. Gas purchases for fiscal 2013 totaled 258 petajoules.

Gas sales for fiscal 2013 totaled 1,536 petajoules, or year-on-year growth of 1.0 percent. Of this total, 53.5 percent was sold to industry, 26.0 percent to residential use, and 12.2 percent to the commercial sector.

Table 7.3

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

(Petajoules)

Item	FY2005		FY2010		FY2012		FY2013	
Production and purchases	1,394		1,547		1,587		1,610	
Production	1,235	(100.0)	1,288	(100.0)	1,324	(100.0)	1,352	(100.0)
Petroleum gases [2)]	67	(5.4)	46	(3.6)	52	(3.9)	55	(4.0)
Natural gas and LNG	1,168	(94.6)	1,241	(96.4)	1,272	(96.1)	1,297	(96.0)
Others	-	(-)	-	(-)	-	(-)	-	(-)
Purchases	159	(100.0)	259	(100.0)	263	(100.0)	258	(100.0)
Coal gases	2	(1.3)	-	(-)	-	(-)	-	(-)
Petroleum gases [3)]	10	(6.4)	6	(2.4)	6	(2.2)	5	(1.8)
Natural gas and LNG [4)]	147	(92.3)	253	(97.6)	257	(97.8)	253	(98.2)
Others	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Sales	1,359	(100.0)	1,477	(100.0)	1,520	(100.0)	1,536	(100.0)
Residential	416	(30.6)	410	(27.7)	410	(27.0)	400	(26.0)
Commercial	205	(15.1)	198	(13.4)	188	(12.4)	187	(12.2)
Industrial	619	(45.5)	738	(50.0)	796	(52.4)	822	(53.5)
Others [5)]	120	(8.8)	131	(8.9)	126	(8.3)	127	(8.3)

1) Figures in parentheses indicate percentage. 2) Benzine gas, liquefied petroleum gas, other petroleum-based gas. 3) Vaporized liquefied petroleum gas, other petroleum-based gas.
4) Natural gas, vaporized liquefied natural gas. 5) Public offices, schools, medical institutions, etc.

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's expenses for the research and development (R&D) of science and technology are at a top level among major countries, and support the technology-based nation of Japan. Researchers in the fields of science and technology (including social sciences and humanities) as of the end of March 2014 totaled 841,600. The total R&D spending in fiscal 2013 amounted to 18.1 trillion yen, an increase of 4.7 percent from the previous fiscal year. Relative to GDP, R&D spending was 3.75 percent, which increased for the first time in two years.

Table 8.1

Trends in Research and Development

Year	Number of Researchers [1)]	Fiscal year	R&D expenditures (billion yen)	GDP (billion yen)	Ratio of R&D expenditures to GDP (%)
2005	790,900	2004	16,938	502,761	3.37
2006	819,900	2005	17,845	505,349	3.53
2007	826,600	2006	18,463	509,106	3.63
2008	827,300	2007	18,944	513,023	3.69
2009	839,000	2008	18,800	489,520	3.84
2010	840,300	2009	17,246	473,934	3.64
2011	842,900	2010	17,110	480,233	3.56
2012	844,400	2011	17,379	473,905	3.67
2013	835,700	2012	17,325	474,475	3.65
2014	841,600	2013	18,134	483,110	3.75

1) Business enterprises, and non-profit institutions and public organizations: full time equivalent. In "full time equivalent," the number of researchers partly engaged in R&D is recalculated based on the actual number of hours they spent in R&D. Universities and colleges: headcount.

Source: Statistics Bureau, MIC.

As of the end of March 2014, the number of researchers amounted to 485,300 persons in business enterprises, 38,600 persons in non-profit institutions and public organizations, and 317,700 persons in universities and colleges. In terms of R&D expenditures in fiscal 2013, business enterprises spent 12.7 trillion yen (70.0 percent of total R&D expenditures),

non-profit institutions and public organizations spent 1.7 trillion yen (9.6 percent), and universities and colleges spent 3.7 trillion yen (20.4 percent).

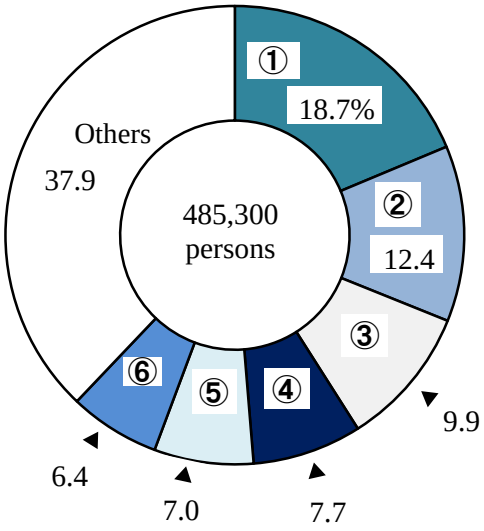
Universities and colleges spend more than 90 percent of their R&D expenditure on natural sciences for basic research and applied research, while business enterprises allocate over 70 percent for development purposes.

Based on the Science and Technology Basic Law, which was promulgated and enforced in 1995, the Japanese government has formulated a Basic Plan since fiscal 1996, and has promoted science and technology policies. Currently, the Fourth Science and Technology Basic Plan (fiscal 2011 to fiscal 2015), which orients the recovery and reconstruction from the Great East Japan Earthquake as one of its main pillars, is being initiated. Within R&D spending in fiscal 2013, the amount of expenses used for the three fields the government should address as priority issues set in the Fourth Science and Technology Basic Plan consisted of 899.0 billion yen towards "Promotion of Life Innovation," 635.1 billion yen towards "Promotion of Green Innovation," and 100.8 billion yen towards "Recovery and Reconstruction from the Great East Japan Earthquake." Among these, R&D spending for "Recovery and Reconstruction from the Great East Japan Earthquake" increased by 16.0 percent as compared to the previous fiscal year.

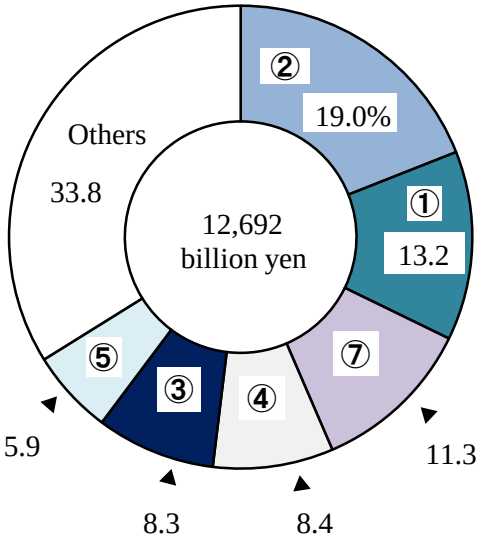
Approximately 90 percent of the 485,300 researchers at business enterprises at the end of March 2014, or 426,700 persons, were in the manufacturing industries; the largest number was in "the information and communication electronics equipment industry," followed by "the motor vehicle, parts and accessories industry," then by "the business oriented machinery industry." In terms of R&D expenditures in fiscal 2013, of 12.7 trillion yen spent by business enterprises, 11.3 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 drugs and medicines industry."

Figure 8.1
Researchers and Expenditures by Industry (Business enterprises)

Researchers (as of end-March 2014)



Expenditures (FY2013)



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

(2) Technology Balance of Payments (Technology Trade)

Technology trade is defined as the export or import of technology by business enterprises with other countries, such as patents, expertise, and technical guidance. In fiscal 2013, Japan earned 3,395.2 billion yen from technology exports, which was up 24.8 percent from the previous fiscal year. This was the second consecutive increase. Of the total receipts, 69.2 percent was from overseas parent/subsidiary companies. Meanwhile, Japan paid 577.7 billion yen for technology imports. This was up 28.8 percent from the previous fiscal year, the second consecutive increase. Of this figure, 28.8 percent was for payments to overseas parent/subsidiary companies.

Table 8.2

Technology Trade by Business Enterprises [1)]

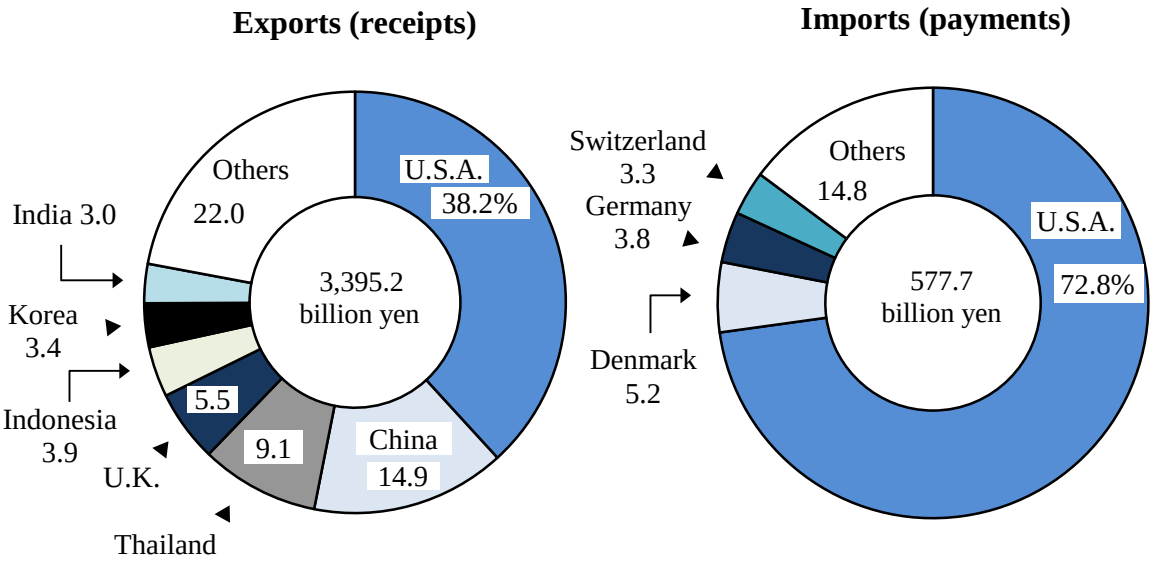
Fiscal year	Technology Trade				Exports value / Imports value
	Exports		Imports		
	Value (billion yen)	Annual increase rate (%)	Value (billion yen)	Annual increase rate (%)	
1990	339.4	3.0	371.9	12.7	0.91
1995	562.1	21.6	391.7	5.7	1.43
2000	1,057.9	10.1	443.3	8.0	2.39
2005	2,028.3	14.6	703.7	24.0	2.88
2010	2,436.6	20.9	530.1	-0.9	4.60
2012	2,721.0	14.1	448.6	8.2	6.07
2013	3,395.2	24.8	577.7	28.8	5.88

1) The survey coverage was expanded in FY1996 and FY2001.

Source: Statistics Bureau, MIC.

In fiscal 2013, Japan exported 3,395.2 billion yen of technologies; major export destinations were: the U.S.A. (1,296.3 billion yen, or 38.2 percent of total exports), followed by China (507.6 billion yen), Thailand (308.7 billion yen), and the U.K. (186.7 billion yen). On the other hand, Japan imported 577.7 billion yen of technologies, mainly from the U.S.A. (420.6 billion yen, or 72.8 percent of total imports), followed by Denmark (30.3 billion yen), Germany (22 billion yen), and Switzerland (19.2 billion yen).

Figure 8.2
Composition of Technology Trade by Major Country/Region
(FY2013)



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 filed every year, but a gradual drop has been seen since 2006. It fell significantly in 2009. In 2013, there were 328,436 applications (down 4.2 percent from the previous year).

Table 8.3
Patents

(Cases)

Item	1995	2000	2005	2010	2013
Applications	369,215	436,865	427,078	344,598	328,436
Registrations	109,100	125,880	122,944	222,693	277,079
Existing vested rights	681,459	1,040,607	1,123,055	1,423,432	1,838,177

Source: Japan Patent Office.

Table 8.4
PCT International Applications by Country of Origin

(Filings)

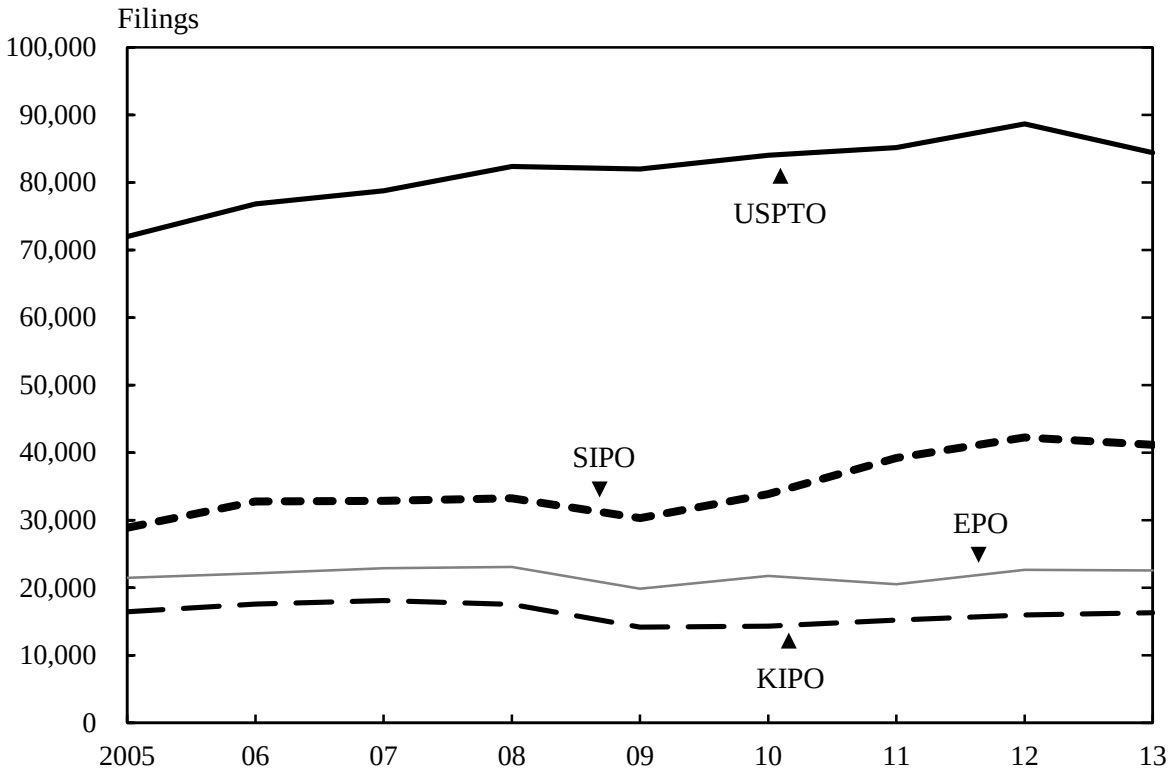
Country	2009	2010	2011	2012	2013	Change from 2012 (%)
Total	155,402	164,340	182,434	195,312	205,300	5.1
U.S.A.	45,628	45,031	49,112	51,643	57,239	10.8
Japan	29,802	32,150	38,875	43,660	43,918	0.6
China	7,900	12,296	16,402	18,617	21,516	15.6
Germany	16,795	17,568	18,852	18,764	17,927	-4.5
Korea, Rep. of	8,035	9,669	10,447	11,847	12,386	4.5
France	7,237	7,246	7,438	7,851	7,899	0.6
U.K.	5,044	4,891	4,848	4,895	4,865	-0.6
Switzerland	3,672	3,728	4,008	4,192	4,367	4.2
Netherlands	4,462	4,063	3,503	4,071	4,198	3.1
Sweden	3,568	3,314	3,462	3,587	3,960	10.4

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 May 2014. In 2013, the number of international patent applications filed under the Patent Cooperation Treaty (PCT) was 205,300, of which 43,918 were from Japan, accounting for 21.4 percent.

The United States Patent and Trademark Office ranked first among major patent offices for applications filed by Japanese applicants in 2013, with 84,429 filings. The number of patent applications filed by Japanese applicants at the State Intellectual Property Office of the People's Republic of China was 41,193.

Figure 8.3
Changes in the Number of Patent Applications Filed with Major Offices by Japanese Applicants



EPO: European Patent Office; KIPO: Korean Intellectual Property Office; SIPO: State Intellectual Property Office of the People's Republic of China; USPTO: United States Patent and Trademark Office.
Source: Japan Patent Office.

3. Information and Communication

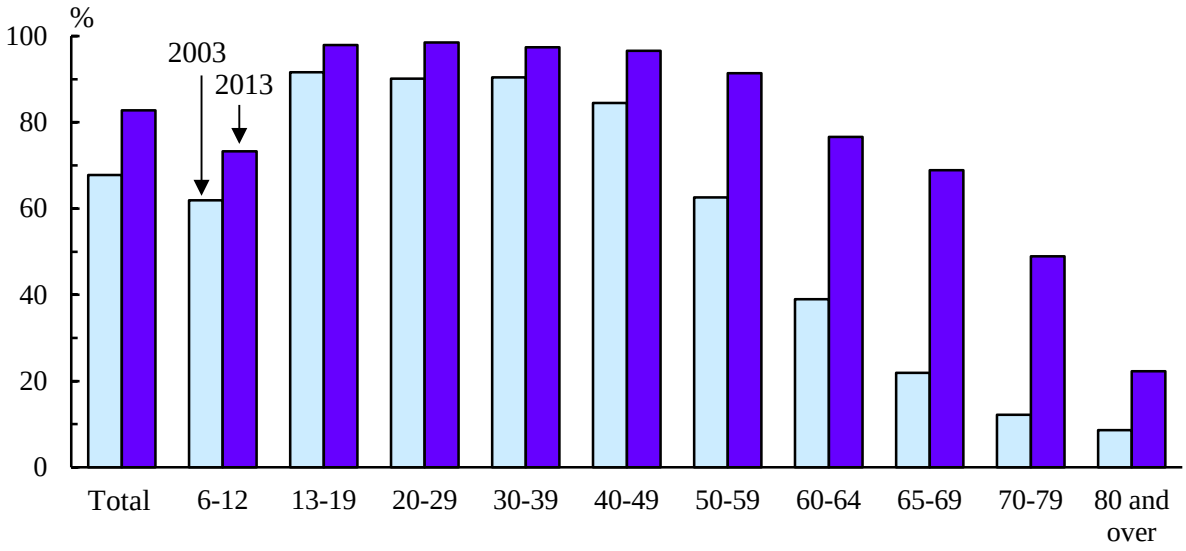
(1) Diffusion of the Internet

The population of Internet users, the commercial use of which began in 1993, continues to increase. The number of people who used the Internet over the last year (individuals who are 6 years of age and older; Internet-connected equipment covers any and all types of Internet connection devices used, including PCs, cell phones, personal handyphone systems, smartphones, tablet terminals, and game machines) was 100.44 million people as of the end of 2013. The number of people who used the Internet exceeded 100 million people for the first time, accounting for 82.8 percent of the population 6 years of age and older. Observation by age

group shows that the individual Internet usage rate exceeded 90 percent among people in each age group between 13 and 59, although the rate drops as the age increases.

According to the status of Internet use by terminal as of the end of 2013, the usage rate of home PCs was the highest (58.4 percent), followed by smartphones (42.4 percent), and PCs outside the home (27.9 percent). Figures for the rate of Internet use by terminal by age group show that over 70 percent of people in each age group of between 13 and 49 use home PCs. In the 20-39 age groups, usage of smartphones surpassed that of home PCs.

Figure 8.4
Trends in Internet Usage Rate by Age Group 1)



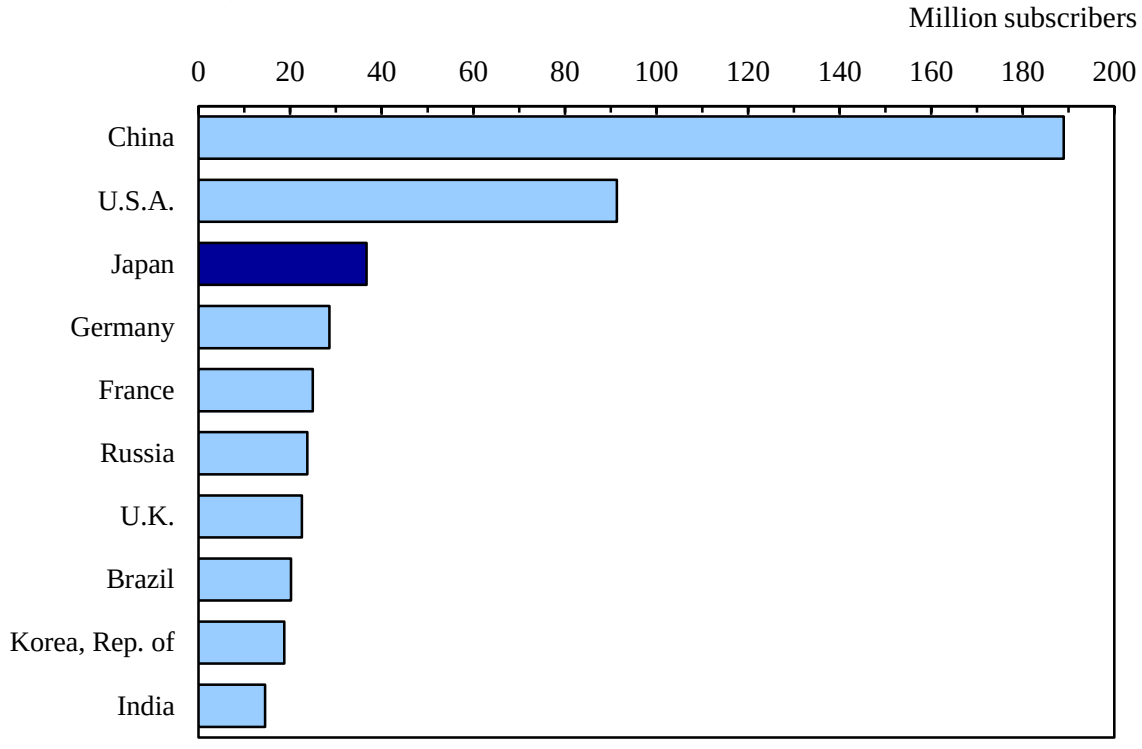
1) Ages 6 years and over.
Source: Ministry of Internal Affairs and Communications.

Among enterprises, the Internet usage rate at the end of 2013 was 99.9 percent, which was the same rate as that of 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

The number of broadband (connection) subscribers as of the end of March 2014 was 89.69 million. Among the number of broadband subscribers, those with subscriptions for 3.9G mobile phones (LTE) were the highest, amounting to 46.41 million subscriptions and accounting for 51.7 percent of the total. Compared to the previous year, 3.9G mobile phones (LTE) increased by 128 percent, and it is clear that they are popularizing rapidly. Those with FTTH (Fiber To The Home: enables ultra-high-speed Internet access of several dozen to a maximum of 1Gbps) using optical fiber was the second highest, with 25.32 million subscribers (6.1 percent increase as compared to the previous year), making up 28.2 percent of the total.

Figure 8.5
International Comparison of the Number of Broadband Subscribers [1] (2013)



1) Fixed (wired) broadband.
Source: International Telecommunication Union.

In 2013, the number of fixed (wired) broadband subscribers in Japan was 36.66 million, the third-largest after China (188.91 million) and the U.S.A. (91.34 million).

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 2014, the total number of IP phone subscribers was 33.78 million.

Table 8.5
Subscribers to Telecommunications Services [1)]

(Thousands)

Item	1995	2000	2005	2010	2013	2014
Public phones (NTT [2)] only)	801	736	442	283	210	196
Fixed phone services	59,936	55,547	51,626	37,918	28,471	26,094
Mobile phone [3)]	4,331	56,846	91,474	116,295	141,129	149,561
IP phone	-	-	8,305	23,172	31,271	33,780
ISDN (Integrated Services Digital Network)	344	6,683	7,981	5,421	4,273	3,949
DSL (Digital Subscriber Line)	-	0	13,676	9,735	5,425	4,470
Cable Internet	-	216	2,961	5,314	6,012	6,023
FTTH (Fiber To The Home)	-	-	2,890	17,802	23,854	25,320
BWA (Broadband Wireless Access) ..	-	-	-	153	5,313	7,461
International phone calls, sent and received	599,400	801,200	# 1,103,700	1,101,600	879,800	704,200

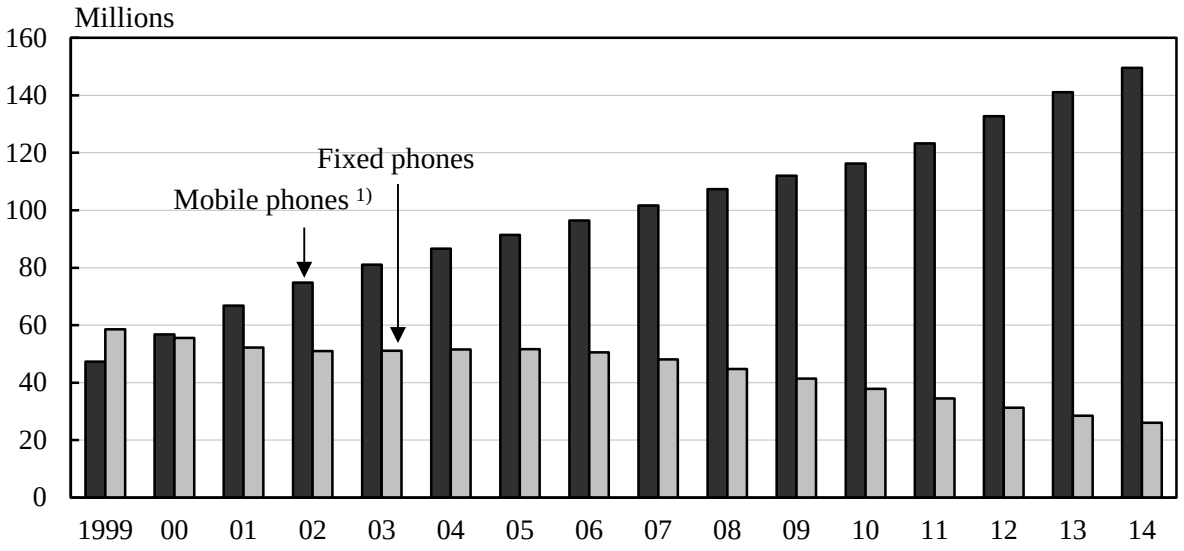
1) End of March. 2) Nippon Telegraph and Telephone Corporation.
3) Cell phones and PHS (Personal Handyphone System).
Source: Ministry of Internal Affairs and Communications.

In addition, although its percentage within the total number of broadband subscribers is small, in recent years, the number of subscribers of BWA (Broadband Wireless Access) service (access service connecting to networks via broadband wireless access systems using the 2.5GHz band [WiMAX, etc.]) has been increasing. As of the end of March 2014, the number of BWA subscribers was 7.46 million (up 40 percent as compared to the previous year).

(3) Telephones

The number of fixed phone service subscription contracts has continued to decrease in recent years. As of the end of March 2014, the number of fixed phone subscribers was 26.09 million (down 8.3 percent from the previous year). Meanwhile, the number of mobile phone subscribers (cell phones and personal handyphone systems) totaled 141.13 million at the end of March 2013, marking a rise by 6.0 percent year-on-year to 149.56 million at the end of March 2014.

Figure 8.6
Telephone Service Subscribers



1) Subscribers of cell phones and PHS (Personal Handyphone System).
Source: Ministry of Internal Affairs and Communications.

(4) Postal Service

As of the end of March 2015, Japan Post Co., Ltd. had 24,470 post offices nationwide. In fiscal 2014, post offices handled 21.99 billion items of domestic mail (including parcels), which was a 1.3 percent decrease from the previous fiscal year. Furthermore, the total quantity of international mail (letters, express mail services [EMS], and parcels) sent in fiscal 2014 amounted to 46.59 million items (a decrease of 1.2 percent from the previous fiscal year).

Table 8.6
Postal Services

(Millions)

Item	FY1995	FY2000	FY2005	FY2010	FY2013	FY2014
Domestic						
Letters	24,262.9	26,114.4	22,666.1	19,757.9	18,524.6	18,142.0
Parcels	400.2	310.5	2,075.0	2,968.4	3,752.6	3,847.0
International						
Sent	122.8	106.0	77.5	54.2	47.2	46.6
Letters [1)]	119.9	104.3	76.1	52.8	45.4	43.6
Parcels	2.9	1.7	1.5	1.4	1.8	3.0

1) Including express mail services (EMS).

Source: Japan Post Co., Ltd.

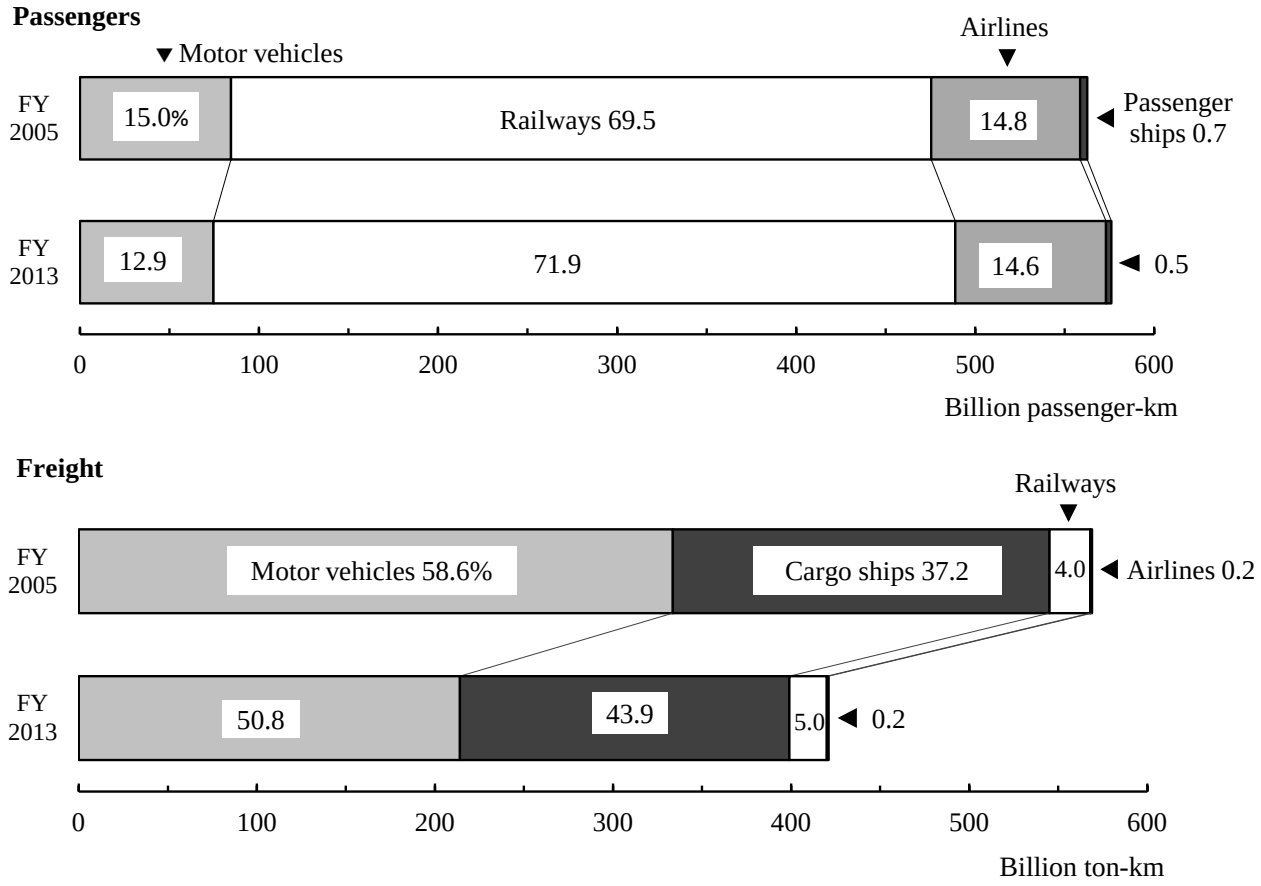
Chapter 9

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.

Figure 9.1
Composition of Domestic Transport



1) The data for passenger ships is that for FY2012 instead of FY2013.
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 the 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 2013, the number of domestic transport passengers was 29.85 billion (up 1.9 percent from the previous fiscal year). The total volume of passenger transport was 573.1 billion passenger-kilometers (up 2.1 percent).

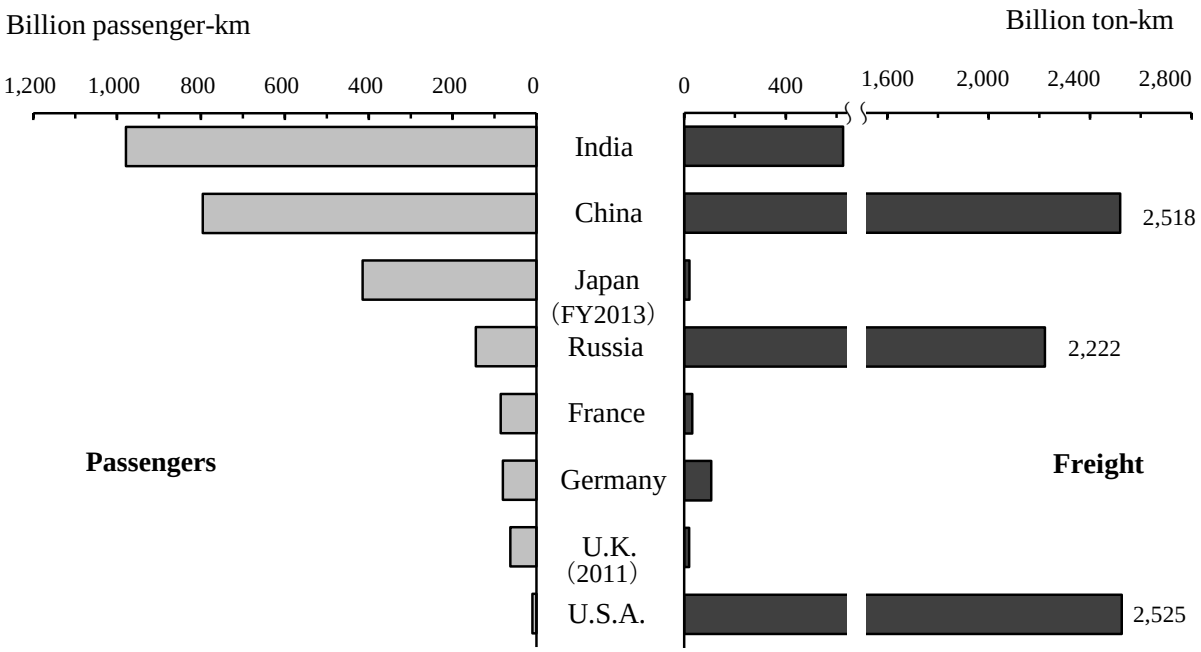
Table 9.1
Domestic Passenger Transport

Item	Passengers carried (thousands)		Passenger kilometers (millions)	
	FY2012	FY2013	FY2012	FY2013
Total transport volume	29,291,761	* 29,851,813	561,071	* 573,102
Railways	23,041,825	23,606,410	404,394	414,387
JR (Japan Railways)	8,962,809	9,146,991	253,788	260,013
Other than JR	14,079,016	14,459,419	150,606	154,374
Motor vehicles	6,076,806	6,152,915	75,668	74,571
Buses (Commercial use)	4,437,253	4,505,190	68,458	67,527
Taxis and limousine hires	1,639,553	1,647,725	7,210	7,044
Airlines	85,996	92,488	77,917	84,144
Passenger ships	87,134	…	3,092	…

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

In fiscal 2013, the Japan Railways (JR) group reported 9.15 billion passengers (up 2.1 percent from the previous fiscal year) and 260.01 billion passenger-kilometers (up 2.5 percent). Railways other than JR reported 14.46 billion passengers (up 2.7 percent) and 154.37 billion passenger-kilometers (up 2.5 percent).

Figure 9.2
Rail Transport by Country (2012)



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

To promote the use of buses, approaches to improve punctuality and speed using bus lanes and to make buses more convenient, such as by introducing a bus location system that provides locational information of buses as well as an IC card system that enables smooth bus rides, are being carried out. Commercial buses transported 4.51 billion passengers (up 1.5 percent from the previous fiscal year) and achieved 67.53 billion passenger-kilometers (down 1.4 percent); both figures increased in fiscal 2013.

Fiscal 2013 air transport records show that there were 92.49 million passengers (up 7.6 percent from the previous fiscal year), and passenger-kilometers amounted to 84.14 billion (up 8.0 percent).

In fiscal 2012, passenger ships reported 87.13 million passengers (up 3.6 percent from the previous fiscal year) and 3.09 billion passenger-kilometers (up 1.5 percent).

(2) Domestic Freight Transport

In the area of domestic freight, a total of 4.77 billion metric tons (down 0.1 percent from the previous fiscal year) of freight was transported for a total of 421.07 billion ton-kilometers (up 2.9 percent) in fiscal 2013.

As for transport tonnage volume in fiscal 2013, motor vehicle transport accounted for more than 90 percent of the total.

Table 9.2
Domestic Freight Transport

Item	Freight tonnage (thousands)		Ton kilometers (millions)	
	FY2012	FY2013	FY2012	FY2013
Total transport volume	4,775,236	4,769,204	409,235	421,072
Railways	42,340	44,101	20,471	21,071
Motor vehicles	4,365,927	4,345,753	209,956	214,092
Commercial use	3,011,839	2,989,496	180,336	184,840
Non-commercial use	1,354,088	1,356,256	29,620	29,252
Cargo ships	365,992	378,334	177,791	184,860
Airlines [1)]	977	1,016	1,017	1,049

1) Including overweight baggage and postal mail.

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

2. International Transport

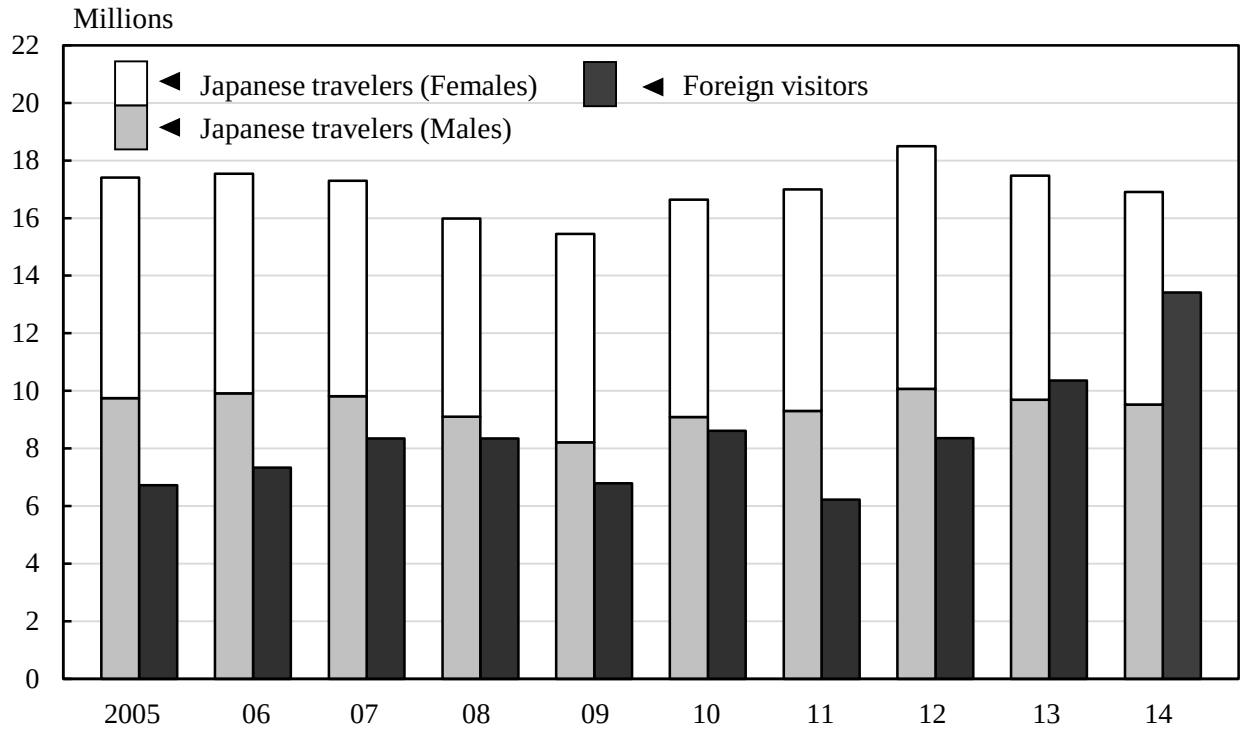
(1) International Passenger Transport

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 2013, however, Japanese airlines transported 14.86 million passengers (up 6.2 percent from the previous year) on international flights, and registered 65.61 billion passenger-kilometers (up 6.9 percent). Both recorded their second consecutive year of increase.

The number of Japanese overseas travelers in 2014 was 16.90 million (down 3.3 percent from the previous year).

According to reports on arrivals by tourist offices in countries around the world, China, the Republic of Korea, and the U.S.A. had many Japanese visitors in 2013.

Figure 9.3
Japanese Overseas Travelers and Foreign Visitor Arrivals



Source: Ministry of Justice; Japan National Tourism Organization.

Table 9.3
Japanese Travelers

Country or area of destination	2012		2013		2014	
	Number of arrivals	Annual growth (%)	Number of arrivals	Annual growth (%)	Number of arrivals	Annual growth (%)
China	3,518,153	-3.8	2,877,533	-18.2	2,717,600	-5.6
Korea, Rep. of	3,518,792	7.0	2,747,750	-21.9	2,280,434	-17.0
U.S.A. [1]	3,698,073	13.8	3,730,287	0.9	…	…
Taiwan	1,432,315	10.6	1,421,550	-0.8	1,634,205	15.0
Hong Kong SAR	1,254,602	-2.3	1,057,033	-15.7	1,078,766	2.1
Thailand	1,373,716	21.8	1,536,425	11.8	1,265,307	-17.6
Germany [2]	734,475	14.3	711,529	-3.1	…	…
France	731,369	19.5	682,384	-6.7	…	…

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 13.41 million in 2014 (up 29.4 percent from the previous year). Broken down by country/region, the number of visitors from Asian countries was highest, totaling 10.82 million (up 33.3 percent from the previous year). Among Asian countries, the number of visitors from the Republic of Korea was highest, amounting to 2.76 million, a figure that accounted for 20.5 percent of the total number of foreign visitors to Japan.

This increase is attributed to the permeation of a sense of low travel costs due to correction of the yen appreciation, visa alleviation measures for various Southeast Asian countries, an increase in the supply of airline seats based on new services by low-cost air carriers, etc.

Table 9.4
Foreign Visitors

Region, country or area of origin	2012		2013		2014*	
	Number of arrivals	Percentage distribution	Number of arrivals	Percentage distribution	Number of arrivals	Percentage distribution
Total arrivals [1]	8,358,105	100.0	10,363,904	100.0	13,413,467	100.0
Asia	6,387,977	76.4	8,115,789	78.3	10,819,211	80.7
Korea, Rep. of	2,042,775	24.4	2,456,165	23.7	2,755,313	20.5
China	1,425,100	17.1	1,314,437	12.7	2,409,158	18.0
Taiwan	1,465,753	17.5	2,210,821	21.3	2,829,821	21.1
Hong Kong SAR .	481,665	5.8	745,881	7.2	925,975	6.9
Thailand	260,640	3.1	453,642	4.4	657,570	4.9
Singapore	142,201	1.7	189,280	1.8	227,962	1.7
Europe.....	775,840	9.3	904,132	8.7	1,048,731	7.8
U.K.	173,994	2.1	191,798	1.9	220,060	1.6
Africa.....	24,725	0.3	26,697	0.3	28,336	0.2
North America	876,401	10.5	981,981	9.5	1,112,317	8.3
U.S.A.	716,709	8.6	799,280	7.7	891,668	6.6
Canada	135,355	1.6	152,766	1.5	182,865	1.4
South America	51,151	0.6	49,930	0.5	56,873	0.4
Oceania.....	241,513	2.9	284,886	2.7	347,339	2.6
Australia	206,404	2.5	244,569	2.4	302,656	2.3

1) Including stateless people, etc.
Source: Japan National Tourism Organization.

In 2014, of the total number of foreign visitors to Japan, tourists numbered 10.88 million people, or 81.1 percent of total foreign visitors. The highest number of tourists came from Taiwan, with 2.67 million travelers, followed by the Republic of Korea, with 2.29 million travelers.

(2) International Freight Transport

The volume of seaborne foreign transport in 2013 was 1,022.5 million tons, up 2.1 percent over the previous year. Of this figure, total exports increased by 9.9 percent to 55.4 million tons, and total imports increased by 0.8 percent to 534.9 million tons.

Table 9.5
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
2012	1,001,130	50,414	530,855	419,861
2013*	1,022,469	55,412	534,884	432,172

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

Air-shipped international freight in 2013 totaled 1.2 million tons in terms of volume (up 5.6 percent from the previous year) and 6.53 billion tons in terms of ton-kilometers (up 7.2 percent).

Chapter 10

Commerce

1. Wholesale and Retail

The "2012 Economic Census for Business Activity" showed that 1.41 million wholesale and retail establishments were in operation in Japan. The number of persons engaged at such establishments became 11.75 million. Sales in the wholesale and retail industries amounted to 415.12 trillion yen, accounting for 31.1 percent of the total of all industries.

(1) Wholesale Trade

The number of wholesale establishments was 372,000 in 2012. 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 13.2 percent were individual proprietorships.

Table 10.1
Establishments and Persons Engaged in the Wholesale and Retail Sector (2012)

Item	Total	Wholesale	Retail
Number of Establishments	1,405,021	371,663	1,033,358
Size of operation (persons engaged)			
1-4 persons	825,858	183,335	642,523
5-9	294,114	95,349	198,765
10-19	167,674	53,092	114,582
20-29	52,460	16,779	35,681
30-49	31,140	11,539	19,601
50-99	18,752	6,242	12,510
100 and over	9,208	3,361	5,847
Loaned or dispatched employees only	5,815	1,966	3,849
Persons engaged	11,746,468	3,915,256	7,831,212
Regular employees	9,633,026	3,345,068	6,287,958
Full-time employees	5,084,354	2,711,122	2,373,232
Other than full-time employees [1)]	4,548,672	633,946	3,914,726
Temporary employees	521,317	93,721	427,596
Loaned or dispatched employees from the separately operated establishments	401,948	143,674	258,274
Loaned or dispatched employees to the separately operated establishments	116,139	92,084	24,055

1) Among regular employees, excludes workers generally referred to as "full-time employees" and "regular members of staff," and includes those referred to as "contract employees," "non-regular members of staff," "part-timers," and similar appellations.

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

The number of persons engaged in wholesale was 3.92 million in 2012, of which 728,000 were persons other than full-time employees (including those who are referred to as "contract employees," "non-regular members of staff," "part-timers," and similar appellations) and temporary employees, making up 18.6 percent of the total.

(2) Retail Trade

The number of retail establishments in operation totaled 1.03 million in 2012. Observed by size of operation in terms of persons engaged, establishments with less than 10 persons accounted for 81.4 percent of the total. By type of legal organization, 56.3 percent of retail establishments were corporations, while 43.5 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 7.83 million in 2012, of which 4.34 million were persons other than full-time employees (including those referred to as "contract employees," "non-regular members of staff," "part-timers," and similar appellations) and temporary employees, comprising 55.4 percent of the total.

2. Eating and Drinking Places

There were 611,000 eating and drinking places establishments in operation and 4.20 million persons engaged at them in 2012.

Table 10.2
Eating and Drinking Places (2012)

Size of operation (persons engaged)	Establishments		Persons engaged	
	Number	Ratio (%)	Number	Ratio (%)
Total	610,782	100.0	4,201,947	100.0
1-4 persons	375,915	61.5	829,459	19.7
5-9	120,006	19.6	778,085	18.5
10-19	67,759	11.1	920,588	21.9
20-29	27,012	4.4	640,682	15.2
30 and over	19,563	3.2	1,033,133	24.6
Loaned or dispatched employees only	527	0.1	-	-

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

Chapter 11

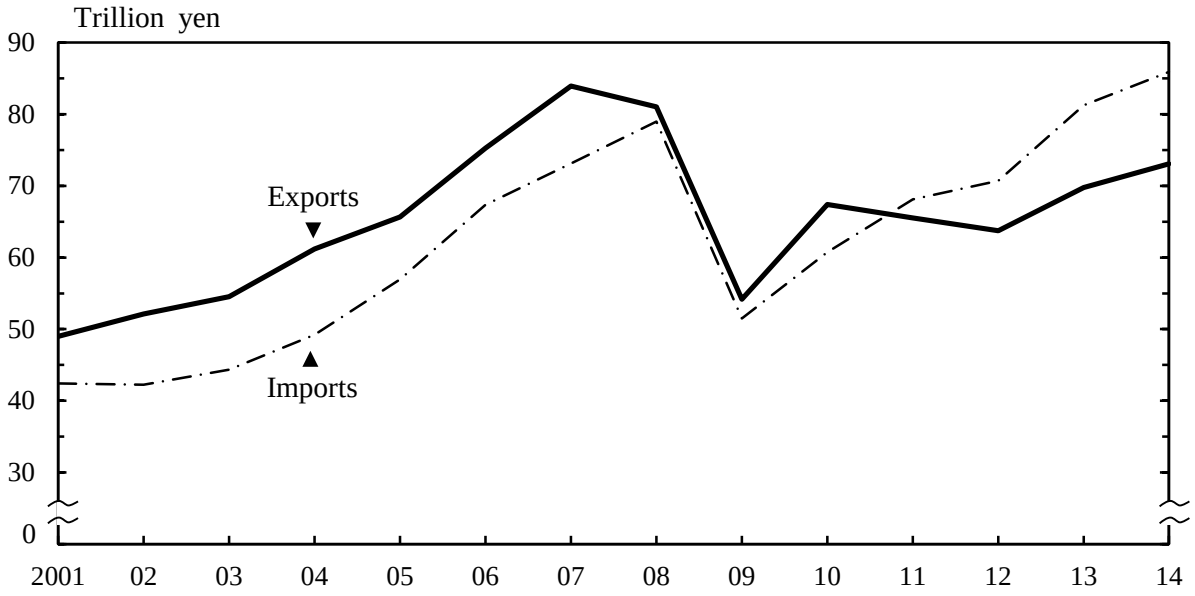
Trade, International Balance of Payments, and International Cooperation

1. Trade

(1) Overview of Trade

In 2014, Japan's international trade on a customs clearance basis increased, together with exports and imports, due to an increase in yen conversion associated with yen depreciation. Exports (in FOB value) amounted to 73.1 trillion yen, which was a 4.8 percent increase as compared to the previous year, and an increase for the second consecutive year. Imports (in CIF value) amounted to 85.9 trillion yen, which was a 5.7 percent increase as compared to the previous year, and an increase for the fifth consecutive year. Trade deficit totaled 12.8 trillion yen. This was the fourth consecutive year of red figures since 2011, when the trade deficit entered the red for the first time in 31 years.

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 (2010=100)					
				Exports			Imports		
	Exports (FOB)	Imports (CIF)	Balance	Value index	Quantum index 1)	Unit value index	Value index	Quantum index 1)	Unit value index
2005	65,657	56,949	8,707	97.4	98.6	98.8	93.7	99.5	94.2
2006	75,246	67,344	7,902	111.6	106.3	105.1	110.8	103.3	107.3
2007	83,931	73,136	10,796	124.5	111.4	111.8	120.4	103.2	116.7
2008	81,018	78,955	2,063	120.2	109.7	109.6	129.9	102.5	126.7
2009	54,171	51,499	2,671	80.4	80.5	99.8	84.8	87.8	96.5
2010	67,400	60,765	6,635	100.0	100.0	100.0	100.0	100.0	100.0
2011	65,546	68,111	-2,565	97.3	96.2	101.1	112.1	102.6	109.3
2012	63,748	70,689	-6,941	94.6	91.6	103.3	116.3	105.0	110.8
2013	69,774	81,243	-11,468	103.5	90.2	114.8	133.7	105.3	127.0
2014	73,093	85,909	-12,816	108.4	90.7	119.6	141.4	106.0	133.4

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

Japan's 2014 exports increased by 4.2 percent from the previous year in terms of unit value index (an increase for the fifth consecutive year), and increased by 0.6 percent from the previous year in terms of quantum index (the first increase in four years).

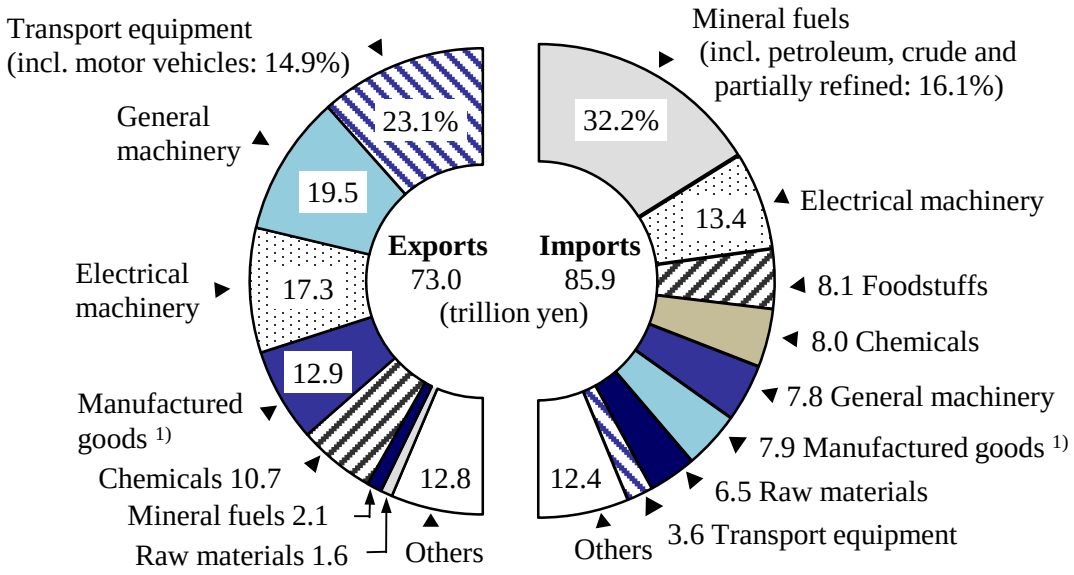
Japan's imports in 2014, unit value index and quantum index, increased by 5.0 percent and 0.7 percent compared to the previous year; both indices recorded their fifth consecutive year of increase.

(2) Trade by Commodity

Japan's exports in 2014 consisted of transport equipment, which accounted for the largest portion of the total export value, 23.1 percent, followed by general machinery and electrical machinery, making up 19.5 percent and 17.3 percent, respectively. Motor vehicles, which are in the transport equipment category, constituted 14.9 percent of the total export value, down 1.4 percent in quantity and up 4.9 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 32.2 percent of the total value imported, followed by electrical machinery and manufactured goods, with 13.4 percent and 8.1 percent, respectively. Crude petroleum and partially refined petroleum, in the mineral fuels category, constituted 16.1 percent of the total import value, down 5.5 percent in quantity and 2.6 percent in value from the previous year.

Figure 11.2
Component Ratios of Foreign Trade by Commodity (2014)



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

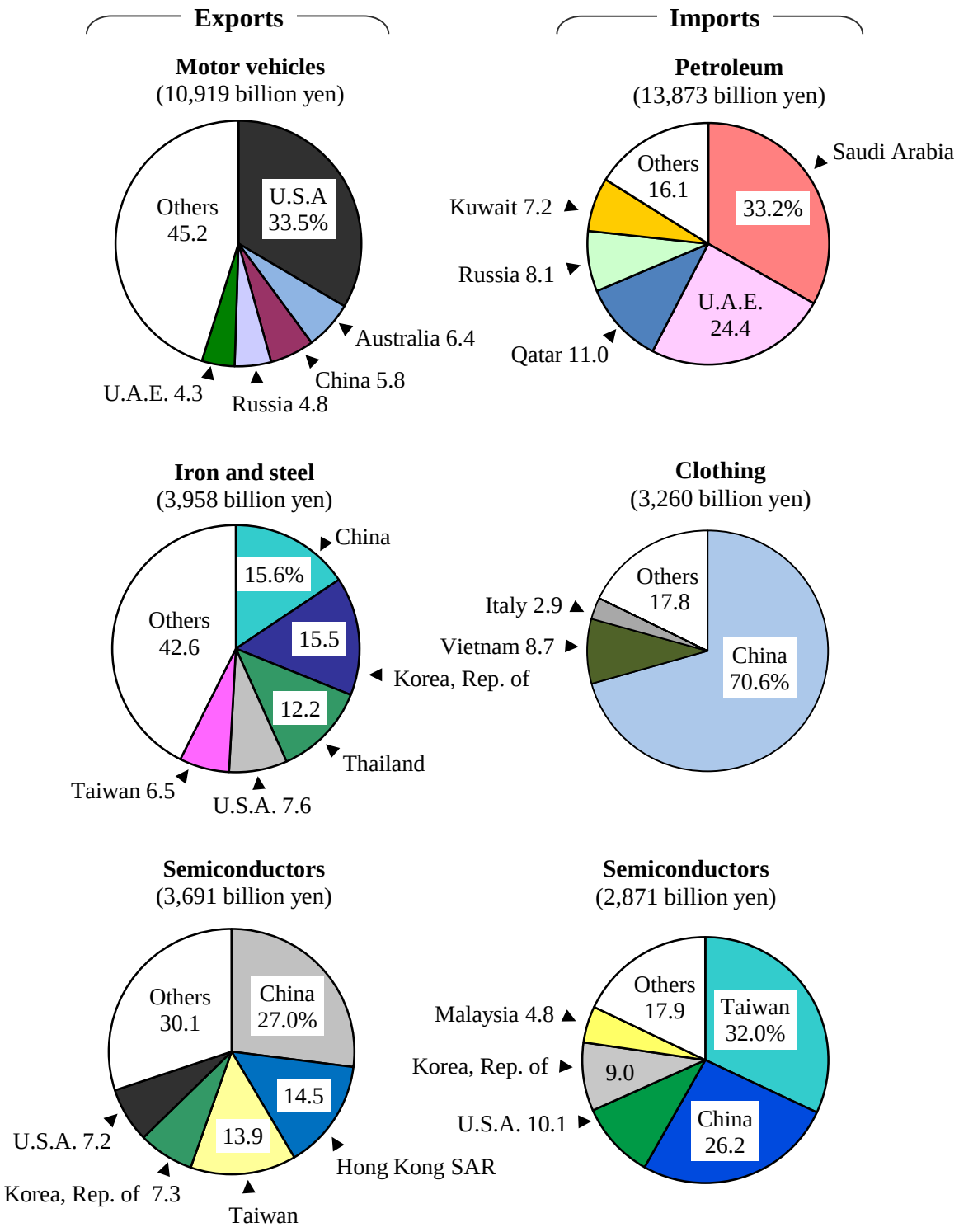
Table 11.2
Value of Exports and Imports, by Principal Commodity

(Billion yen)

Item	2011	2012	2013	2014	Annual growth (%)
Exports, total	65,546	63,748	69,774	73,093	4.8
Foodstuffs	359	355	436	482	10.5
Raw materials	972	1,060	1,206	1,194	-1.0
Mineral fuels	1,247	1,026	1,533	1,517	-1.0
Chemicals	6,798	6,365	7,507	7,818	4.1
Organic Chemicals	1,908	1,818	2,520	2,440	-3.2
Manufactured goods [1)]	8,786	8,442	9,177	9,464	3.1
Iron and steel products	3,709	3,496	3,793	3,958	4.4
General machinery	13,803	12,843	13,359	14,218	6.4
Power generating machinery	2,317	2,261	2,520	2,540	0.8
Electrical machinery	11,600	11,405	12,052	12,650	5.0
Semiconductors and other electronic parts	3,565	3,339	3,553	3,691	3.9
Transport equipment	14,033	14,995	16,332	16,907	3.5
Motor vehicles	8,204	9,225	10,413	10,919	4.9
Others	7,948	7,258	8,172	8,844	8.2
Scientific and optical instruments	2,109	2,084	2,223	2,436	9.6
Imports, total	68,111	70,689	81,243	85,909	5.7
Foodstuffs	5,854	5,852	6,473	6,732	4.0
Raw materials	5,270	4,768	5,358	5,590	4.3
Mineral fuels	21,816	24,088	27,444	27,692	0.9
Petroleum, crude and partially refined	11,415	12,247	14,245	13,873	-2.6
Chemicals	6,098	5,926	6,464	6,864	6.2
Medical and pharmaceutical products	1,725	1,941	2,138	2,214	3.5
Manufactured goods [1)]	6,069	5,508	6,245	6,994	12.0
Non-ferrous metals	1,813	1,370	1,541	1,692	9.8
General machinery	4,970	5,004	5,969	6,761	13.3
Computers and units	1,612	1,648	1,928	2,122	10.1
Electrical machinery	7,989	8,438	10,309	11,532	11.9
Communication equipment	1,576	2,149	2,679	2,865	7.0
Transport equipment	1,738	2,312	2,788	3,056	9.6
Others	8,307	8,793	10,192	10,688	4.9
Clothing and clothing accessories	2,598	2,680	3,248	3,260	0.4

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 (2014)



Source: Ministry of Finance.

(3) Trade by Country/Region

Japan has maintained a trade surplus with Asia and the U.S.A., while having a continuous trade 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 28 [1)]	Middle East	Oceania
Exports from Japan									
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
2013	69,774	37,867	12,625	5,512	4,061	12,928	# 7,000	2,478	2,029
2014	73,093	39,518	13,381	5,456	4,232	13,649	7,585	2,988	1,958
Imports to Japan									
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
2013	81,243	35,972	17,660	3,493	2,315	6,815	# 7,649	15,667	5,376
2014	85,909	38,618	19,176	3,531	2,568	7,543	8,169	15,826	5,706

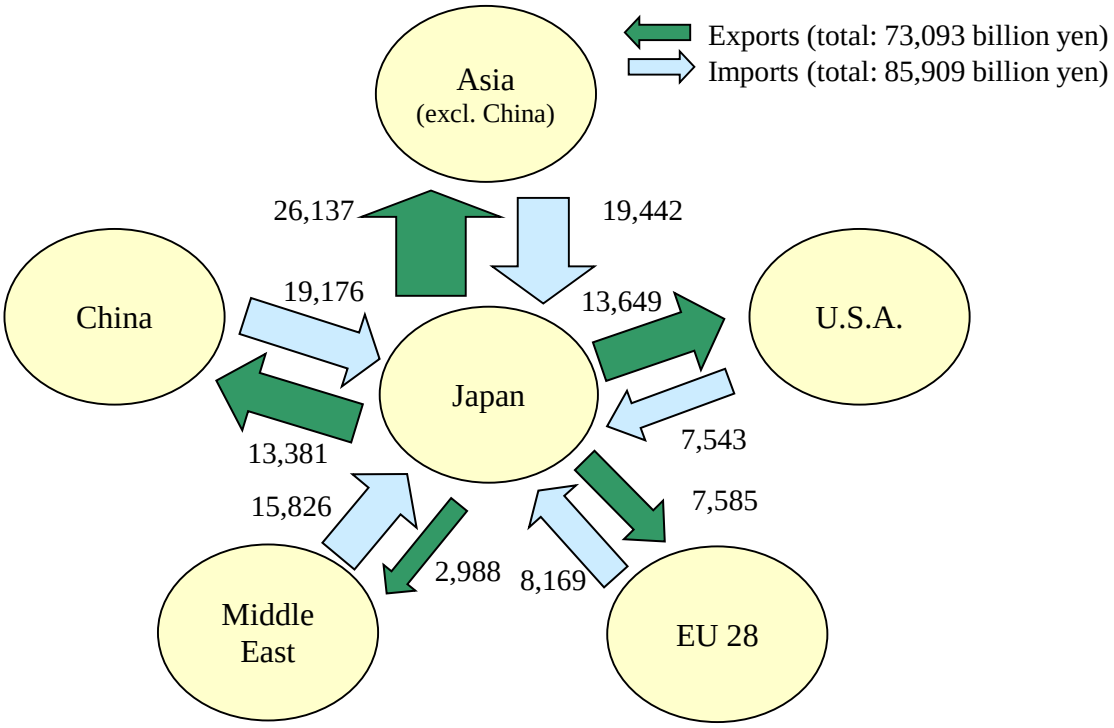
1) EU member countries were 27 countries, before July 2013.
Source: Ministry of Finance.

(A) Trade with Asia

Japan's 2014 trade balance with Asia resulted in a 0.9 trillion yen surplus, a decrease for the fourth consecutive year (down 52.5 percent from the previous year). Exports (in FOB value) totaled 39.5 trillion yen (up 4.4 percent), an increase for the second consecutive year; this was mainly due to contributions for the increase in scientific and optical instruments and electrical machinery. Imports (in CIF value) amounted to 38.6 trillion yen (up 7.4 percent), an increase for the fifth consecutive year; this was mainly attributed to the increase in electrical machinery and manufactured goods.

In 2014, Japan's trade with China amounted to 13.4 trillion yen in exports and 19.1 trillion yen in imports. Trade with China accounts for about 20 percent of the value of both Japan's imports and exports. China is Japan's largest trading partner in terms of the combined value of imports and exports.

Figure 11.4
Japan's Foreign Trade by Country/Region (2014)



Source: Ministry of Finance.

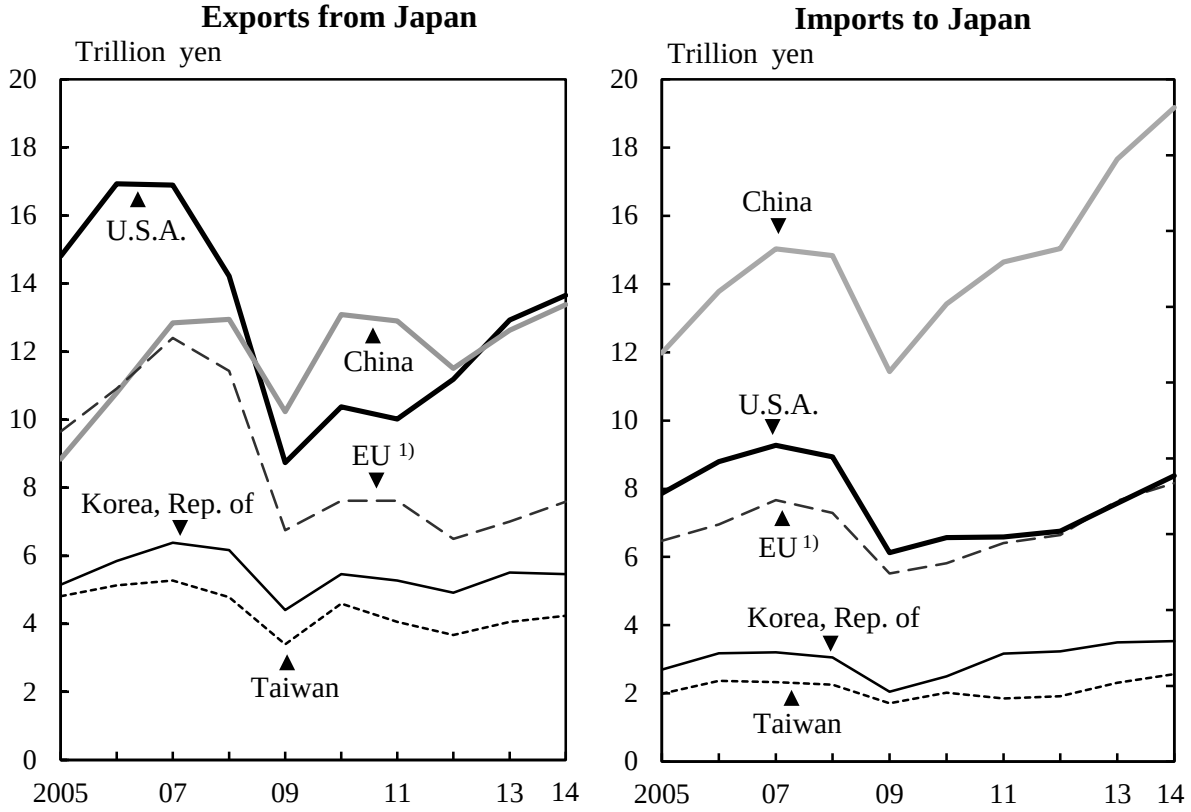
(B) Trade with U.S.A.

Japan's 2014 trade balance with the U.S.A. showed a surplus of 6.1 trillion yen (down 0.1 percent from the previous year), indicating that the trade surplus narrowed. Exports (in FOB value) totaled 13.6 trillion yen (up 5.6 percent), making Japan the biggest export counterpart for the second consecutive year. General machinery and transport equipment made major contributions to the increase. Imports (in CIF value) totaled 7.5 trillion yen (up 10.7 percent), the fifth consecutive annual increase. The rise was due mainly to the contributions of electrical machinery and general machinery.

(C) Trade with EU

In July 2013, the EU was expanded from 27 to 28 member countries. In 2014, Japan's exports (FOB value) to the EU (28 countries) increased by 8.3 percent year-on-year to 7.6 trillion yen. Commodities such as transport equipment and general machinery contributed to the growth in exports. Imports (CIF value) from the EU (28 countries) totaled 8.2 trillion yen, up 6.7 percent from the previous year. Commodities such as general machinery and transport equipment contributed to the growth in imports. As a result, Japan's trade balance with the EU (28 countries) registered a deficit of 583.5 billion yen.

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



1) 25 countries: from May 2004 to Dec. 2006, 27 countries: from Jan. 2007 to June 2013, 28 countries: from July 2013 onward.
Source: Ministry of Finance.

2. International Balance of Payments

Breaking down the current account in 2014, goods and services fell by -1.2 trillion yen from the previous year to -13.5 trillion yen, indicating a bigger deficit. Primary income amounted to 18.1 trillion yen, which was a 9.7 percent increase from the previous year, indicating an increase in its surplus. As a result, the current account totaled 2.6 trillion yen, and its surplus shrank for the fourth consecutive year.

Breaking down the financial account in 2014, there was a decrease in net assets for direct investment as compared to the previous year. However, since there was an increase in net assets for portfolio investment as compared to the previous year, the financial account amounted to 5.5 trillion yen.

Table 11.4
International Balance of Payments

(Billion yen)

Item	2011	2012	2013	2014
Current account	10,401.3	4,764.0	3,931.7	2,645.8
Goods and services	-3,110.1	-8,082.9	-12,252.1	-13,481.7
Goods	-330.2	-4,271.9	-8,773.4	-10,401.6
Exports	62,965.3	61,956.8	67,829.0	74,101.6
Imports	63,295.5	66,228.7	76,602.4	84,503.2
Services	-2,779.9	-3,811.0	-3,478.6	-3,080.1
Primary income	14,621.0	13,991.4	17,172.9	18,120.3
Secondary income	-1,109.6	-1,144.5	-989.2	-1,992.9
Capital account	28.2	-80.4	-743.6	-198.7
Financial account [1)]	12,629.4	4,192.5	-933.6	5,499.1
Direct investment	9,310.1	9,359.1	13,721.0	11,813.4
Portfolio investment	-13,524.5	2,443.5	-26,565.2	-4,950.2
Financial derivatives (other than reserves)	-1,347.0	590.3	5,551.6	3,639.6
Other investment	4,401.0	-5,149.0	2,508.5	-5,893.5
Reserve assets	13,789.7	-3,051.5	3,850.4	889.8
Net errors and omissions	2,199.8	-491.1	-4,121.7	3,052.0

1) Positive figures (+) show increase in net assets, negative figures (-) show decrease in net assets.

Source: Ministry of Finance.

Japan's external assets (the balance of overseas assets held by residents in Japan) as of the end of 2014 amounted to 945.2 trillion yen, while its external liabilities (assets held in Japan by nonresidents) were 578.4 trillion yen. As a result, Japan's net external assets (external assets minus external liabilities) were 366.9 trillion yen.

Table 11.5
Trends in Japan's International Investment Position [1)]

(Billion yen)

Item	2010	2011	2012	2013	2014
Assets	561,448	583,100	658,927	797,686	945,273
Liabilities	305,542	317,359	359,625	471,955	578,416
Net assets	255,906	265,741	299,302	325,732	366,856

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 percent year-on-year). Moreover, at the end of 2014, they were amounted to 1,260.5 billion U.S. dollars (down 0.5 percent), marking a third consecutive annual decrease.

Table 11.6
Reserve Assets

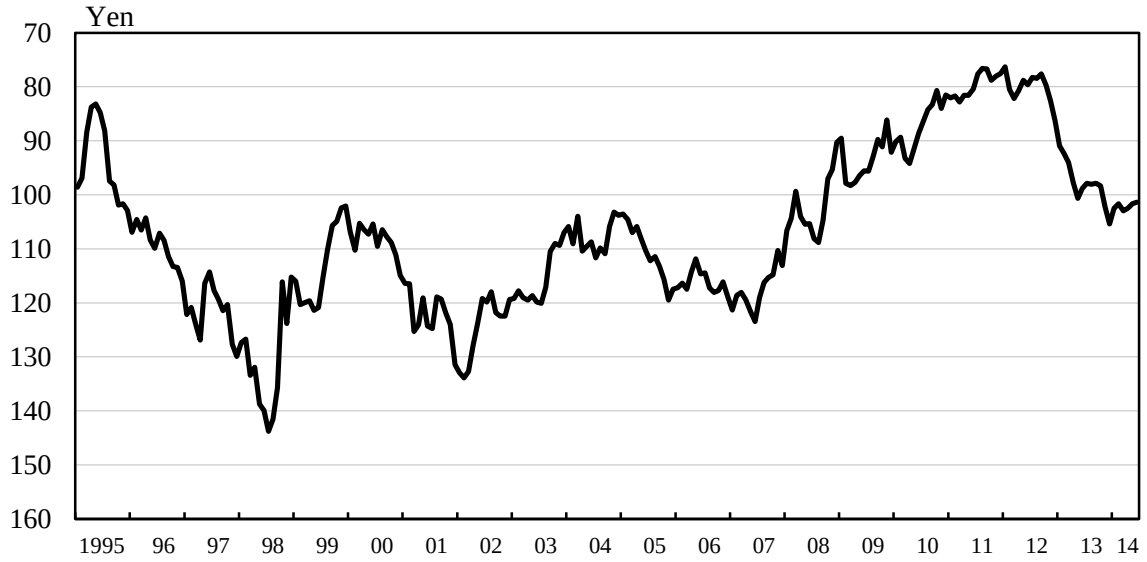
(Million U.S. dollars)

End of year	Total	Foreign currency [1)]	Reserve position in IMF	SDRs	Gold [2)]	Other reserve assets [3)]
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
2013	1,266,815	1,202,443	14,202	20,129	29,560	481
2014	1,260,548	1,199,651	11,993	18,895	29,504	505

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

The yen was worth 83.19 yen to the U.S. dollar in May 1995. The trend subsequently shifted to a progressively weaker yen, which eventually reached 143.79 yen to the U.S. dollar 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 April 2013, the Bank of Japan introduced quantitative and qualitative monetary easing to put an end to deflation. Based on this, the exchange rate shifted towards yen depreciation. As of June 2015, the exchange rate was 122.25 yen per 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, grants by private nonprofit agencies, assistance 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	2009	2010	2011	2012	2013
Total value	45,454	48,249	61,828	48,977	58,459
Official flows	17,704	14,720	13,736	15,998	12,868
Official development assistance (ODA)	9,467	11,058	10,831	10,605	11,582
Bilateral official development assistance [2)]	6,176	7,337	6,943	6,402	8,611
Grants [2)]	5,493	6,943	8,567	6,759	9,836
Grants-in-aid [2)]	2,374	3,464	5,033	3,117	7,032
Technical cooperation	3,118	3,478	3,534	3,641	2,804
Loans, etc.	684	395	-1,624	-356	-1,224
Contributions to multilateral institutions [3)]	3,290	3,720	3,888	4,202	2,970
Other official flows (OOF)	8,237	3,662	2,905	5,393	1,286
Official export credits (over one year)	-786	-1,039	-622	-623	-441
Direct investment finance, etc.	7,498	4,217	3,889	6,829	1,946
Concessional lending to multilateral institutions	1,525	485	-362	-813	-219
Private flows (PF)	27,217	32,837	47,594	32,494	45,133
Private export credits (over one year)	-1,220	2,767	1,853	-3,951	3,271
Direct investment	19,440	21,650	40,315	31,215	38,715
Bilateral investment in securities, etc.	7,010	7,428	5,844	6,470	4,859
Concessional lending to multilateral institutions	1,987	992	-419	-1,241	-1,712
Grants by private nonprofit agencies	533	692	497	487	458
ODA as percentage of GNI (%)	0.18	0.20	0.18	0.17	* 0.23
ODA as percentage of GNI (DAC average) (%)	0.31	0.32	0.31	0.29	* 0.30

1) Net disbursement at current prices. Negative figures (-) indicate that loan repayments, etc., exceeded the disbursed amount. 2) Including bilateral grants through multilateral institutions. 3) Expenditures clearly addressing a country at the point of disbursement are considered as bilateral ODA.

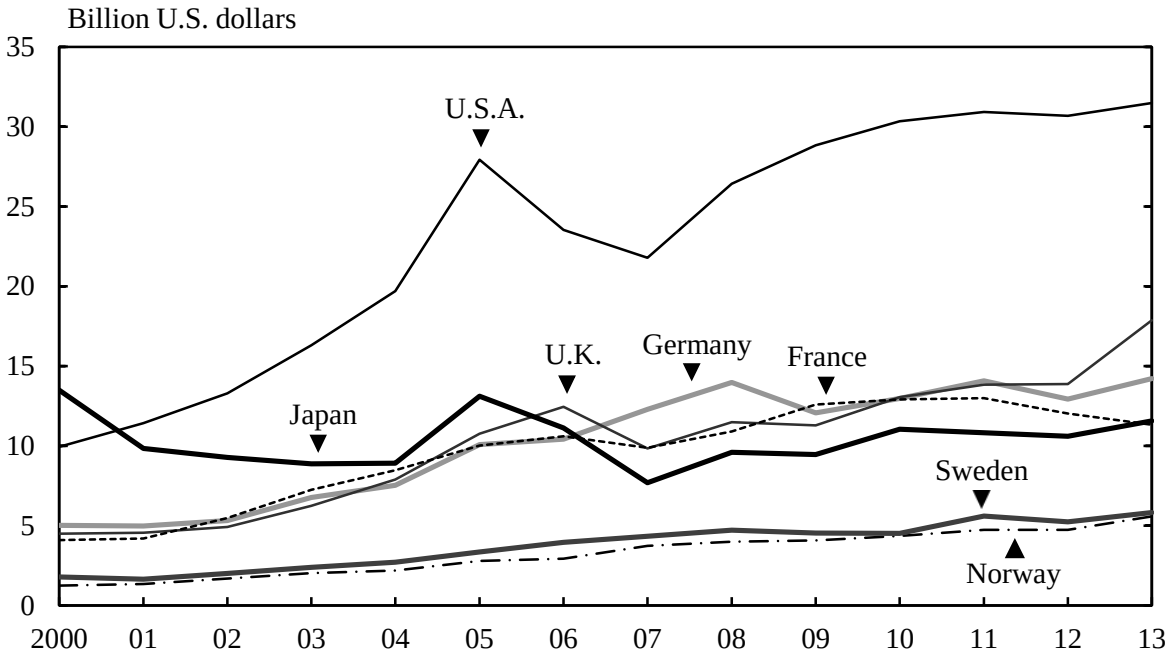
Source: Ministry of Foreign Affairs; Ministry of Finance; OECD.

In the ODA framework, Japan's spending (on the basis of net disbursement at current prices) in 2013 increased by 9.2 percent over the previous year to 11.6 billion U.S. dollars. 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.

In the 2013 comparison of the ODA provided by the member countries of the Development Assistance Committee (DAC) of the OECD, Japan was the fourth-largest contributor behind the U.S.A., the U.K. and Germany. The ratio of Japan's ODA to Gross National Income (GNI) was 0.23

percent, or an increase of 0.06 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 11.6 billion U.S. dollars in ODA provided by Japan in 2013, 8.6 billion was bilateral ODA (up 34.5 percent year-on-year), and 3.0 billion was ODA contributed through multilateral institutions (down 29.3 percent).

Bilateral ODA provided in 2013 consisted of 7.0 billion U.S. dollars in grants-in-aid, 2.8 billion in technical cooperation, and -1.3 billion in loans, etc. (the negative value indicates a larger amount of repayment received in 2013 than the amount lent in the same year).

By region, bilateral ODA (including assistance to graduated countries) was distributed as follows: Asia, 40.5 percent; Sub-Saharan Africa, 25.1 percent; Middle East and North Africa, 18.1 percent; Oceania, 1.4 percent; LatinAmerica and the Caribbean, -0.4 percent; and Europe, -0.04 percent.

Table 11.8

Regional Distribution of Bilateral ODA [1)]

(Million U.S. dollars)

Region	1990	2000	2010	2012	2013
Total	6,940	9,640	7,428	6,352	8,524
Asia	4,117	5,284	2,529	1,612	3,449
ASEAN [2)]	2,299	# 3,126	902	407	2,477
Middle East and North Africa	666	727	1,592	1,498	1,539
Sub-Saharan Africa	831	970	1,733	1,718	2,137
Latin America and the Caribbean	561	800	-344	-192	-34
Oceania	114	151	176	128	122
Europe	158	118	181	35	-3
Multiple regions, etc.	494	1,592	1,562	1,553	1,315

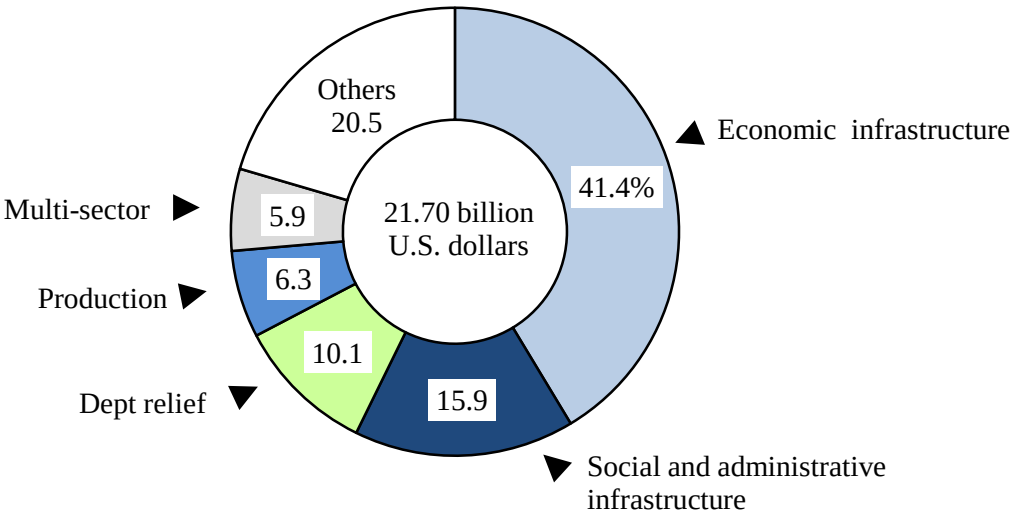
1) Net disbursement at current prices. Including assistance to graduated countries. Negative figures (-) indicate that loan repayments, etc., exceeded the disbursed amount. 2) The data in 1990: 6 countries, the data from 2000: 10 countries.

Source: Ministry of Foreign Affairs.

Bilateral ODA in 2013 (including assistance to graduated countries) was broken down by purpose (on a commitment basis) as follows: 41.4 percent for improving economic infrastructure, followed in descending order by social and administrative infrastructure (including education, water supply and sanitation), with 16.0 percent.

Figure 11.8

Distribution of Bilateral ODA by Sector [1)] (2013)



1) Commitment basis. Including assistance to 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	FY2005	FY2010	FY2011	FY2012	FY2013
Total	37,291	41,212	46,799	45,704	42,632
Trainees received	24,504	23,978	27,847	26,081	22,240
Dispatched					
Experts	3,488	8,296	9,082	9,325	10,359
Research team	6,862	7,046	8,527	9,021	8,615
Japan Overseas Cooperation Volunteers	1,804	1,459	1,046	948	1,081
Other volunteers	633	433	297	329	337

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 which occurred in March 2011, the data on labor in 2011 (1. Labor Force - 3. Unemployment) are supplementary estimated figures.

1. Labor Force

The labor force, defined as the sum of the employed and unemployed in the population aged 15 years and over, numbered 65.87 million people in Japan in 2014, up 100,000 (0.2 percent) for the second consecutive year of increase.

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 (15 to 64 years old). 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 2014 labor force participation rate (rate of the labor force to the population aged 15 years and over) was 59.4 percent (up 0.1 percentage points from the previous year). Observed by gender, the rate was 70.4 percent for men (down 0.1 percentage points) and 49.2 percent for women (up 0.3 percentage points).

Table 12.1
Population by Labor Force Status

(Thousands)

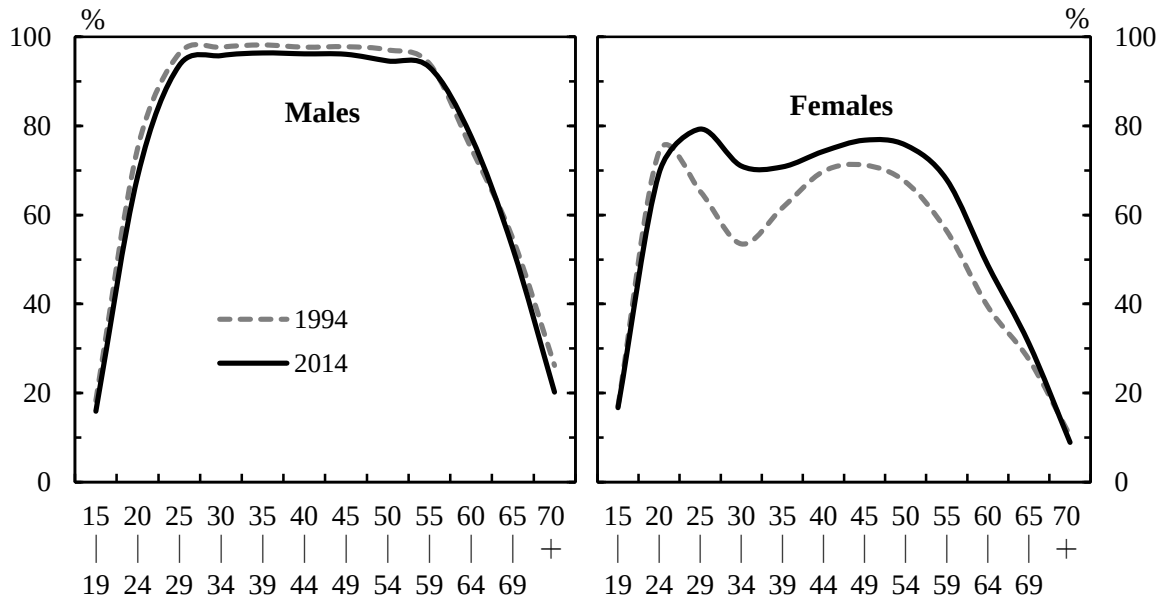
Year	Population aged 15 years and over	Labor force			Not in labor force	Unemployment rate (%)
		Total	Employed	Unemployed		
Total						
2000	108,360	67,660	64,460	3,200	40,570	4.7
2005	110,080	66,510	63,560	2,940	43,460	4.4
2010	111,110	66,320	62,980	3,340	44,730	5.1
2011 1)	111,110	65,910	62,890	3,020	45,170	4.6
2012	110,980	65,550	62,700	2,850	45,400	4.3
2013	110,880	65,770	63,110	2,650	45,060	4.0
2014	110,820	65,870	63,510	2,360	44,890	3.6
Males						
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
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
2013	53,490	37,730	36,100	1,620	15,740	4.3
2014	53,460	37,630	36,210	1,410	15,810	3.7
Females						
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
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
2013	57,380	28,040	27,010	1,030	29,320	3.7
2014	57,360	28,240	27,290	950	29,080	3.4

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 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 (1994) shows that, in 2014, 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 17.5 percentage points in the 30-34

age group and by 9.2 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. Although this is thought to be greatly affected by the progression of enhancement of the legal system with respect to establishing both work and child-rearing, and development of a work environment such as at companies, there are also effects from the trend of getting married and having children later in life.

Figure 12.1
Labor Force Participation Rate by Gender



Source: Statistics Bureau, MIC.

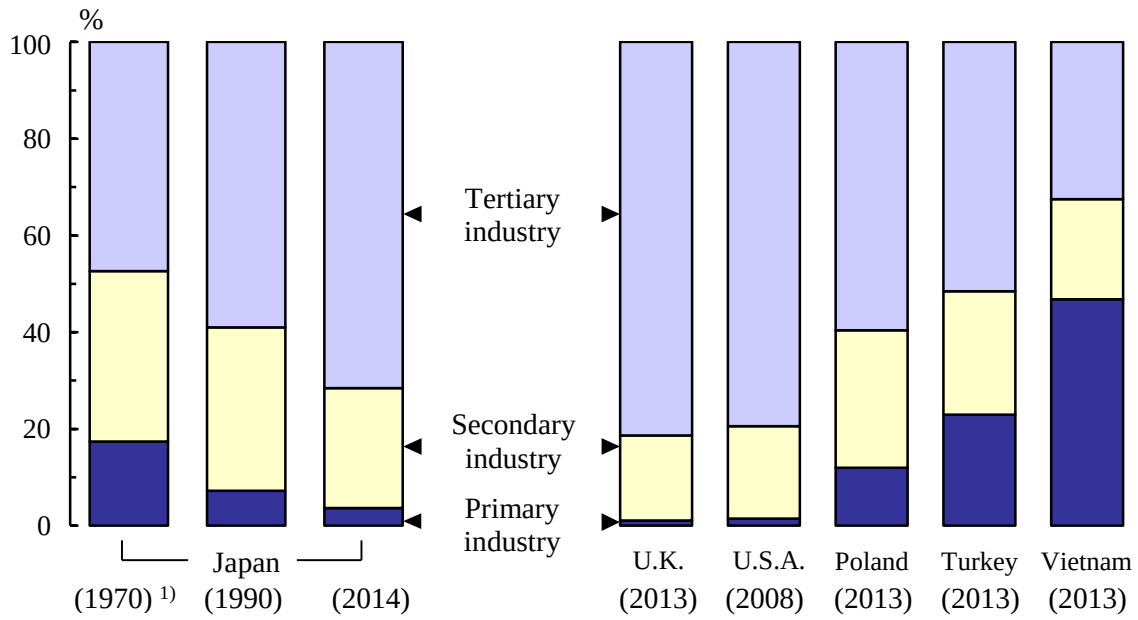
2. Employment

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 an increase of 400,000 in 2014, from 63.11 million (56.9 percent of the population aged 15 years and over) in the previous year to 63.51 million (57.3 percent).

(1) Employment by Industry

In 2014, the primary industry accounted for 3.7 percent of employment; the secondary industry, 24.8 percent; and the tertiary industry, 71.6 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 the primary industry has been continually falling, while the percentage employed in the tertiary industry has been continually rising. The percentage employed in the secondary industry has also been trending downward. By industry, the number of persons employed in the primary industries of agriculture and forestry has been on a downward trend.

Table 12.2
Employment by Industry

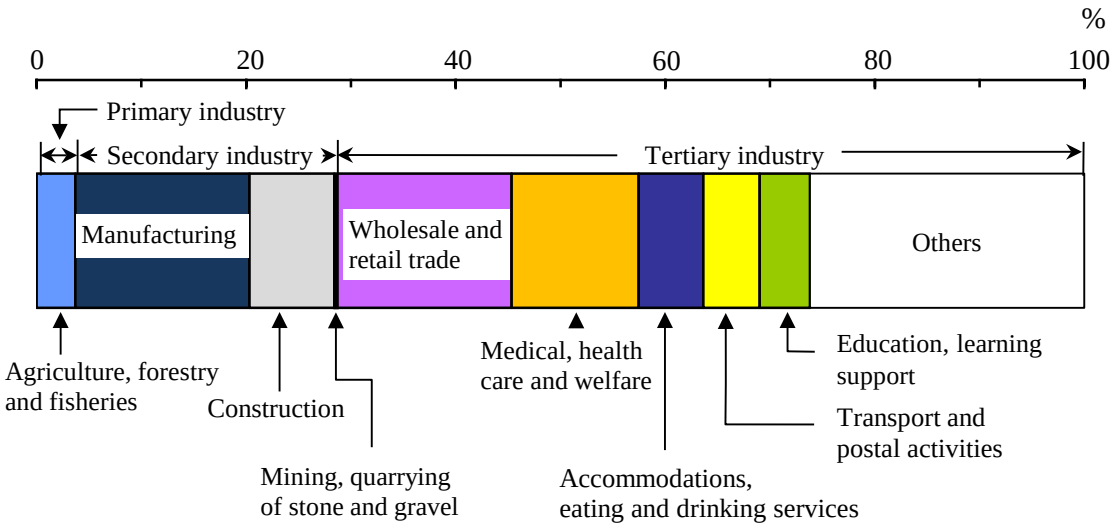
(Thousands)

Industries	2011 [1]	2012	2013 [2]	2014 [2]	Percentage	
					Males	Females
Total [3]	62,890	62,700	63,110	63,510	57.0	43.0
Primary industry	**2,490**	**2,400**	**2,330**	**2,300**	**61.7**	**38.3**
Agriculture and forestry	2,310	2,240	2,170	2,090	60.3	39.7
Fisheries	180	160	160	210	76.2	23.8
Secondary industry	**15,540**	**15,380**	**15,410**	**15,480**	**75.1**	**24.9**
Mining and quarrying of stone and gravel	30	30	30	30	75.0	25.0
Construction	5,020	5,030	4,990	5,050	85.2	14.8
Manufacturing	10,490	10,320	10,390	10,400	70.2	29.8
Tertiary industry	**44,310**	**44,300**	**44,450**	**44,740**	**50.6**	**49.4**
Electricity, gas, heat supply and water	310	310	300	290	86.2	13.8
Information and communications	1,900	1,880	1,920	2,030	74.4	25.6
Transport and postal activities	3,510	3,400	3,400	3,360	81.3	18.8
Wholesale and retail trade	10,570	10,420	10,570	10,590	48.6	51.4
Finance and insurance	1,620	1,630	1,650	1,540	46.4	53.6
Real estate and goods rental and leasing	1,130	1,120	1,100	1,120	63.4	36.6
Scientific research, professional and technical services	2,080	2,050	2,070	2,120	66.5	33.5
Accommodations, eating and drinking services	3,820	3,760	3,840	3,850	37.9	62.1
Living-related and personal services and amusement services	2,420	2,390	2,420	2,380	40.8	59.2
Education, learning support	2,940	2,950	2,990	3,010	44.7	55.3
Medical, health care and welfare	6,780	7,060	7,350	7,570	24.7	75.3
Compound services	440	470	550	570	61.4	38.6
Services, n.e.c.	4,570	4,620	4,010	3,970	61.7	38.3
Government [4]	2,220	2,240	2,280	2,340	73.2	26.8

1) Supplementary estimated figures. 2) Dispatched workers were classified into "Service, n.e.c." until 2012. From 2013, they were classified into each industry which they actually worked.
3) Including "Industries unable to classify." 4) Excluding elsewhere classified.

Source: Statistics Bureau, MIC.

Figure 12.3
Distribution of Employment by Industry (2014)



Source: Statistics Bureau, MIC.

In the tertiary industry, which accounted for approximately 70 percent of all industry, employment increased from the previous year by 220,000 and 110,000 in the "medical, health care and welfare" and "information and communications" sectors, respectively. Meanwhile, employment in "finance and insurance" decreased by 110,000.

Depending on the industrial sector, a difference was seen in the employment tendency between men and women. In 2014, of male employment was highest in "electricity, gas, heat supply and water" (86.2 percent), followed by "construction" (85.2 percent) and "transport and postal activities" (81.3 percent). The percentage of female employment was highest in "medical, health care and welfare" (75.3 percent), followed by "accommodations, eating and drinking services" (62.1 percent) and "living-related and personal services and amusement services" (59.2 percent).

(2) Employment by Occupation

In terms of occupation, employment in the "sales workers" category has been declining in recent years. The number of "sales workers" was 8.54 million in 2014, down 0.7 percent from the previous year's 8.60 million. In

contrast, "service workers" such as home-care workers have continued to increase over the past few years due to a trend toward a service-oriented economy, the aging population, and improvements to welfare services. There is also a rising trend in the number of "professional and engineering workers."

Table 12.3
Employment by Occupation

(Thousands)

Occupation	2011 [1]	2012	2013	2014	Percentage	
					Males	Females
Total [2]	62,890	62,700	63,100	63,510	57.0	43.0
Administrative and managerial workers	1,580	1,530	1,430	1,420	88.7	11.3
Professional and engineering workers	9,870	10,100	10,040	10,240	53.8	46.2
Clerical workers	12,340	12,140	12,350	12,440	40.3	59.7
Sales workers	8,920	8,750	8,600	8,540	56.9	43.1
Service workers	7,530	7,580	7,800	7,890	32.6	67.4
Security workers	1,230	1,220	1,250	1,260	93.7	6.3
Agricultural, forestry and fishery workers	2,460	2,370	2,290	2,240	63.4	36.6
Manufacturing process workers	9,050	9,020	9,000	9,010	71.0	29.0
Transport and machine operation workers	2,230	2,220	2,240	2,220	97.3	2.7
Construction and mining workers	3,010	3,020	3,020	3,050	98.4	1.6
Carrying, cleaning, packaging, and related workers	4,140	4,140	4,270	4,310	54.9	45.1

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

In 2014, the percentages of male and female employed persons by occupation show that men were particularly prominent among "construction and mining workers" (98.4 percent) and "transport and machine operation workers" (97.3 percent). Women were prominent among "service workers" (67.4 percent) and "clerical workers" (59.7 percent).

(3) Employment by Employment Pattern

Observation of employment by patterns in Japan shows that regular staff members have been on a slight declining trend since the late 1990s, while the number of non-regular staff members, such as part-time workers and agency-dispatched workers, has been increasing gradually.

In 2014, there were 52.40 million employees (excluding company executives), of whom 19.62 million, or 37.4 percent, were non-regular staff members. The ratio of non-regular staff members among all male employees was 21.8 percent, while the corresponding ratio for females was 56.7 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.

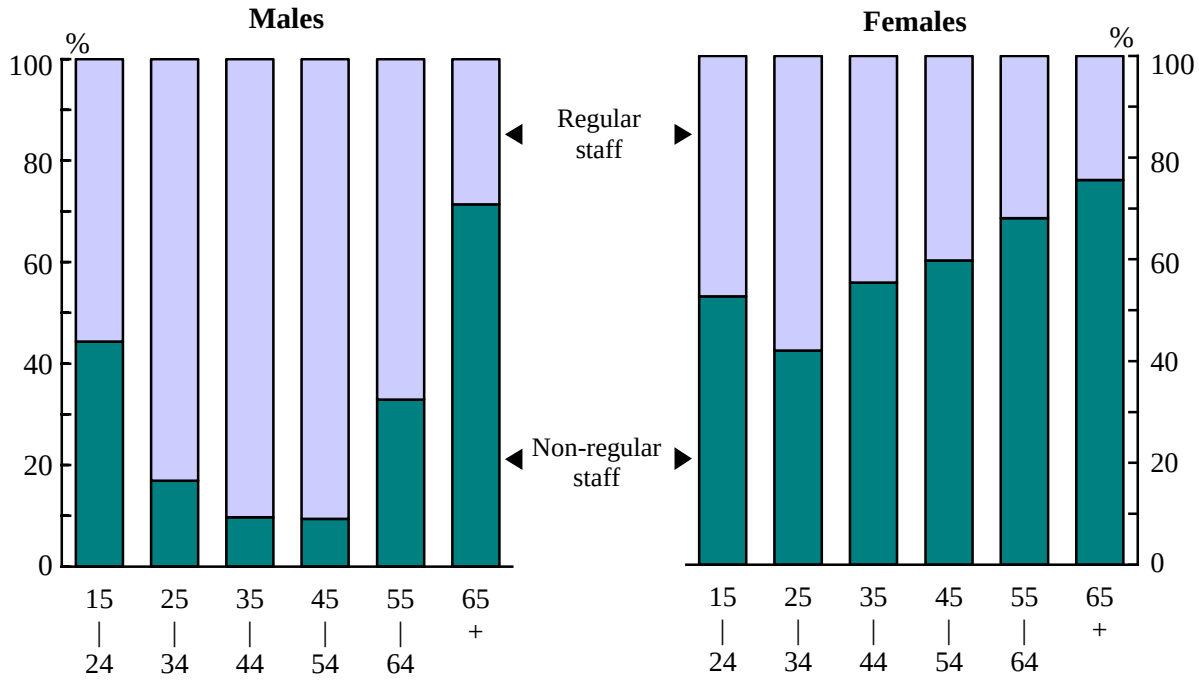
Table 12.4
Employment by Employment Pattern (2014)

(Thousands)

	Employees[1)]	Regular staff	Percentage	Non-regular staff	Percentage
Total	52,400	32,780	62.6	19,620	37.4
Males	28,890	22,590	78.2	6,300	21.8
Females	23,510	10,190	43.3	13,320	56.7

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

Figure 12.4
Employment Pattern by Gender and Age (2014)



Source: Statistics Bureau, MIC.

Factors behind the rise in non-regular staff members include diversification of use of human resources such as due to progression of technological innovation, and saturation of a work style that is suited to the individual characteristics and circumstances of laborers. As a result, with respect to employment patterns, there has been an increase in non-regular staff members, particularly women and the elderly.

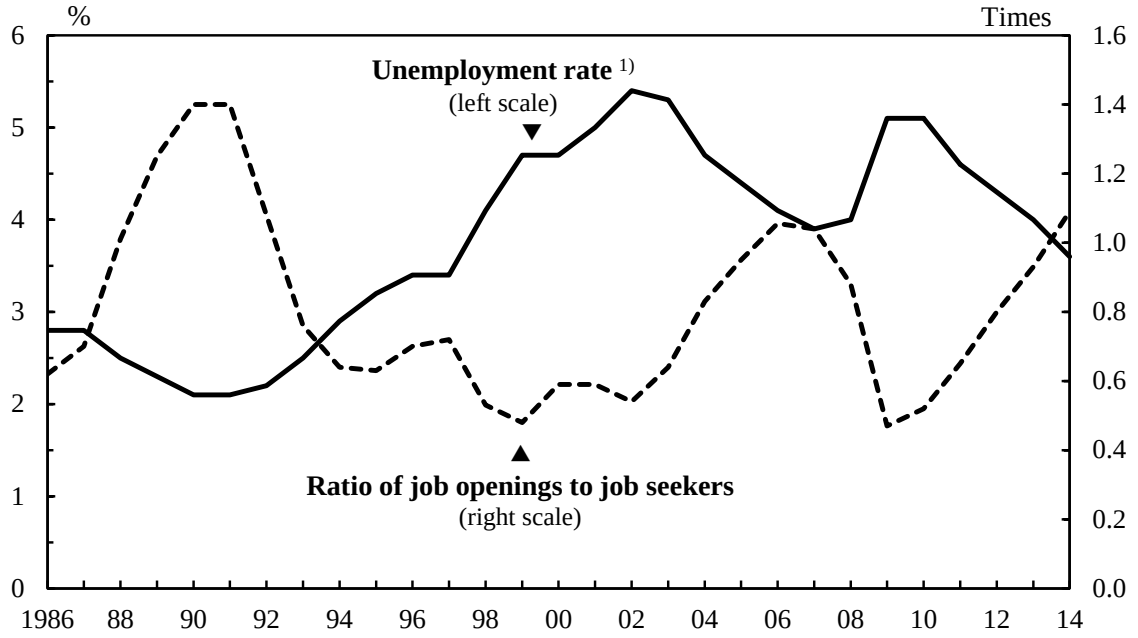
The employment rate of new graduates had been worsening as a result of the economic slowdown since 2008, but in recent years, their employment situation has been on an improving trend.

3. Unemployment

In 2014 the unemployed numbered 2.36 million people, down 10.9 percent from the previous year and representing a decline for the fifth consecutive year. The unemployment rate was 3.6 percent, down 0.4 percentage points from the previous year.

After the ratio of job openings to job seekers peaked in 2006, it has been on a falling trend in recent years. Since 2009, the ratio has been increasing.

Figure 12.5
Unemployment Rate and Ratio of Job Openings to Job Seekers

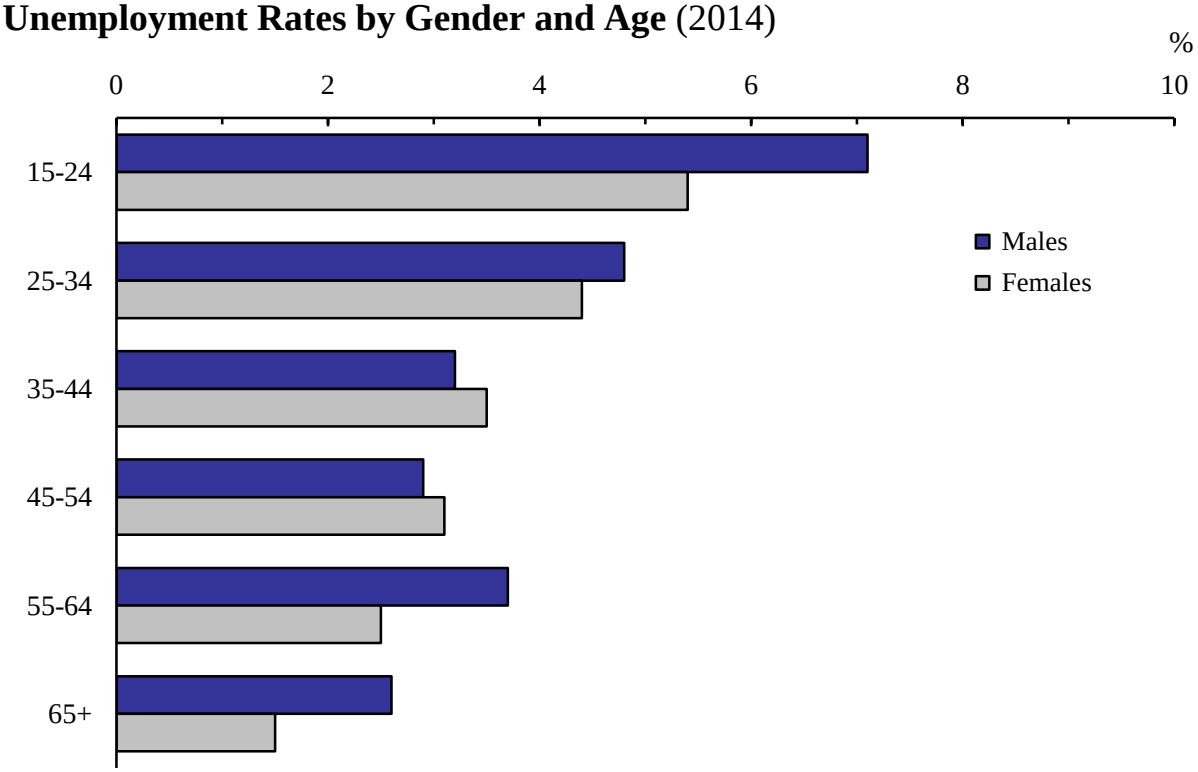


1) The data for 2011 indicates supplementary estimated figure.
Source: Statistics Bureau, MIC; Ministry of Health, Labour and Welfare.

A breakdown by gender shows that the unemployment rate in 2014 was 3.7 percent among men, and 3.4 percent among women. The unemployment rate has been higher among men for the seventeenth consecutive year 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 12.6
Unemployment Rates by Gender and Age (2014)



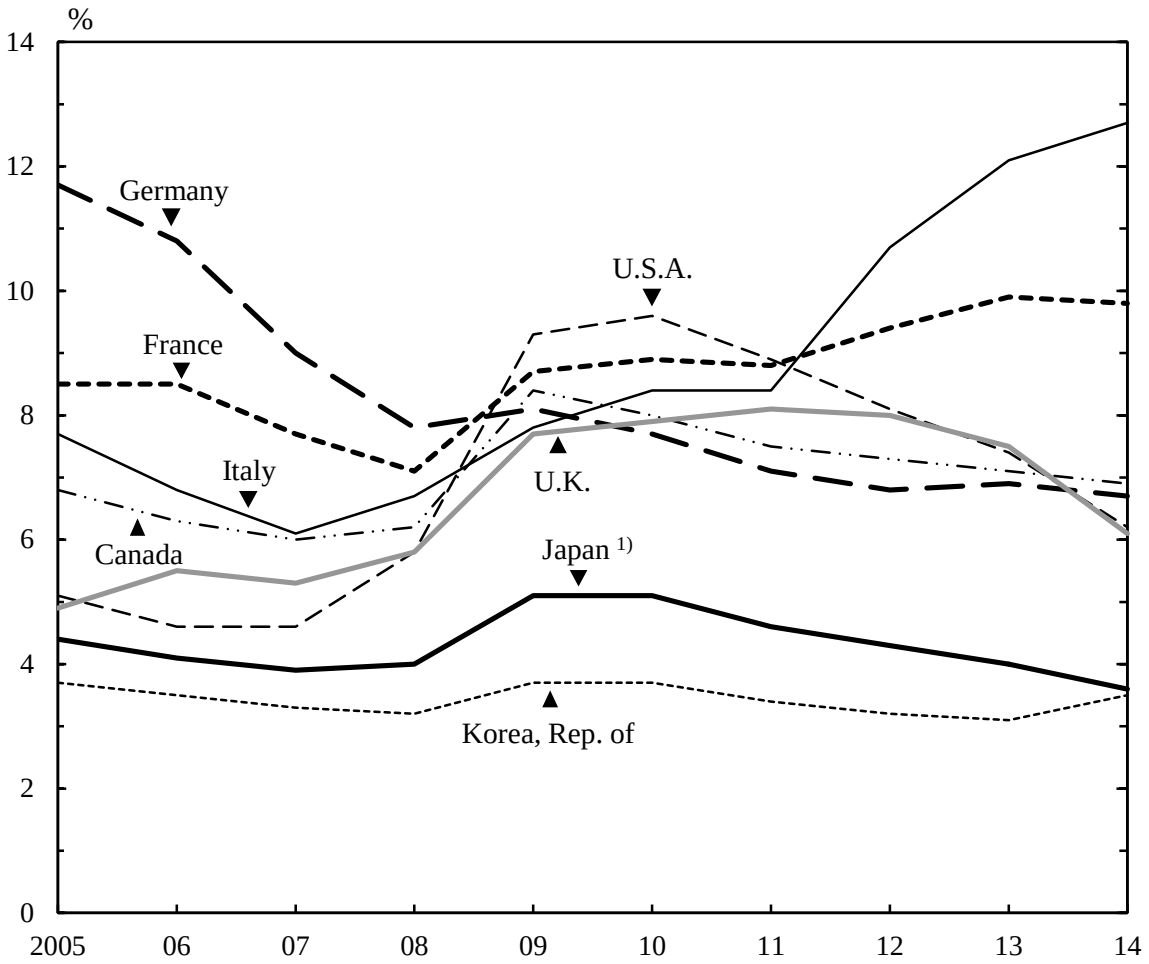
Source: Statistics Bureau, MIC.

Analyzing the total number of unemployed in 2014 (2.36 million people), by reasons for job-seeking, the major reason were: (i) involuntarily dismissed due to corporate or business circumstances, or reaching retirement age limit, 0.73 million persons; (ii) voluntarily left a job for personal or family reasons, 0.90 million persons; (iii) new job seekers due to the necessity to earn income, 0.33 million; and (iv) new job seekers just graduated from school, 0.12 million.

In terms of the duration of unemployment, most were unemployed for "1 year or more" (0.89 million persons), followed by "less than 3 months" (0.74 million persons). Among younger job seekers, the percentage of a

short job-seeking period is high, and among the elderly, the percentage of a long job-seeking period is high.

Figure 12.7
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 2014, the monthly average of total hours worked was 145.1 per regular employee (in establishments with five or more regular employees), down 0.3 percent from the previous year, and an annual average of 1,741 hours.

Of the total monthly hours worked, 134.1 were scheduled working hours, representing a decrease of 0.6 percent from the previous year. Non-scheduled work such as overtime work averaged 11.0 hours per month, representing an increase of 3.8 percent from the previous year. Working days averaged 18.8 days per month in 2014.

In 2014, the monthly average of total cash earnings per regular employee (in establishments with five or more regular employees) was 317,000 yen. This total amount includes 261,000 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 56,000 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)

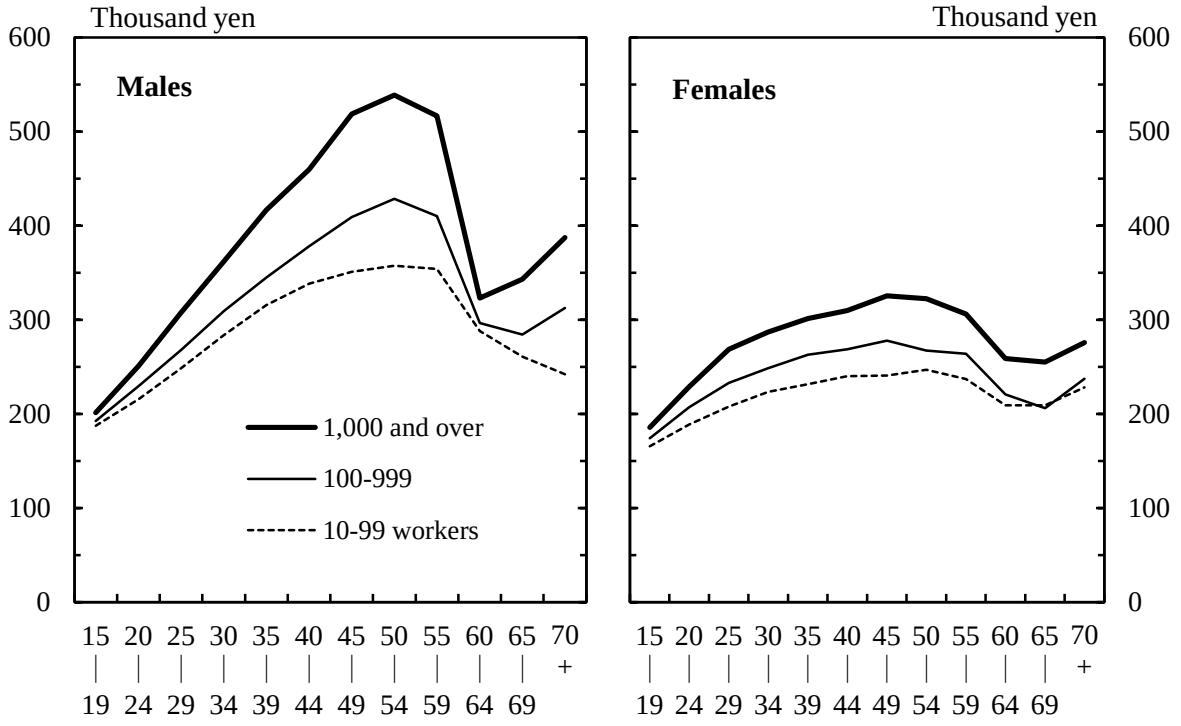
Year	Days worked	Hours of Work			Wages (1,000 yen)				
		Total	Scheduled	Non-scheduled	Total	Contractual	Scheduled	Non-scheduled	Special [2]
2000	20.0	154.4	144.6	9.8	355	284	265	19	72
2005	19.5	150.2	139.8	10.4	335	273	253	19	62
2010	19.0	146.2	136.2	10.0	317	263	245	18	54
2012	19.1	147.1	136.7	10.4	314	262	243	19	53
2013	18.9	145.5	134.9	10.6	314	260	241	19	54
2014	18.8	145.1	134.1	11.0	317	261	241	20	56
Indices (2010 average = 100) [3]									
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	-	-
2012	-	100.3	100.2	101.7	98.9	99.4	99.1	-	-
2013	-	99.3	98.8	104.4	98.5	98.5	98.1	-	-
2014	-	98.9	98.2	108.6	98.9	98.4	97.7	-	-

1) Establishments with five 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 decline. Into the 1990s, an increasing number of enterprises reviewed their salary system, resulting in a more widespread introduction of a merit-based pay system placing emphasis on performance. In recent years, many companies have also adopted wage determination based on job performance skills with consistency.

Figure 12.8
Monthly Contractual Cash Earnings by Size of Enterprise (2014)



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 2014 results of the Family Income and Expenditure Survey.

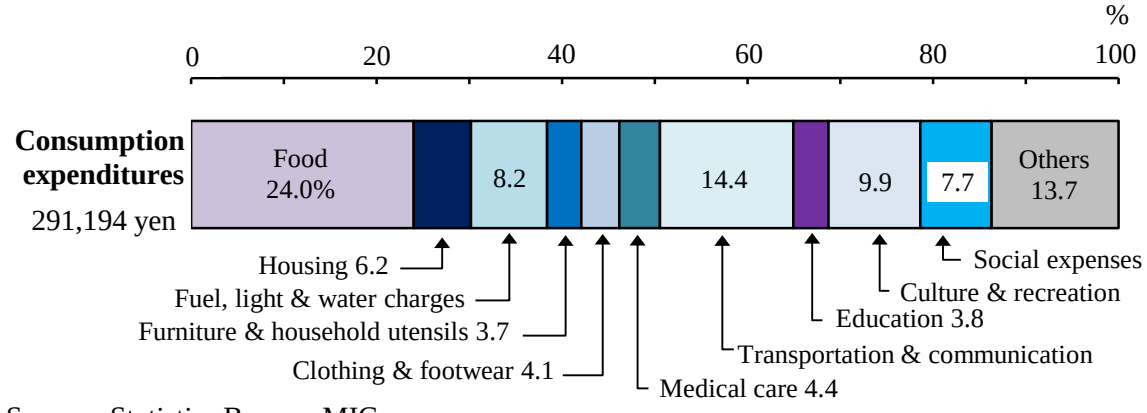
(1) Income and Expenditure

(A) Two-or-more-person Households

The 2014 average monthly consumption expenditures per two-or-more-person household (the average number of household members being 3.03 and the average age of the household head being 58.3 years) was 291,194 yen. Compared to the previous year, it increased by 0.3 percent in nominal terms and decreased by 2.9 percent in real terms. The share of food expenses to total consumption expenditures (Engel's coefficient) was 24.0 percent.

When looking at the real annual change in consumption expenditures, although there was last-minute demand due to an increase in the consumption tax in 2014, there was a decrease in real terms for the first time in three years due to a reactionary fall afterwards as well as bad summer weather.

Figure 13.1
Average Monthly Consumption Expenditures
(Two-or-more-person households) (2014)



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 3.40 and the average age of the household head being 48.1 years) was 519,761 yen in 2014, of which about 80 percent came from the household head's income.

Table 13.1

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

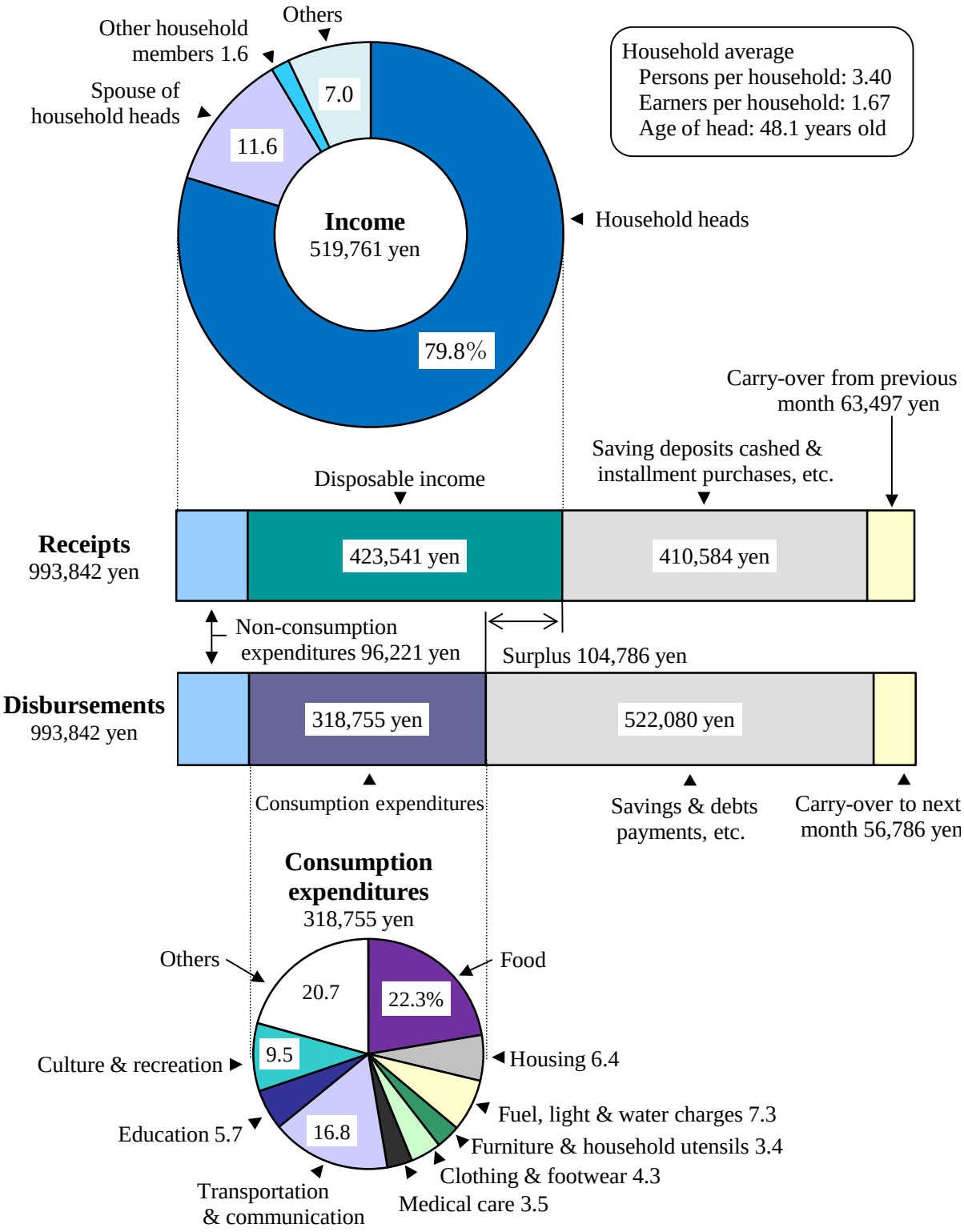
(Thousand yen)

Item	2010	2011	2012	2013	2014
Income (A)	520.7	510.1	518.5	523.6	519.8
Wages and salaries	485.3	473.1	479.6	486.6	483.3
Others	35.4	37.0	38.9	37.0	36.5
Disposable income (A-C)	430.0	420.5	425.0	426.1	423.5
Expenditures	409.0	398.4	407.4	416.6	415.0
Consumption expenditures (B)	318.3	308.8	313.9	319.2	318.8
Non-consumption expenditures (C) [2]	90.7	89.6	93.5	97.5	96.2
Surplus ((A-C)-B)	111.7	111.7	111.1	107.0	104.8
Net increase in deposits and insurance	76.8	76.8	77.8	74.3	77.1
Average propensity to consume (%) [3]	74.0	73.4	73.9	74.9	75.3
Ratio of net increase in deposits and insurance (%) [4]	17.9	18.3	18.3	17.4	18.2
Engel's coefficient (%)	21.9	22.2	22.1	22.1	22.3
Annual change (%) (real terms)					
Disposable income	1.3	-1.9	1.1	-0.2	-3.8
Consumption expenditures	0.6	-2.7	1.6	1.2	-3.3

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 increase in deposits 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 423,541 yen. Of this disposable income, 318,755 yen was used for living expenses (consumption expenditures), such as food and housing expenses, while the remainder (surplus), totaling 104,786 yen, was applied to savings, life insurance premiums and repaying debt such as housing loans.

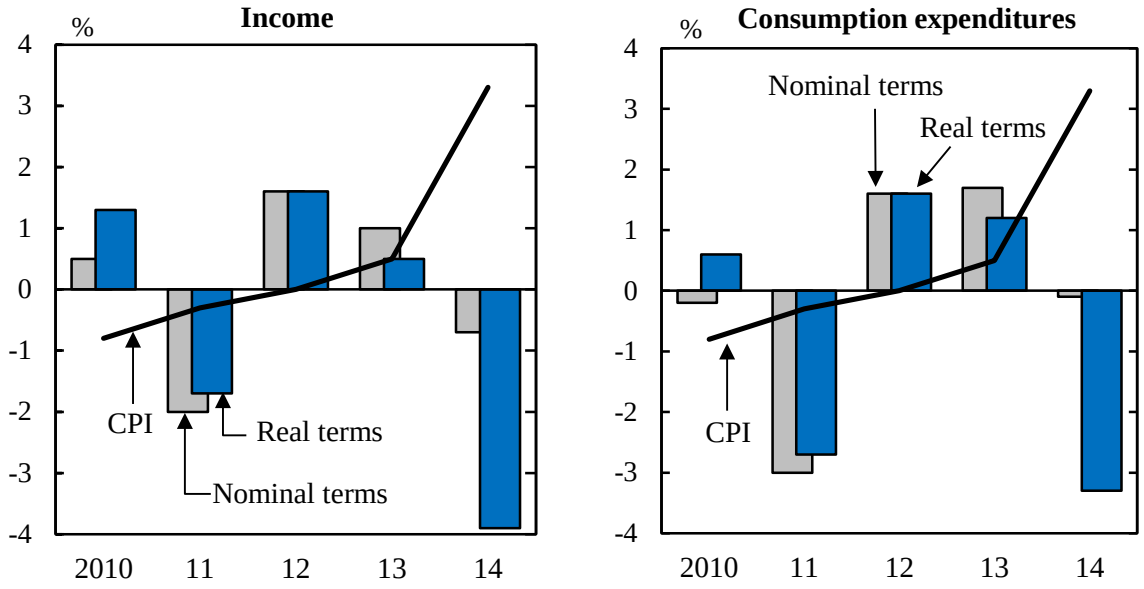
Figure 13.2
Balance of Income and Expenditures
(Monthly average, workers' households [1]) (2014)



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

A comparison of consumption expenditures by category showed that spending on "housing" and "furniture and household utensils" increased from the previous year in real terms, while spending on "food," "culture and recreation," etc. decreased in real terms.

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

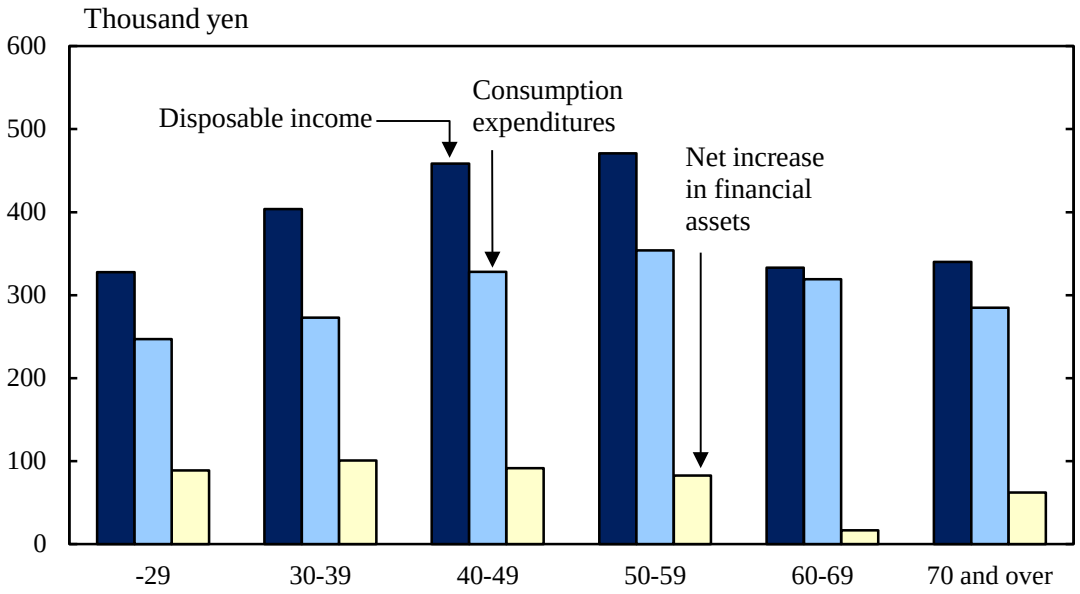


1) Two-or-more-person households.
Source: Statistics Bureau, MIC.

Family budgets differ among households according to their stages in life. Observed by age group of the household head, the 2014 average monthly disposable income of workers' households was the highest in households in the 50s group (470,924 yen), followed by those in the 40s group (458,577 yen) and the 30s group (403,778 yen).

The 2014 average propensity to consume (the ratio of consumption expenditures to disposable income) was the lowest in households in the 30s group (67.6 percent). The figure was 71.6 percent in those in the 40s group, 75.2 percent in the 50s group, 95.9 percent in the 60s group, and 83.8 percent in the 70-and-over group. The percentage tends to be higher as the age goes up, except for the under-30 group (75.4 percent). Meanwhile, a net increase in financial assets (an amount added to savings) was the highest in households in the 30s group, followed by those in the 40s group.

Figure 13.4
Average Monthly Family Income and Expenditures by Age Group of Household Head (Workers' households [1)]) (2014)



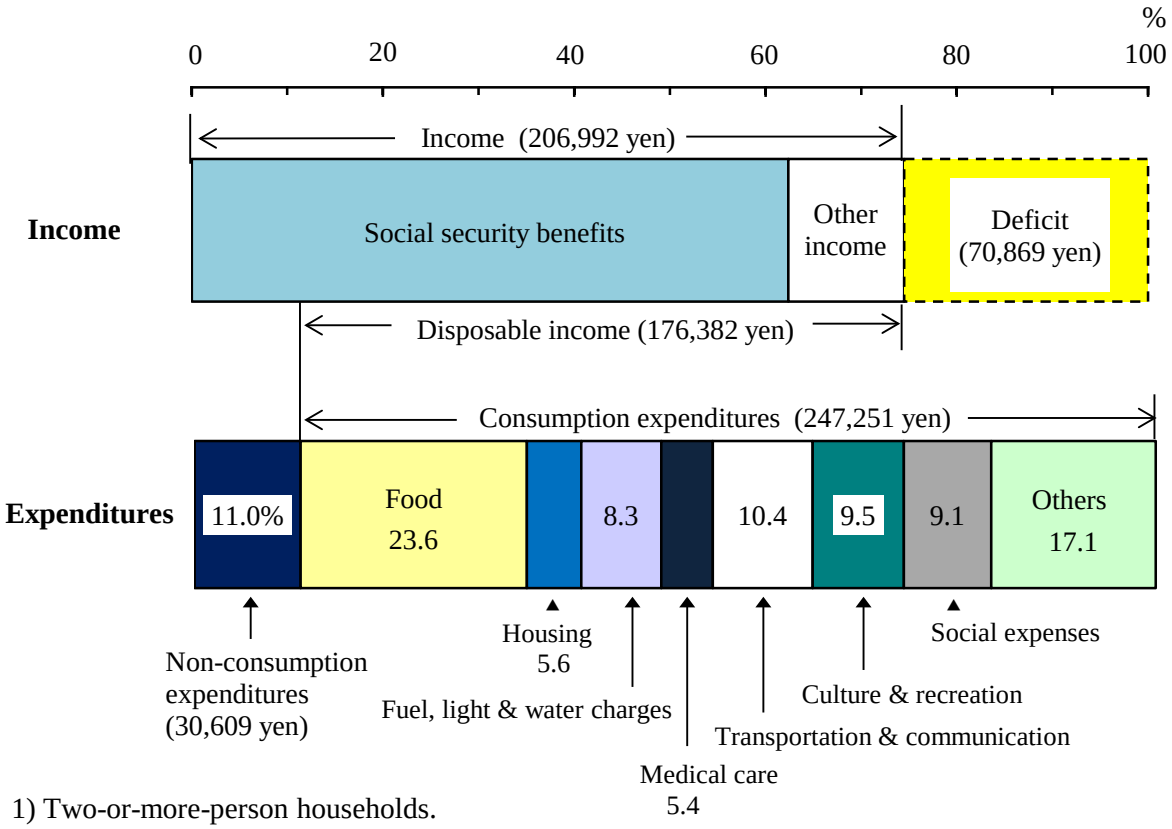
1) Two-or-more-person households.
Source: Statistics Bureau, MIC.

(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 206,992 yen in 2014. Social security benefits amounted to 173,371 yen, thus accounting for 83.8 percent of income.

Disposable income averaged 176,382 yen, while consumption expenditures averaged 247,251 yen. The average propensity to consume in non-working elderly households was 140.2 percent, which means consumption expenditures exceeded disposable income. The deficit of disposable income to consumption expenditures (70,869 yen) increased from that of the previous year (65,421 yen). This deficit was financed by withdrawing financial assets such as deposits, etc.

Figure 13.5
Average Monthly Income and Expenditures
(Non-working elderly households [1]) (2014)



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

(B) One-person Households

The average monthly consumption expenditures of one-person households in 2014 was 162,002 yen, up 0.8 percent in nominal terms and down 2.4 percent in 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 3.6 percent for the under 35-year-old group, down 2.1 percent in the 35-59 age group, and there was a 2.2-percent decrease 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 by Age Group
(One-person households)(2014)

(Yen)

Item	Average		Under 35 years		35-59		60 and over	
	Actual figures	ratio (%)	Actual figures	ratio (%)	Actual figures	ratio (%)	Actual figures	ratio (%)
Consumption expenditures	162,002	100.0	165,713	100.0	181,773	100.0	150,769	100.0
Food	38,539	23.8	42,926	25.9	43,228	23.8	34,740	23.0
Housing	21,657	13.4	32,973	19.9	27,981	15.4	14,789	9.8
Fuel, light and water charges	11,849	7.3	7,323	4.4	11,052	6.1	13,715	9.1
Furniture and household utensils	4,745	2.9	3,029	1.8	4,124	2.3	5,614	3.7
Clothing and footwear	6,404	4.0	8,350	5.0	8,090	4.5	4,922	3.3
Medical care	6,962	4.3	4,102	2.5	6,665	3.7	8,034	5.3
Transportation and communication	19,681	12.1	25,284	15.3	26,328	14.5	14,492	9.6
Culture and recreation	19,135	11.8	20,442	12.3	21,737	12.0	17,392	11.5
Others	33,030	20.4	21,283	12.8	32,567	17.9	37,071	24.6
Annual change (real terms) (%)								
Consumption expenditures	-2.4		-3.6		-2.1		-2.2	

Source: Statistics Bureau, MIC.

(2) Savings and Debts

Two-or-more-person households in 2014 showed that the average amount of savings per workers' household was 12.90 million yen, resulting in its ratio to yearly income (7.02 million yen) amounting to 183.8 percent. The median value dividing households with savings into equal halves (the value of savings of the household that is in the middle when households are lined up in order from those with the lowest amount of savings to those with the highest amount of savings) was 7.41 million yen. On the other hand, the average amount of debt per household was 7.56 million yen, which was 107.7 percent relative to yearly income. The median value dividing households with debt into equal halves was 12.55 million yen. The portion for "housing and/or land" averaged 7.10 million yen of household debt. A total of 40.9 percent of workers' households held "debts for housing and/or 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/or land	Ratio of debts to yearly income (%)	Ratio of households holding debts (%)
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
2013	7,080	12,440	175.7	7,400	6,870	104.5	54.0
2014	7,020	12,900	183.8	7,560	7,100	107.7	52.9

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 70s 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]) (2014)

(Million yen)

Item	Average	-29	30-39	40-49	50-59	60-69	70 and over
Yearly income	7.02	4.57	6.01	7.27	8.30	6.37	5.96
Savings	12.90	2.71	6.01	10.35	15.65	23.56	25.48
Financial institutions	12.33	2.64	5.70	9.76	14.76	23.04	25.46
Demand deposits	3.08	1.26	2.48	2.76	3.24	4.52	4.93
Time deposits	4.69	0.84	1.75	3.38	5.72	9.69	11.05
Life insurance, etc.	3.20	0.39	1.12	2.68	4.28	5.58	5.40
Securities	1.36	0.15	0.35	0.93	1.53	3.26	4.08
Non-financial institutions	0.57	0.07	0.31	0.59	0.89	0.52	0.02
Debts	7.56	5.87	9.99	10.48	6.08	1.99	0.83
Housing and/or land	7.10	5.43	9.58	9.94	5.56	1.69	0.65
Other than housing and/or land	0.27	0.14	0.22	0.34	0.31	0.17	0.11
Monthly and yearly installments	0.19	0.29	0.20	0.20	0.21	0.13	0.07

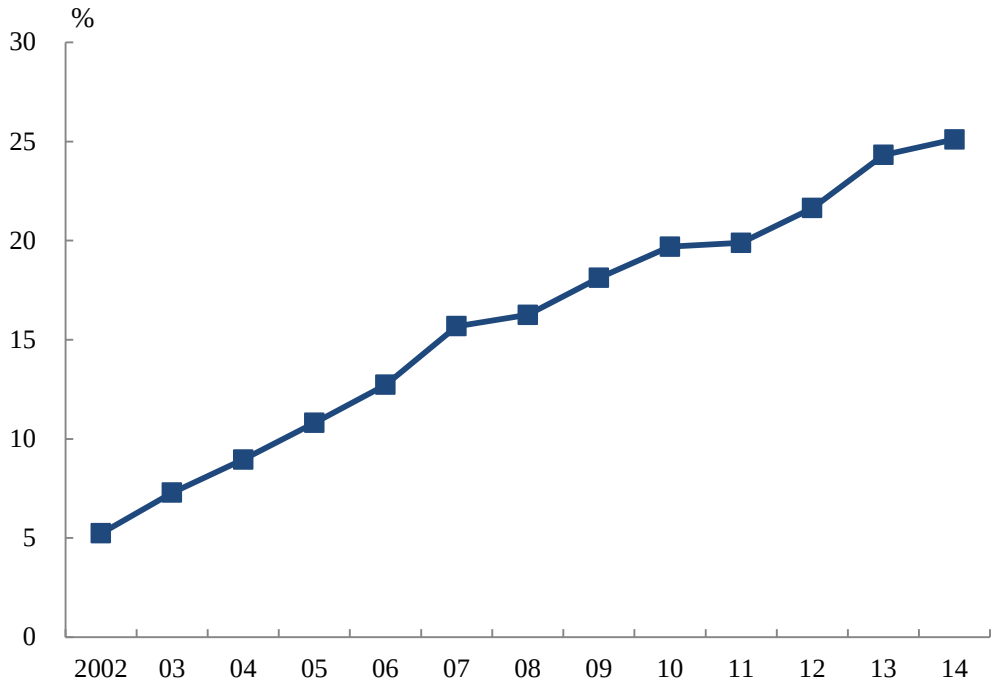
1) Two-or-more-person households.

Source: Statistics Bureau, MIC.

(3) Internet Shopping by Households

Due to popularization of computers, smartphones, etc., the use of Internet shopping has been increasing in recent years. According to the Survey of Household Economy, the percentage of households that utilize Internet shopping has continued to increase since 2002, reaching 25.1 percent in 2014. Monthly expenditures per household that has used Internet shopping totaled 25,846 yen.

Figure 13.6
The Proportion of Households Ordered Over the Internet
(Two-or-more-person households)



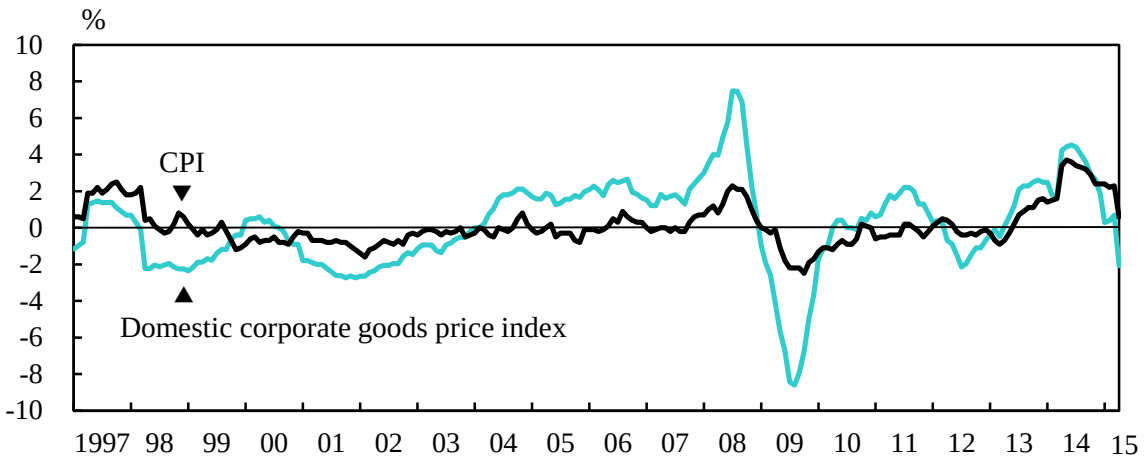
Source: Statistics Bureau, MIC.

2. Prices

Domestic corporate goods prices were on a downward trend starting in 1992, after the collapse of the bubble economy, and then turned upward in 2004. Domestic corporate goods prices are easily affected by changes in the price of imported raw materials such as crude petroleum and iron ore, due to fluctuations in the conditions of international commodity markets as well as in the exchange rate, and its impact is significant in advances and declines from 2008 to 2009 around the time of the "Lehman shock". Starting in 2010, domestic corporate goods prices fluctuated within a range of plus or minus 2 percent (as compared to the same month of the previous year), and started to increase in the second quarter of 2013. However, the index turned downward in April 2015.

On the other hand, the width of the increase in consumer prices also shrank starting in 1992. Although the width of the increase of this index expanded temporarily when the consumption tax rate was raised from 3 percent to 5 percent in 1997, it subsequently went on a downward trend. Starting in the fourth quarter of 2007, prices were once again on an upward trend due to sharp increases in the price of imported raw materials, and in the third quarter of 2008, the increase in prices exceeded 2 percent year-on-year. Thereafter, consumer prices were affected by the fall in prices of imported raw materials, and started to decrease in the first quarter of 2009. After that, they showed a downward trend. Starting in the third quarter of 2013, however, the index turned upward.

Figure 13.7
Price Trends (Percent change from previous year)



Source: Statistics Bureau, MIC; Bank of Japan.

(1) Consumer Price Index (CPI)

The all items index of consumer prices (with base year 2010 = 100) was 102.8 in 2014, up 2.7 percent from the previous year.

Table 13.5
CPI for Major Categories of Goods and Services

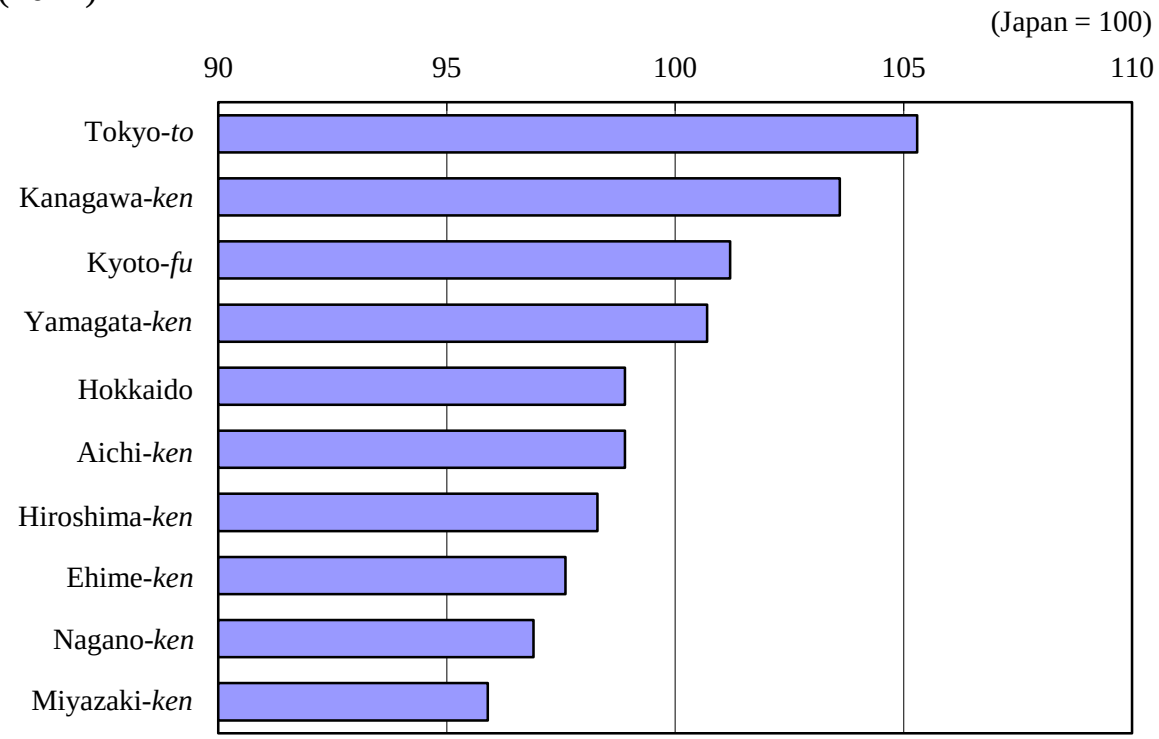
(CY2010=100)

Item	Weight	2000	2005	2012	2013	2014
All items	10000	102.7	100.4	99.7	100.0	102.8
All items, less imputed rent	8442	103.1	100.3	99.7	100.2	103.6
Food	2525	98.4	96.8	99.7	99.6	103.4
Housing	2122	100.9	100.6	99.5	99.1	99.1
Fuel, light and water charges	704	94.6	94.4	107.3	112.3	119.3
Furniture and household utensils	345	131.1	111.6	91.7	89.7	93.1
Clothing and footwear	405	106.3	100.2	99.7	100.1	102.2
Medical care	428	98.7	101.2	98.5	98.0	99.0
Transportation and communication	1421	103.0	101.6	101.5	102.9	105.6
Education	334	103.2	107.4	98.2	98.8	100.6
Culture and recreation	1145	118.0	107.9	94.5	93.6	97.0
Miscellaneous	569	95.4	97.1	103.5	104.8	108.6
Goods	4931	104.5	100.1	99.3	99.9	104.0
Services	5069	100.8	100.7	100.0	100.1	101.6

Source: Statistics Bureau, MIC.

According to the general index (all items, less imputed rent) in the regional difference index of consumer prices, which compares the difference in consumer price levels by prefecture, Tokyo-*to* had the highest score in 2014, with a figure of 105.3 against the national average set at 100, followed by Kanagawa-*ken*, with 103.6. On the other hand, Miyazaki-*ken* registered the lowest score, with 95.9. Comparing Tokyo-*to* and Miyazaki-*ken*, the price index for Tokyo-*to* was 9.8 percent higher than that of Miyazaki-*ken*.

Figure 13.8
Regional Difference Index of Consumer Prices by Selected Prefectures
(2014)



Source: Statistics Bureau, MIC.

(2) Corporate Goods and Services Price Indices

The corporate goods price index measures price changes of goods traded in the corporate sector. It is comprised of the producer price index (price index of domestically-produced and domestically-traded goods in the corporate sector), the export price index, and the import price index.

In 2014, the producer price index (2010 as the base year = 100) was 105.1, up 3.1 percent from the previous year.

In 2014, although the export price index decreased to 98.1 on a contract currency basis (down 1.7 percent from the previous year), measured on a yen basis, the index increased to 110.6 (up 3.4 percent). Meanwhile, the import price index fell to 111.4 on a contract currency basis (down 1.6 percent from the previous year) and increased to 128.0 on a yen basis (up 4.3 percent).

The services producer price index measures price movements of services traded between companies. In 2014, the corporate services price index (2010 as the base year = 100) was 101.7, up 2.7 percent from the previous year.

Table 13.6
Corporate Goods and Services Price Indices

(CY2010=100)

Item	Weight	2005	2011	2012	2013	2014
Corporate goods price index						
Domestic corporate goods price index	1000.0	97.2	101.5	100.6	101.9	105.1
Manufacturing industry products	902.5	97.4	101.3	99.7	100.3	103.2
Export price index (yen basis)	1000.0	115.7	97.8	95.8	107.0	110.6
Import price index (yen basis)	1000.0	94.1	107.5	107.2	122.7	128.0
Services producer price index						
All items	1000.0	103.3	99.3	99.0	99.0	101.7
Information and communications	237.8	105.2	99.1	98.5	97.6	99.4
Transportation	186.7	100.5	100.1	100.3	100.9	103.9
Real estate services	72.1	97.5	96.9	94.9	93.5	95.5
Advertising services	63.4	111.5	100.5	101.4	102.3	105.1

Source: Bank of Japan.

Chapter 14

Environment and Life

1. Environmental Issues

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

In fiscal 2013, Japan's total emission of greenhouse gases, which are a major cause of global warming, amounted to 1.48 billion tons (calculated after their conversion into carbon dioxide), representing an increase of 1.2 percent from the previous fiscal year. Carbon dioxide accounted for 93 percent of these greenhouse gases, with an emission volume of 1.31 billion tons. A breakdown of carbon dioxide emissions by sector revealed that emissions from the industrial sector accounted for 32.8 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)]

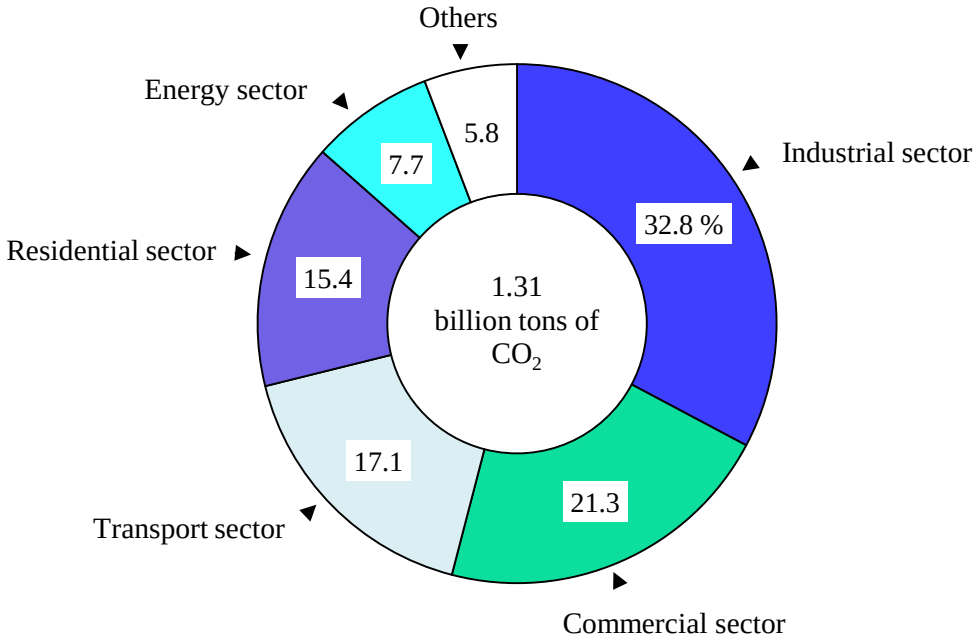
(Million tons)

Item	FY1990	FY2000	FY2005	FY2010	FY2012	FY2013
Total	1,154	1,273	1,304	1,212	1,296	1,311
Industrial sector	503	467	457	414	432	429
Commercial sector	134	207	239	219	254	279
Transport sector	206	255	240	222	226	225
Residential sector	131	162	180	174	204	201
Energy sector	93	91	104	110	105	101
Industrial processes and product use	64	58	54	45	45	47
Waste (incineration, etc.)	22	31	30	27	29	28

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)] (FY2013)



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 2012 nationwide industrial waste generation totaled 379.14 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 13.10 million tons in fiscal 2012.

Meanwhile, a total of 45.23 million tons of "nonindustrial waste" (household waste and also shop, office and restaurant waste) was generated in fiscal 2012. This translates to 964 grams per person per day. In terms of nonindustrial waste disposal in fiscal 2012, the total volume processed was 42.62 million tons. The total volume of recycled waste was 9.26 million tons, with the recycling rate at 20.5 percent.

Table 14.2

Waste Generation and Disposal (Industrial and nonindustrial waste)

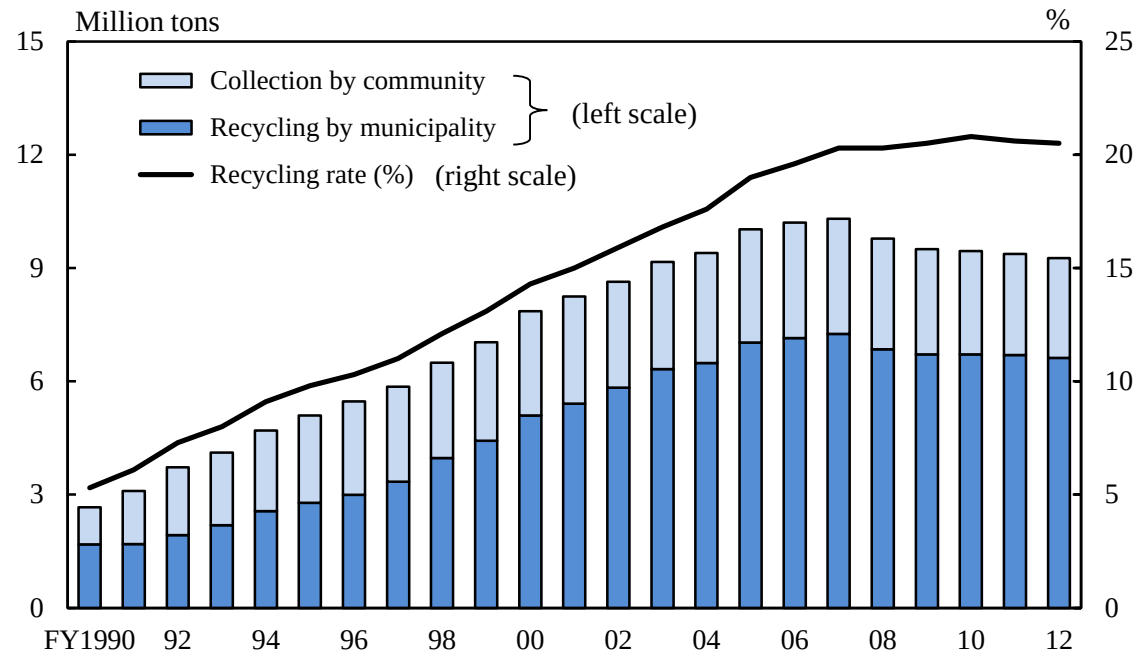
(Thousand tons)

Item	FY1990	FY2000	FY2005	FY2010	FY2012
Industrial waste					
Total volume of waste generation	394,736	406,037	421,677	385,988	379,137
Recycling	150,568	184,237	218,888	204,733	207,569
Treatment for waste reduction	154,443	176,933	178,560	167,000	158,466
Final disposal	89,725	44,868	24,229	14,255	13,102
Nonindustrial waste [1]					
Total volume of waste generation	50,257	54,834	52,720	45,359	45,234
Municipally scheduled and collected	42,495	46,695	44,633	38,827	38,890
Directly brought to waste treatment facilities	6,776	5,373	5,090	3,803	3,697
Recyclable waste collected by community	986	2,765	2,996	2,729	2,646
Waste generated daily per person (in grams)	1,115	1,185	1,131	976	964
Total volume of processed waste	49,282	52,090	49,754	42,791	42,616
Direct incineration	36,192	40,304	38,486	33,799	33,991
Intermediate treatment for recycling, etc.	3,300	6,479	7,283	6,161	5,939
Direct recycling		2,224	2,541	2,170	2,118
Direct final disposal	9,790	3,084	1,444	662	567

1) Due to the Great East Japan Earthquake, figures for FY2010 exclude those for Minamisanriku-*cho* (Miyagi Prefecture).

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) Due to the Great East Japan Earthquake, figures for FY2010 exclude those for Minamisanriku-*cho* (Miyagi Prefecture). Figures for FY2011 exclude disaster waste.

Source: Ministry of the Environment.

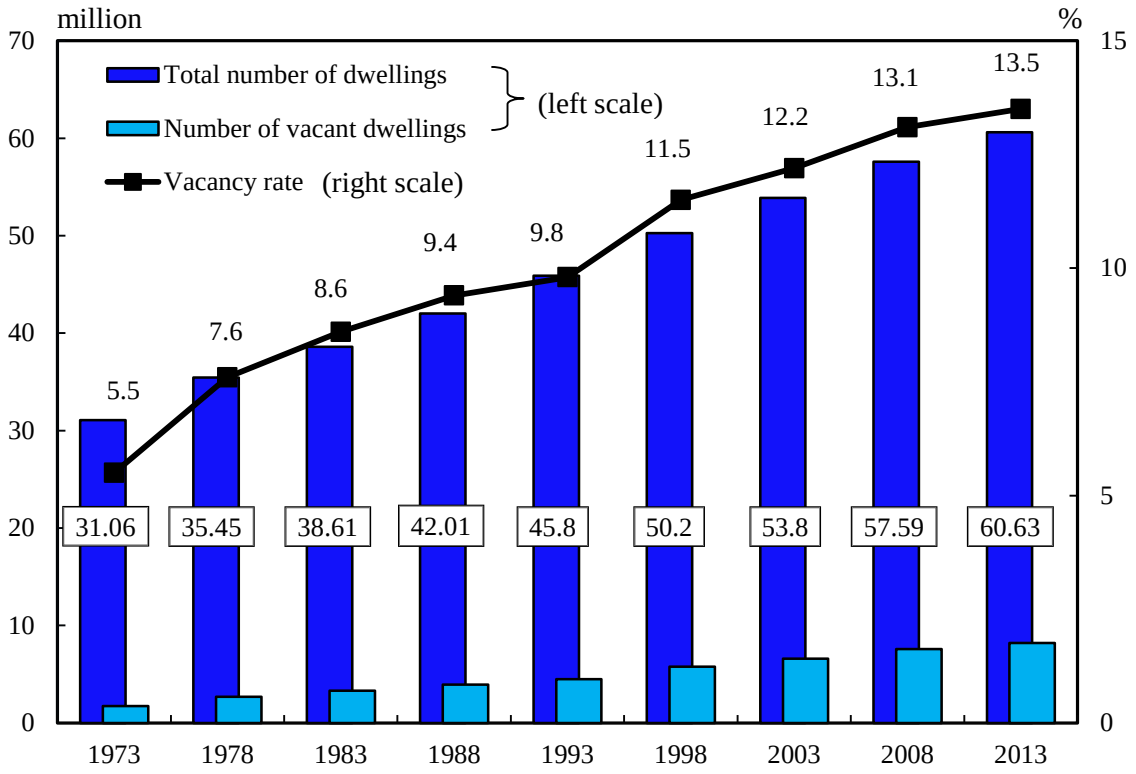
2. Housing

According to the "Housing and Land Survey" conducted in October 2013, the total number of dwellings (in the case of apartment buildings, counting the number of individual units) in Japan was 60.63 million, up by 3.04 million (5.3 percent) from 2008. The number of households was 52.45 million, representing the excess in number of dwellings over households by 8.18 million.

In 2013, the number of occupied dwellings (where people usually live) amounted to 52.10 million, accounting for 85.9 percent of the total number of dwellings. Of these, the number of dwellings used exclusively for living

totaled 50.98 million, accounting for 97.8 percent of the occupied dwellings. Meanwhile, the number of vacant dwellings increased by 0.63 million (8.3 percent) from 2008, to 8.20 million. That vacancy rate represented 13.5 percent of the total number of dwellings, the highest-ever ratio.

Figure 14.3
Trends in Dwellings, Vacant Dwellings and Vacancy Rate



Source: Statistics Bureau, MIC.

A breakdown of occupied dwellings by class of ownership showed that owned houses totaled 32.17 million, accounting for 61.7 percent of the total, which represented an increase of 0.6 percentage points from the figure of 61.1 percent in 2008. Rented houses, on the other hand, numbered 18.52 million, accounting for 35.5 percent of the total.

Table 14.3
Housing Conditions

(Thousands)

Year	Total households	Total number of dwellings	Occupied dwellings 1)	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
2013	52,453	60,629	52,102	32,166	18,519	50,982	93.0

1) Including tenure of dwelling "Not reported."
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
2013	52,102	28,599	1,289	22,085	130

Source: Statistics Bureau, MIC.

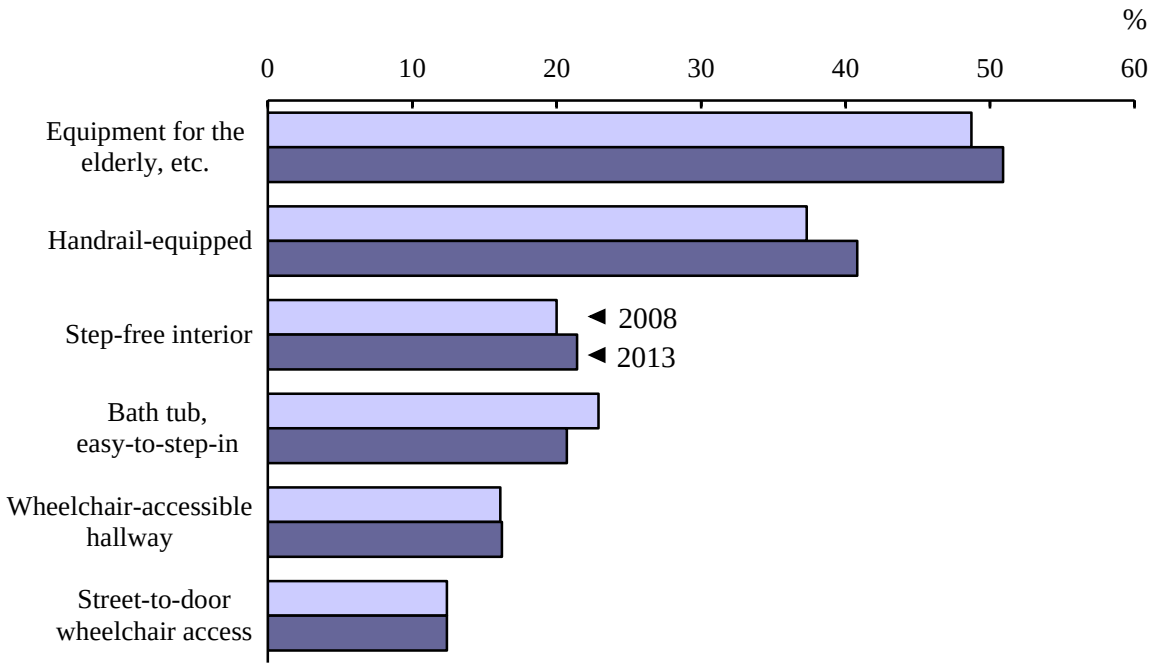
Occupied dwellings by building type showed that 28.60 million or 54.9 percent were detached houses, and 22.09 million or 42.4 percent were

apartments. The proportion of apartments has consistently increased in recent years.

In terms of construction materials, 26.37 million or 92.2 percent of the detached houses were wood-frame houses (including fire-resistant ones). On the other hand, 16.30 million or 73.8 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 26.54 million, or 50.9 percent of all housing, up 2.2 percentage points from 24.15 million (48.7 percent) in 2008. Housing "equipped with handrails" accounted for 40.8 percent of all housing, and housing with a "step-free interior" made up 21.4 percent.

Figure 14.4
Ratio of Housing with Universal Design 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 Policies Basic Act 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 4,373 in 2013, and they recorded their thirteenth consecutive year of decrease. This represented less than one-third of that of 1970.

In 2013, traffic deaths per 100,000 population were 3.4 persons, while the number of persons killed per 10,000 motor vehicles was 0.5 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	931,950	1,155,707	9,073	1.2	7.1
2010	725,903	896,294	4,922	0.6	3.8
2012	665,138	825,396	4,411	0.6	3.5
2013	629,021	781,494	4,373	0.5	3.4

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

4. Crime

In 2014, the reported number of penal code offenses (excluding cases related to traffic accidents) was 1.21 million, a decrease of 101,977 (7.8 percent) compared to the previous year. The proportion of thefts was the highest, accounting for 74 percent, or 897,259 cases (down 8.6 percent from the previous year).

The number of persons arrested for penal code offenses was 251,115 in 2014, a decrease of 11,371 (4.3 percent) compared to the previous year, marking a ten-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 30.6 percent in 2014.

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

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	1,604,205	497,356	322,620	31.0	1,252.3
2013	1,314,140	394,121	262,486	30.0	1,032.3
2014	1,212,163	370,568	251,115	30.6	953.7

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

Various kinds of computers and computer networks are currently playing an essential role as a social foundation. In line with this, crimes utilizing computer networks are becoming increasingly diversified. The number of arrests for cybercrime in 2014, involving the abuse of computer technology and telecommunications technology, was 7,905, down 2.6 percent from the previous year. This represented about a ninefold 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, 2014, the prefectural police operated police headquarters, police academies, 1,169 police stations, 6,255 police boxes (*Koban*) and 6,552 police substations (*Chuzaisho*) 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. In order to respond to changes in the social structure such as further development of the aging of society after the start of the system, as well as needs of the public, who desire in-home care, an aim is being made towards the Community Comprehensive Care System (system where medical care, nursing care, prevention, and livelihood support are provided in an integrated manner in a locale where a person is used to living) and a long-term care insurance system of high quality that provides peace of mind. Revisions of this system and of nursing care compensation are being carried out.

The number of users of long-term care insurance services (fiscal yearly average) totaled 4.58 million in fiscal 2012, and increased by approximately 2.5-fold over 12 years in comparison to the approximately 1.84 million users in fiscal 2000 when the system was initiated. In addition, the amount of nursing care costs in fiscal 2012 (includes allowances for high-cost long-term care service, for high-cost medical care and long-term care service, and for long-term care service to a person admitted to a specified facility), totaled 8.8 trillion yen.

Table 15.1
Trends in Social Security Benefit Expenditures by Institutional Scheme

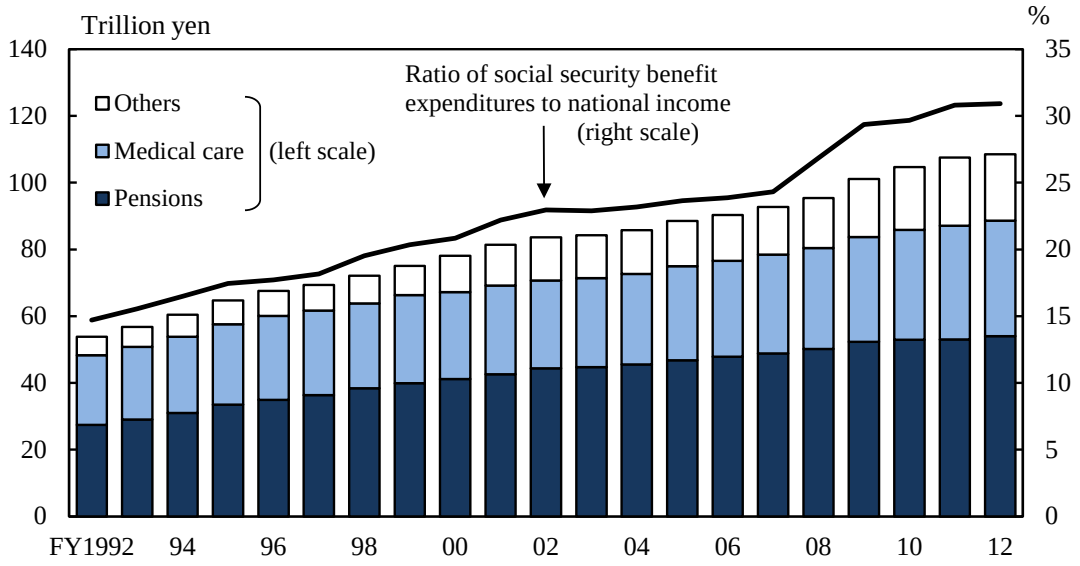
(Billion yen)

Item	FY2000	FY2005	FY2010	FY2011	FY2012
Total	78,133	88,498	104,691	107,506	108,557
Medical insurance	14,567	16,179	18,828	19,312	19,551
Health and medical services for the aged	10,447	10,754	11,700	12,261	12,655
Long-term care insurance	3,262	5,815	7,434	7,809	8,313
Pension benefits	39,173	45,214	51,755	51,922	52,911
Employment insurance [1)]	2,665	1,442	2,097	2,044	1,895
Workers' accident compensation insurance	1,019	953	907	925	920
Family allowance [2)]	712	1,158	3,042	3,205	2,928
Public assistance	1,939	2,594	3,330	3,502	3,603
Social welfare	2,186	2,635	3,394	4,402	3,876
Public health	555	548	1,386	1,380	1,232
Gratuities for retired public employees	1,420	1,059	702	632	564
Aid for war victims	188	146	116	112	109

1) Including unemployment benefits for Seamen's insurance. 2) Including income support for single parent families and families with challenged children.
Source: Ministry of Health, Labour and Welfare.

In fiscal 2012, social security benefit expenditures totaled 108.6 trillion yen (up 1.0 percent from the previous fiscal year), a figure which amounted to 851,300 yen per person. The ratio of Japan's social security benefit expenditures to national income registered 30.9 percent. Benefits for the aged accounted for approximately 70 percent of total social security benefit expenditures.

Figure 15.1
Trends in Social Security Benefit Expenditures by Sector [1)]



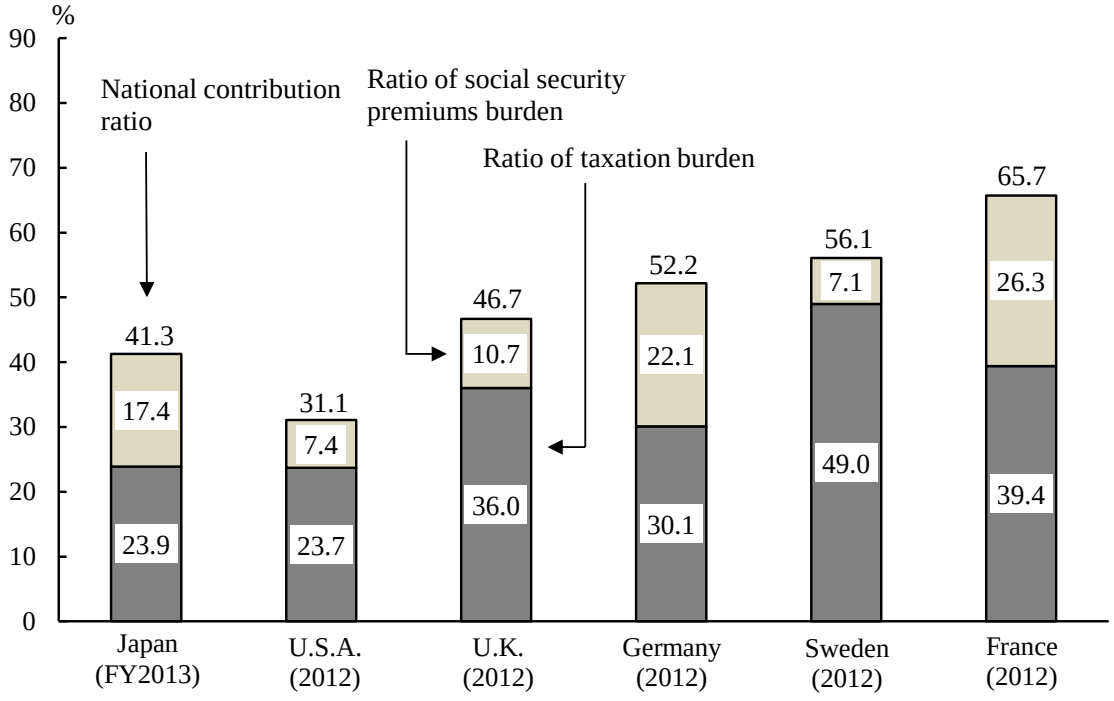
1) Because of retrospective tabulation up to FY2005 of expenditure items data that were added in FY2011, a gap has occurred with FY2004 data.
Source: Ministry of Health, Labour and Welfare.

In fiscal 2012, pensions accounted for half (49.7 percent) of total social security benefit expenditures, while medical care accounted for 31.9 percent, and social welfare and others for 18.4 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 127.1 trillion yen in fiscal 2012. This was financed by 61.4 trillion yen from social insurance contributions, 42.5 trillion yen from taxes and 23.1 trillion yen from other sources. The government is making approaches towards drastic reform of the tax system, including raising the consumption tax, as the first step towards simultaneously ensuring stable funding for social security and achieving sound public finance.

The national contribution ratio (the combined ratios of taxes and social security costs to national income) was 41.3 percent in fiscal 2013 (taxation burden: 23.9 percent; social security premiums: 17.4 percent), up 0.8 percentage points from 40.5 percent in fiscal 2012 (taxation burden: 23.2 percent; social security premiums: 17.4 percent). The national contribution ratio in 2012 was 31.1 percent in the U.S.A., 46.7 percent in the U.K., and 56.1 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.

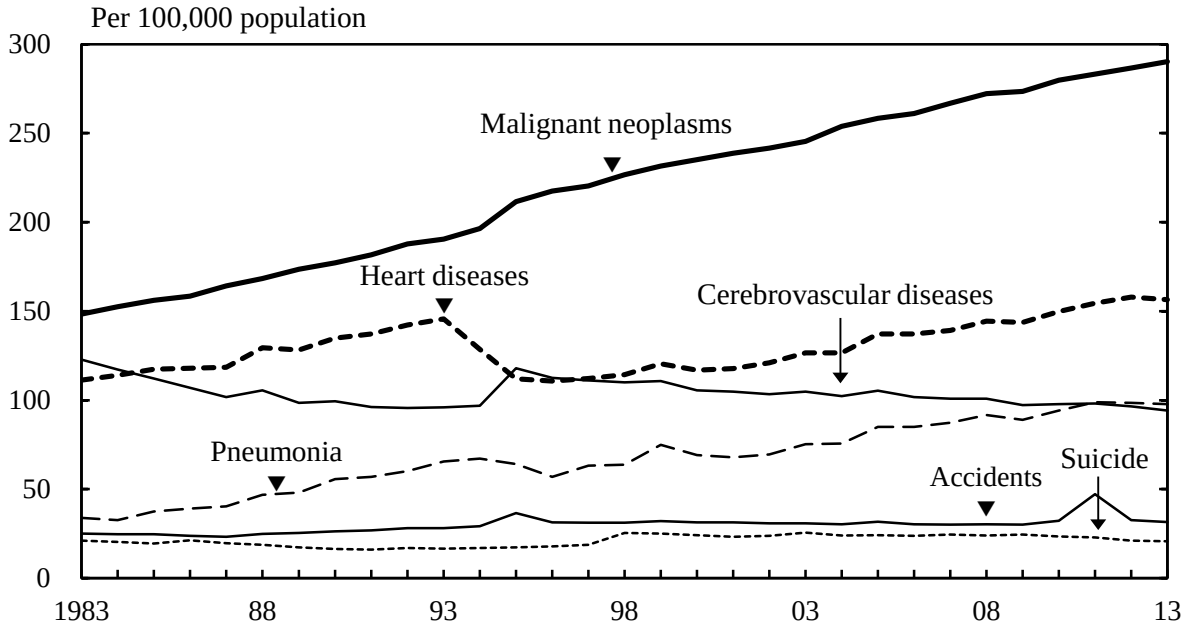
2. Health Care and Public Hygiene

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 preserve the stability of this medical insurance system in the future.

Life expectancy at birth was 86.6 years for women and 80.2 years for men in 2013. Japan's life expectancy remains the highest level in the world. Japan's infant mortality rate was 2.1 per 1,000 births in 2013.

Figure 15.3
Death Rates by Major Cause



Source: Ministry of Health, Labour and Welfare.

The death rate was 1,009.1 per 100,000 population in 2013. The leading cause of death was malignant neoplasms (290.3 per 100,000 population), followed by lifestyle diseases such as heart diseases (156.5; excluding hypertensive diseases), in which people's daily diet and behavior are significant factors therefore, and pneumonia (97.8). Malignant neoplasms

became the leading cause of death in 1981. The death rate by malignant neoplasms has continued to increase since, reaching 28.8 percent of all deaths in 2013.

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 26,063 in 2013, and had remained at the same level of around 30,000 a year since 1998. In 2013, suicide became the leading cause of deaths for people aged between 15 and 39.

In the past, humanity has faced the threat of various epidemic diseases, including new strains of influenza. Currently, in Japan, infection control measures are being advanced, such as through the implementation of vaccinations, with the objective of preventing the occurrence and spreading of infectious diseases.

In terms of healthcare provision, Japan had 300,664 physicians engaged in medical care, or 235.8 physicians per 100,000 population, in 2012. 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 15.2
Number of Medical Personnel at Work

Personnel	2004	2006	2008	2010	2012
Number					
Physicians	267,943	275,127	283,915	292,338	300,664
Dentists	94,022	95,944	98,063	100,161	101,110
Pharmacists	223,564	234,429	249,251	258,713	262,520
Nurses and Assistant nurses	1,146,181	1,194,121	1,252,224	1,320,871	1,373,521
Rates per 100,000 population					
Physicians	209.7	215.1	221.7	228.3	235.8
Dentists	73.6	75.0	76.6	78.2	79.3
Pharmacists	175.0	183.3	194.6	202.0	205.9
Nurses and Assistant nurses	896.9	933.6	977.7	1,031.5	1,077.1

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

As of October 1, 2013, the number of hospitals in Japan (excluding medical clinics and dental clinics) totaled 8,540. The number of hospital beds amounted to 1,573,772 (1,236.3 per 100,000 population).

Table 15.3
Number of Medical Care Institutions and Beds

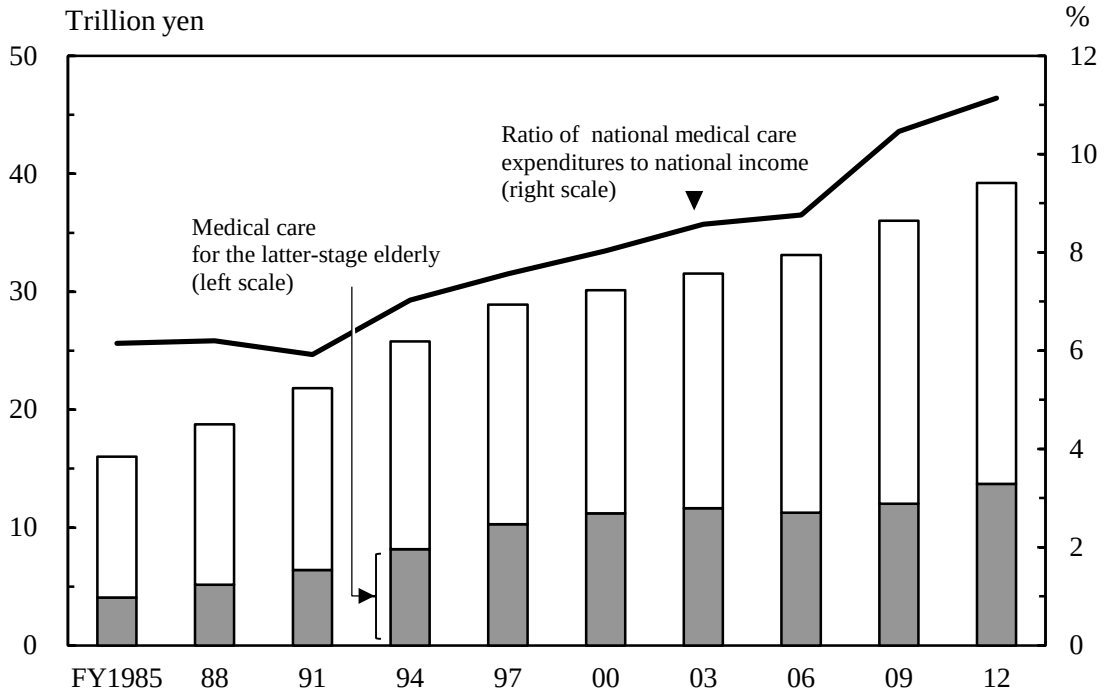
Type of Institution	2005	2008	2011	2012	2013
Institutions					
Number					
Total	173,200	175,656	176,308	177,191	177,769
Hospitals	9,026	8,794	8,605	8,565	8,540
Medical clinics	97,442	99,083	99,547	100,152	100,528
Dental clinics	66,732	67,779	68,156	68,474	68,701
Rates per 100,000 population					
Total	135.6	137.6	138.0	139.0	139.6
Hospitals	7.1	6.9	6.7	6.7	6.7
Medical clinics	76.3	77.6	77.9	78.5	79.0
Dental clinics	52.2	53.1	53.3	53.7	54.0
Beds					
Number					
Total	1,798,637	1,756,115	1,712,539	1,703,950	1,695,210
Hospitals	1,631,473	1,609,403	1,583,073	1,578,254	1,573,772
Medical clinics	167,000	146,568	129,366	125,599	121,342
Dental clinics	164	144	100	97	96
Rates per 100,000 population					
Total	1,407.7	1,375.3	1,340.0	1,336.3	1,331.7
Hospitals	1,276.9	1,260.4	1,238.7	1,237.7	1,236.3
Medical clinics	130.7	114.8	101.2	98.5	95.3
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 2012, the expenditures totaled 39.2 trillion yen or 11.17 percent of Japan's national income. The cost of medical care per person averaged 307,500 yen in fiscal 2012.

Medical costs for treating the latter-stage elderly in fiscal 2012 were 13.7 trillion yen, or about one-third of national medical care expenditure, and accounted for 3.89 percent of the national income. The per-capita cost of medical care for the latter-stage elderly averaged 919,452 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



Source: Ministry of Health, Labour and Welfare.

Chapter 16

Education and Culture

1. School-Based Education

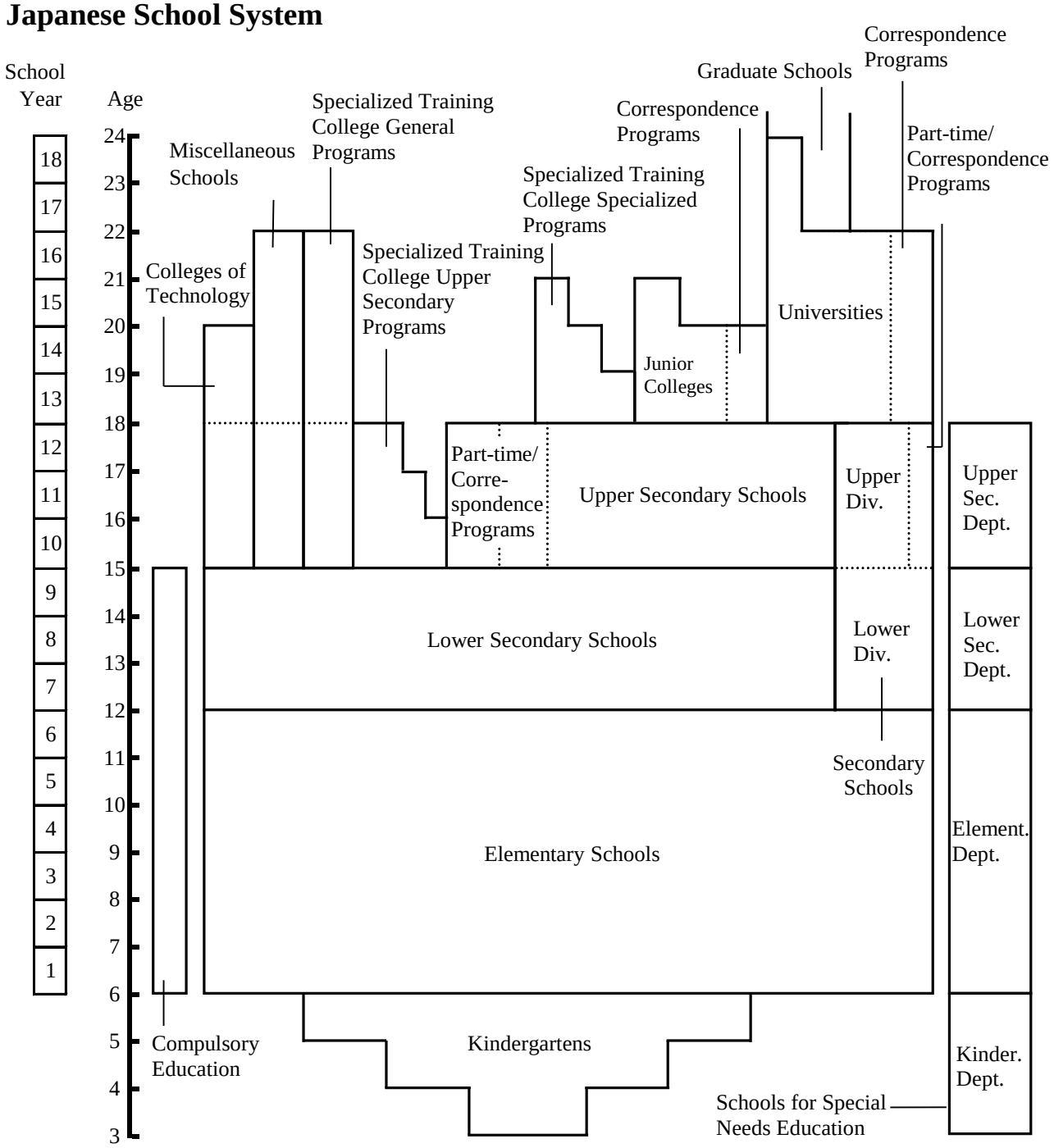
Japan's primary and secondary education is based on a 6-3-3 system: 6 years in elementary school, 3 years in lower secondary school, and 3 years in upper secondary school. The period of compulsory schooling is the 9 years at elementary and lower secondary schools. Higher education institutions are universities, 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 Act 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, 2014)

Type of institution	Schools				Full-time teachers (1,000)	Students (1,000)	
	Total	National	Public	Private		Males	Females
Kindergartens	12,905	49	4,714	8,142	111	790	768
Elementary schools	20,852	72	20,558	222	416	3,377	3,223
Lower secondary schools	10,557	73	9,707	777	254	1,793	1,711
Upper secondary schools	4,963	15	3,628	1,320	235	1,678	1,656
Secondary schools	51	4	30	17	2	15	16
Schools for special needs education [1)]	1,096	45	1,037	14	79	88	47
Colleges of technology	57	51	3	3	4	48	10
Junior colleges	352	-	18	334	8	16	121
Universities	781	86	92	603	181	1,635	1,220
Graduate schools	623	86	77	460	105	173	78
Specialized training colleges	3,206	10	195	3,001	41	294	365
Miscellaneous schools	1,276	-	8	1,268	9	64	58

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.

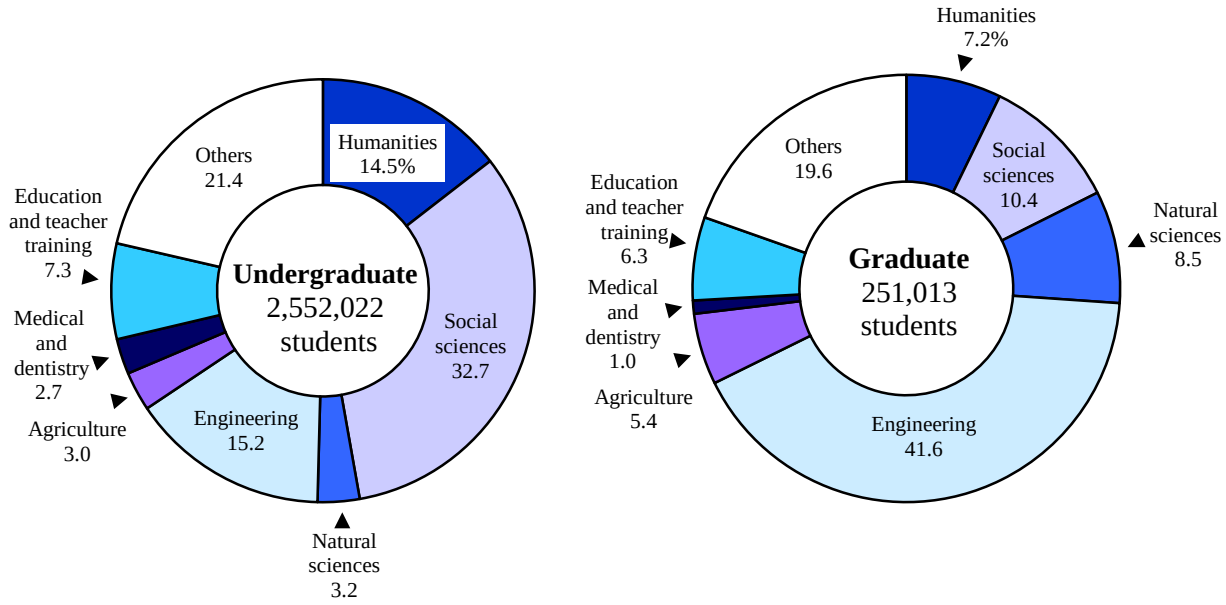
Of the March 2014 upper secondary school graduates, 53.9 percent went straight on to enter a university or junior college. The ratio of upper secondary school graduates who entered a university, junior college, etc. in 2014 was 56.7 percent (57.0 percent of male and 56.5 percent of female graduates), including graduates from previous years.

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

	2005	2010	2012	2013	2014
Total	2,865,051	2,887,414	2,876,134	2,868,872	2,855,529
Undergraduate	2,508,088	2,559,191	2,560,909	2,562,068	2,552,022
Graduate schools	254,480	271,454	263,289	255,386	251,013
Others [1)]	102,483	56,769	51,936	51,418	52,494
Females	1,124,900	1,185,580	1,206,134	1,216,012	1,220,091
Undergraduate	1,009,217	1,077,782	1,101,644	1,113,812	1,117,778
Graduate schools	75,734	82,133	80,460	78,400	77,645
Others [1)]	39,949	25,665	24,030	23,800	24,668
National	627,850	625,048	618,134	614,783	612,509
Public	124,910	142,523	145,578	146,160	148,042
Private	2,112,291	2,119,843	2,112,422	2,107,929	2,094,978

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, 2014)

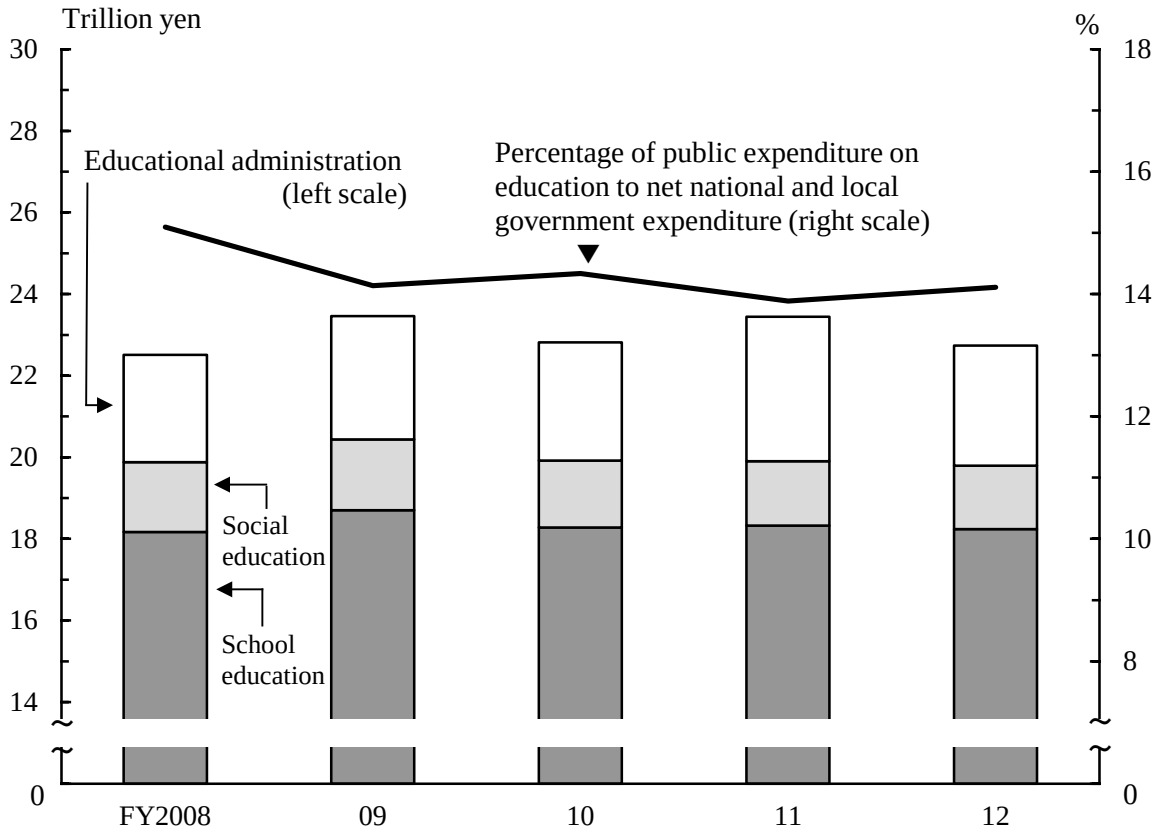


Source: Ministry of Education, Culture, Sports, Science and Technology.

As of May 1, 2014, a total of 107,277 foreign students were enrolled in Japanese junior colleges, universities, and graduate schools. Of the total foreign students, 89.9 percent were from Asia, including 63,842 from China, 11,988 from the Republic of Korea and 4,929 from Vietnam.

Fiscal 2012 public expenditure on education in Japan was 22.7 trillion yen, which was equivalent to 14.1 percent of the net expenditure of national and local governments. Fiscal 2012 school expenditure by households with children attending public school averaged 55,197 yen per elementary school pupil, 131,534 yen per lower-secondary school student and 230,837 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.

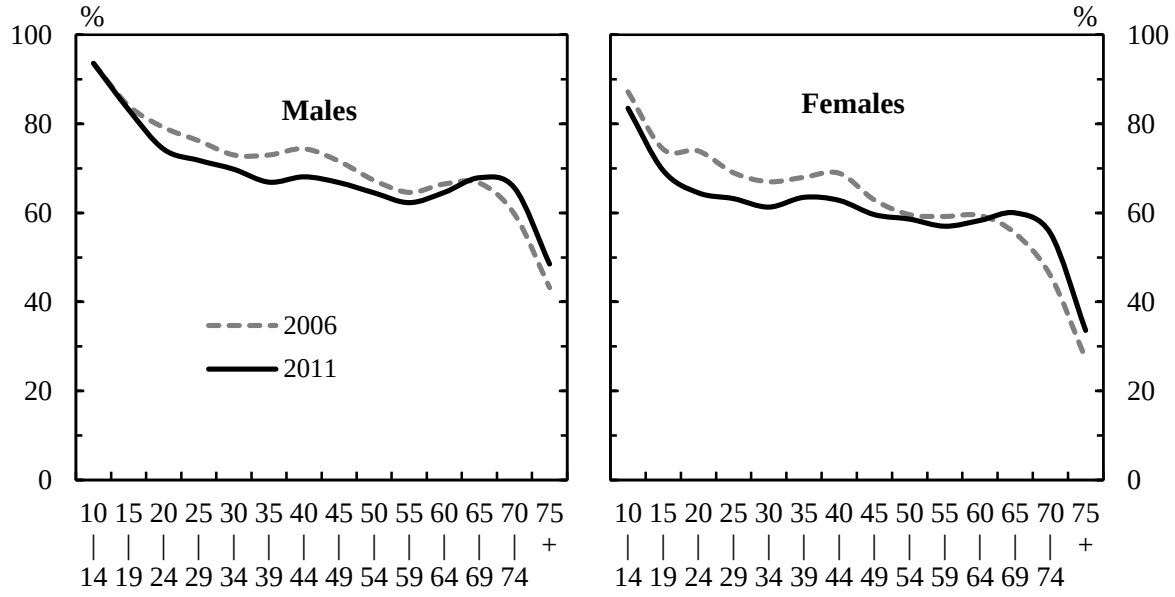
Table 16.5
Major Leisure Activities by Gender (10 years old and over) (2011)

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 activities. 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



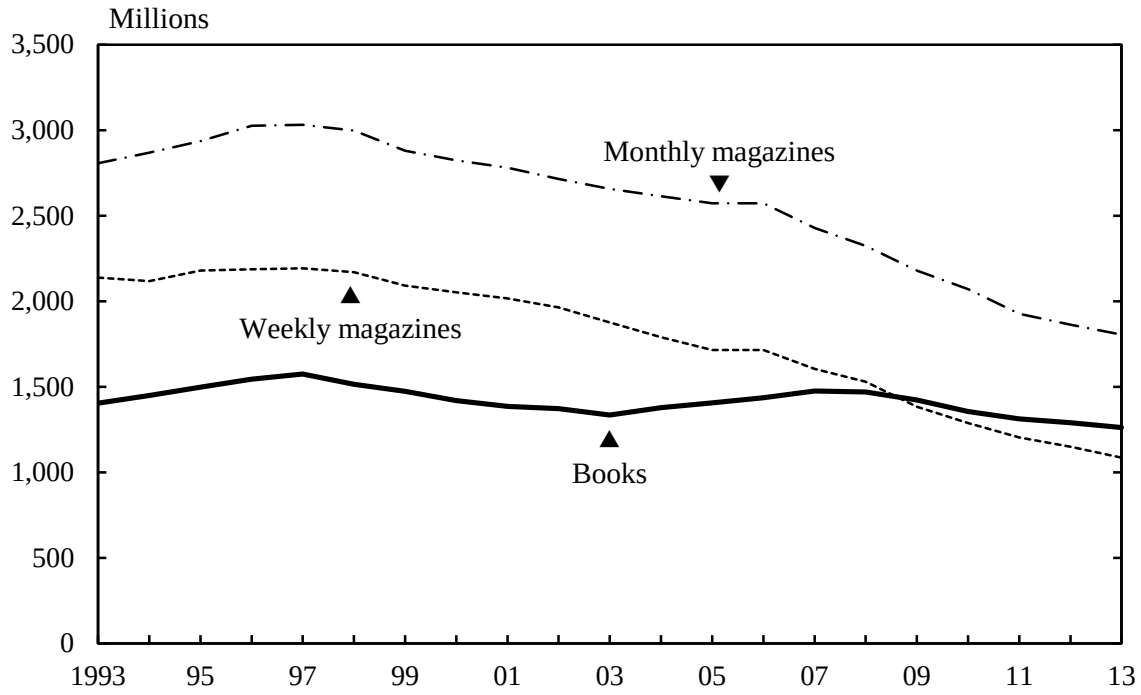
Source: Statistics Bureau, MIC.

4. Publishing and Mass Media

The total number of books and magazines published in Japan during 2013 was 1.26 billion and 2.89 billion, respectively, of which 1.80 billion were monthlies and 1.08 billion were weeklies.

A total of 82,589 new book titles were released in 2013. The number of magazine titles published was 3,800 (including 2,115 monthlies and 101 weeklies) at the end of March 2014. In recent years, there has been an increasing trend in the popularization of the Internet and e-books.

Figure 16.5
Trends in Number of Publications



Source: Shuppan News Co., Ltd.

Table 16.6
Number of New Publications

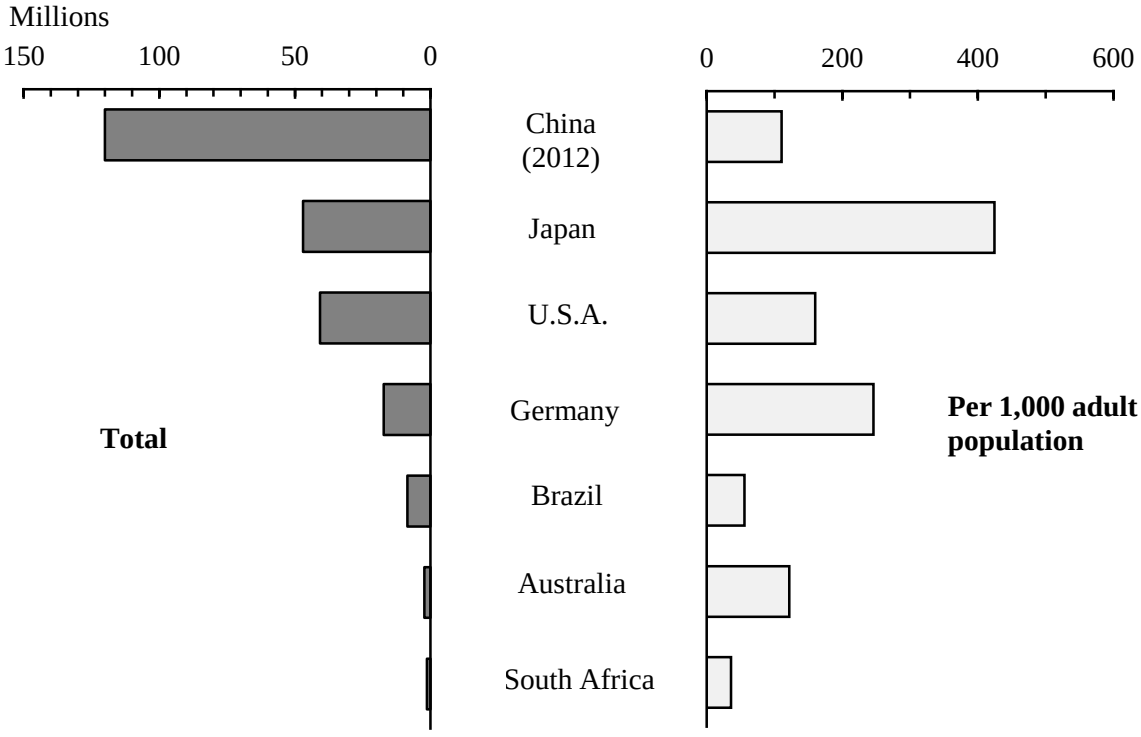
(Titles)

Subject	2000	2005	2010	2012	2013
Total	65,065	78,304	77,773	82,200	82,589
General works	2,587	2,551	2,080	1,981	2,135
Philosophy	2,997	3,763	4,381	4,342	4,289
General history	4,634	5,102	4,969	4,847	4,741
Social sciences	14,099	16,201	15,757	16,094	16,457
Natural sciences	5,218	6,226	6,780	6,935	7,140
Technology and engineering	6,105	8,104	8,499	9,104	9,067
Industry and commerce	3,000	3,337	3,478	3,631	3,505
Art	8,895	10,884	11,535	12,763	13,223
Languages	1,766	2,063	1,884	2,053	1,905
Literature	11,484	13,595	12,879	13,893	13,635
Children's books	3,334	5,064	4,675	4,898	5,013
School textbooks	946	1,414	856	1,659	1,479

Source: Shuppan News Co., Ltd.

A total of 117 daily newspapers were in circulation, and the penetration was 0.83 newspapers per household as of October 2014.

Figure 16.6
Newspaper Circulation by Country (2013)

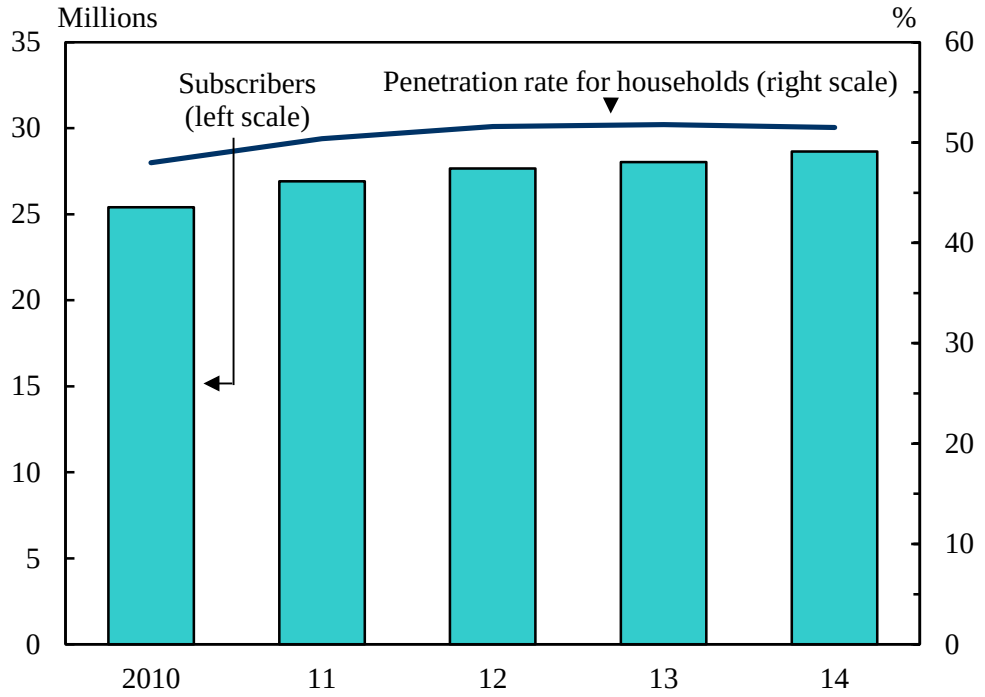


Source: World Association of Newspapers and News Publishers.

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 1)



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

Subscribers of cable television services have increased to 28.6 million households, or 51.5 percent of all households in March 2014.

In 2014, advertising expenditures in the four major mass media types in Japan (newspapers, magazines, radio and television) totaled 2.9 trillion yen, which marked an increase for the third consecutive year. This accounted for 47.8 percent of total advertising expenditures, which were 6.2 trillion yen. Internet advertising expenditure made up 17.1 percent, up 12.1 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)								
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
2012	5,891.3	624.2	255.1	124.6	1,775.7	101.3	868.0	2,142.4
2013	5,976.2	617.0	249.9	124.3	1,791.3	111.0	938.1	2,144.6
2014	6,152.2	605.7	250.0	127.2	1,834.7	121.7	1,051.9	2,161.0
Percentage distribution (%)								
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
2012	100.0	10.6	4.3	2.1	30.2	1.7	14.7	36.4
2013	100.0	10.3	4.2	2.1	30.0	1.8	15.7	35.9
2014	100.0	9.8	4.1	2.1	29.8	2.0	17.1	35.1

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 Act on Protection of Cultural Properties. 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, 2015)

Type of cultural properties	Number	
Designated important cultural properties	13,001	a) 1,093
Fine and applied arts	10,573	a) 872
Buildings	2,428	a) 221
Historic sites, places of scenic beauty and natural monuments	3,151	b) 172
Historic sites	1,745	b) 61
Places of scenic beauty	393	b) 36
Natural monuments	1,013	b) 75
Important tangible folk cultural properties	216	
Important intangible folk cultural properties	290	
Important intangible cultural properties		
Recognized individuals	79	
Performing arts	38	
Craft techniques	41	
Recognized holding groups	27	
Performing arts	13	
Craft techniques	14	
Traditional building preservation areas	109	

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

As of May 1, 2015, 13,001 items were assigned as designated important cultural properties, of which 1,093 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 2014, "Tomioka Silk Mill and Related Sites" in Gunma Prefecture were designated as Japan's 18th World Heritage Site. The Tomioka Silk Mill was a government-run mechanical silk mill established by the Meiji Government in 1872. Even after privatization, silk reeling continued to be carried out, and as the cutting edge in silk-reeling technology development, the Tomioka Silk Mill raised the Japanese silk cultivation and silk reeling industry to the world's top level. Heritage site possesses constituent elements that represent the process of a technological revolution in silk reeling and silk cultivation, which supports silk reeling, and also conveys the entire raw silk production process to the present day.

Subsequently, in July 2015, "Sites of Japan's Meiji Industrial Revolution: Iron and Steel, Shipbuilding and Coal Mining" that are scattered throughout Yamaguchi Prefecture, Fukuoka Prefecture, Saga Prefecture, Kumamoto Prefecture, Nagasaki Prefecture, Kagoshima Prefecture, Iwate Prefecture, and Shizuoka Prefecture were designated as Japan's 19th World Heritage Site. This series of industrial heritage sites demonstrate that the propagation of industrialization from the West to non-Western countries succeeded for the first time. It also reflects that from the mid-19th century to the beginning of the 20th century, rapid industrialization with foundations in iron and steel, shipbuilding, and coal mining was achieved in a short period of a little more than 50 years in Japan.

Table 16.9

Heritage Sites Inscribed on the World Heritage List [1)]

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
2014	Cultural	Tomioka Silk Mill and Related Sites	Gunma
2015	Cultural	Sites of Japan's Meiji Industrial Revolution: Iron and Steel, Shipbuilding and Coal Mining	Yamaguchi, Fukuoka, Saga, Kumamoto, Nagasaki, Kagoshima, Iwate, Shizuoka

1) As of July, 2015.

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 December 2014, Japan has 22 entries on its list, including: *Nogaku* Theater, *Ningyo Johruri Bunraku* Puppet Theater, *Kabuki* Theater (the kind of *Kabuki* performed using a traditional method of acting and directing), and *Washoku*, the traditional dietary culture of the Japanese, notably for the celebration of the New Year.

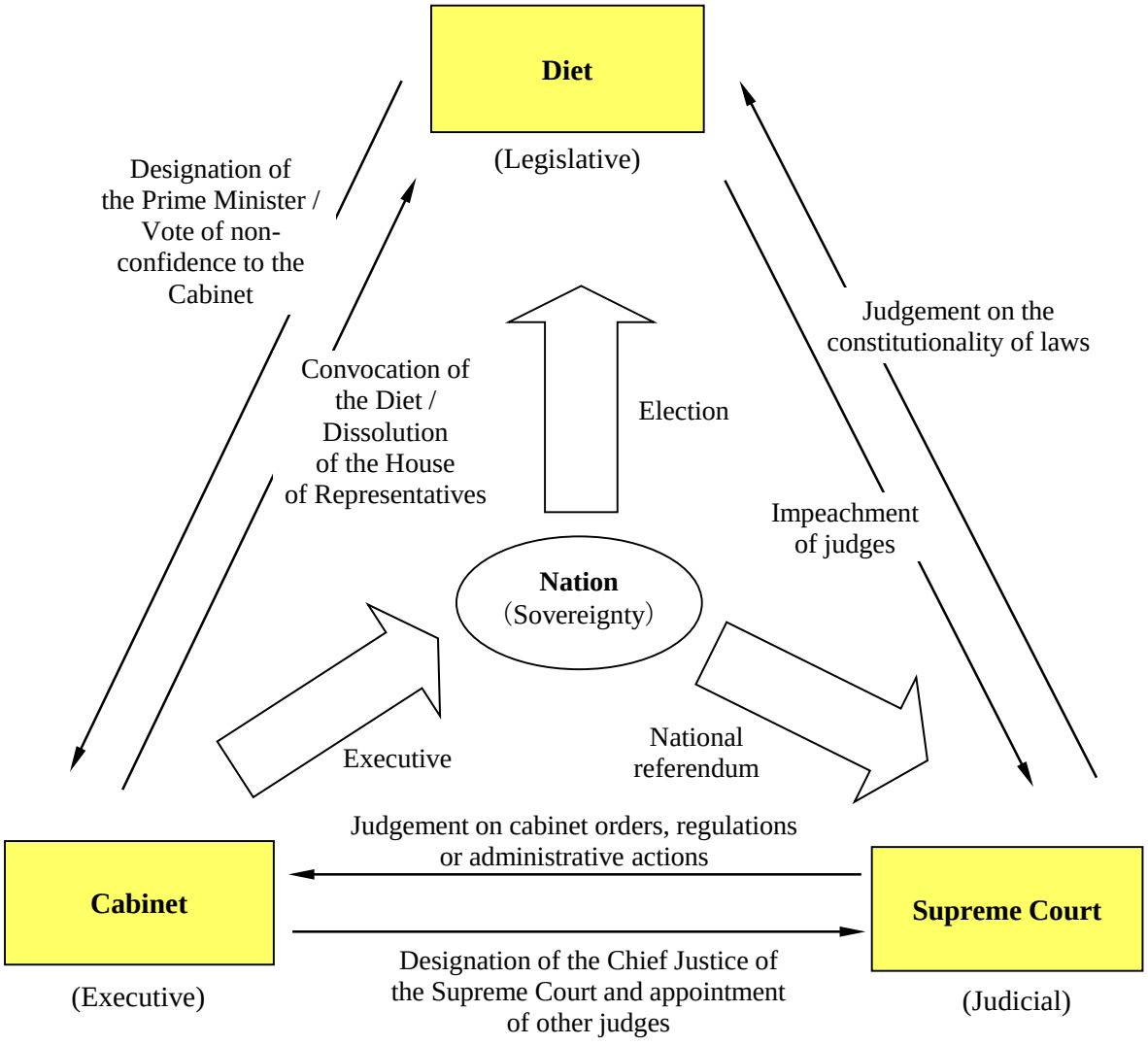
Chapter 17

Government System

1. Division of Powers

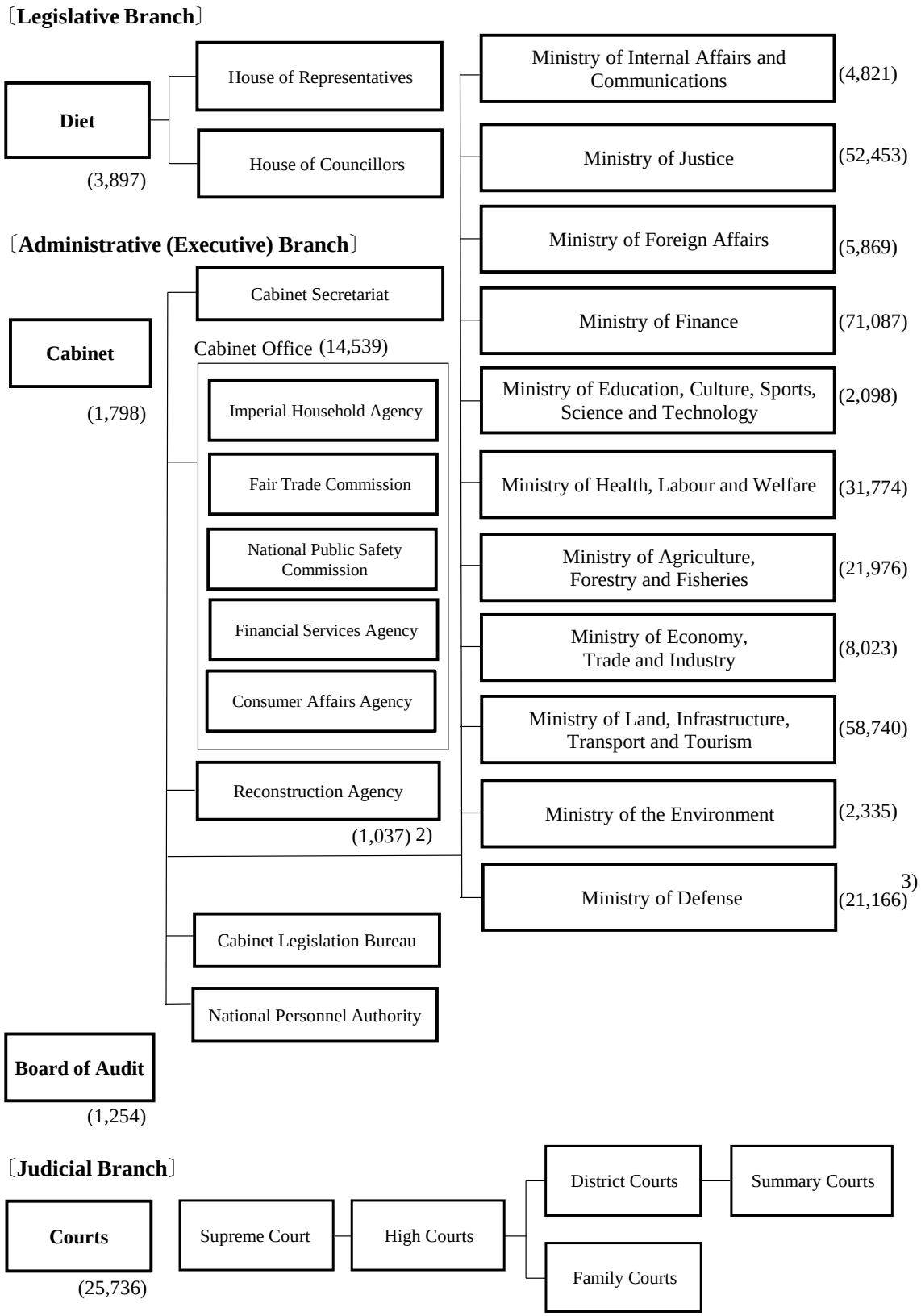
The Japanese Constitution, which went into effect on May 3, 1947, is based on three core principles: sovereignty of the people, respect for fundamental human rights and pacifism. To control governmental power effectively through checks and balances, governmental power is separated into three independent 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] (FY2015)



1) Figures in parentheses refer to budgetary fixed number of national government employees. 2) Of the 1,037 employees, 194 are from the Reconstruction Agency and 843 are from other ministries.
3) Excluding the number of the personnel of the Self-Defense Forces.
Source: Cabinet Bureau of Personnel Affairs, Cabinet Secretariat; 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 475 members. Of these, 295 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 2014. 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.

Based on Revisions to the Public Offices Election Law in June 2015, all Japanese citizens, both men and women, aged 18 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 April 21, 2015) Membership 475, Vacancies 0			House of Councillors (as of May 31, 2015) Membership 242, Vacancies 0		
Name	Males	Females	Name	Males	Females
Incumbents	475	45	Incumbents	242	38
Liberal Democratic Party	291	25	Liberal Democratic Party	114	16
Democratic Party of Japan and Club of Independents	72	9	The Democratic Party and The Shin-Ryokufukai	58	9
Japan Innovation Party	40	1	Komeito	20	3
Komeito	35	3	Japan Innovation Party	11	0
Japanese Communist Party	21	6	Japanese Communist Party	11	4
Party for Future Generations	2	0	The Assembly to Energize Japan and The Independents	7	1
The People's Life Party & Taro Yamamoto and Friends	2	0	Party for Future Generations	6	1
Social Democratic Party	2	0	Independents Club	4	1
			Social Democratic Party	3	1
			The People's Life Party & Taro Yamamoto and Friends	3	1
			New Renaissance Party and Group of Independents	2	0
Independents	10	1	Independents	3	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 7,262 people were tried in *saiban-in* trials held between the start of the system and December 2014.

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
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
2012	1,708	1,751	432	1,099	1,101	32
2013	1,524	1,544	412	1,051	1,051	32
Year	Domestic cases			Juvenile cases [1]		
	Commenced	Terminated	Pending	Commenced	Terminated	Pending
2000	561	555	78	286	288	49
2005	718	713	99	237	238	32
2010	815	815	106	165	168	25
2012	857	854	110	134	139	20
2013	916	905	122	123	124	19

1) Persons involved.

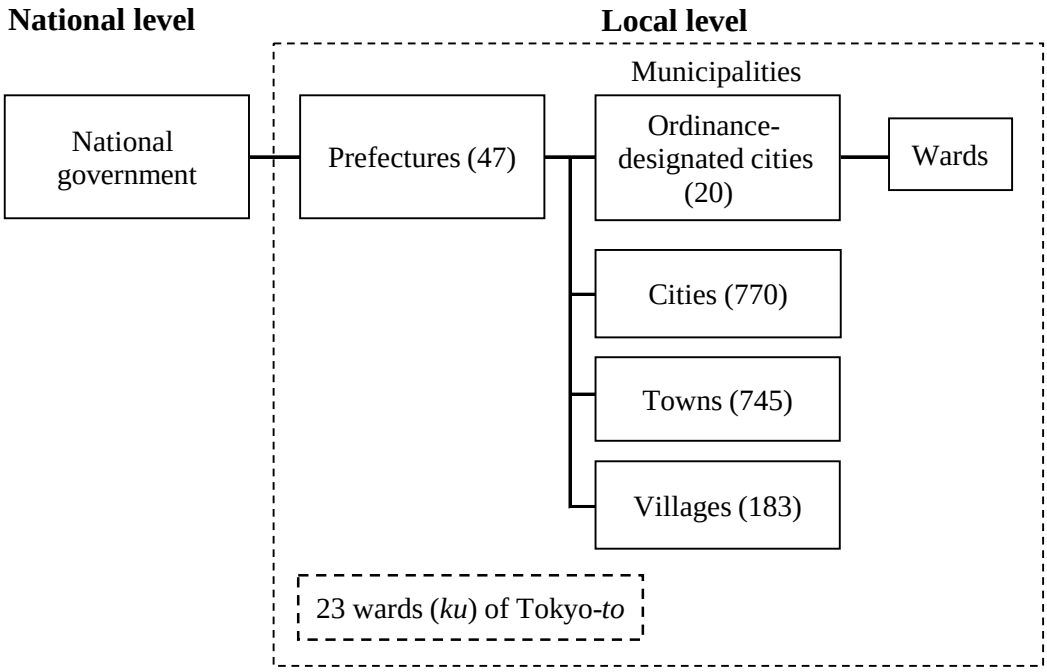
Source: Supreme Court.

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 April 1, 2015, Japan has 47 prefectures, within which there are 1,718 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.

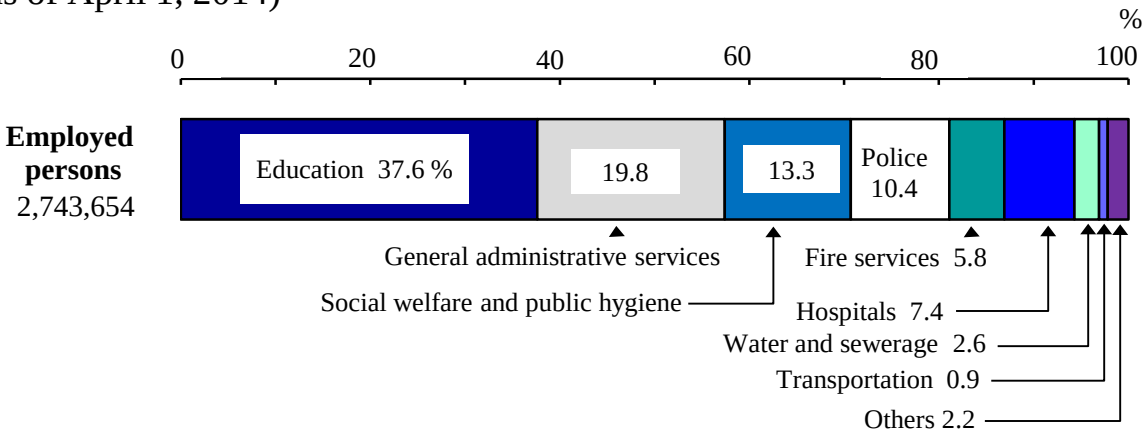
Municipalities that satisfy certain population criteria (i.e., 500,000 people or more) are eligible for designation as "Ordinance-designated cities." This designation gives them administrative and fiscal authority equivalent to those of prefectures. With the addition of Kumamoto-*shi* in April 2012, 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 April 1, 2015)



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, 2014)



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]	2014 [2]	2013	2013	2013	2013
Japan		128,057	127,083	377,962	122,158	341	1,042
Hokkaido	Sapporo-*shi*	5,506	5,400	83,457	22,208	69	245
Aomori-*ken*	Aomori-*shi*	1,373	1,321	9,645	3,234	138	413
Iwate-*ken*	Morioka-*shi*	1,330	1,284	15,279	3,694	85	351
Miyagi-*ken*	Sendai-*shi*	2,348	2,328	7,286	3,145	320	740
Akita-*ken*	Akita-*shi*	1,086	1,037	11,636	3,194	90	329
Yamagata-*ken*	Yamagata-*shi*	1,169	1,131	9,323	2,855	122	400
Fukushima-*ken*	Fukushima-*shi*	2,029	1,935	13,783	4,229	141	460
Ibaraki-*ken*	Mito-*shi*	2,970	2,919	6,096	3,982	481	736
Tochigi-*ken*	Utsunomiya-*shi*	2,008	1,980	6,408	2,982	310	666
Gunma-*ken*	Maebashi-*shi*	2,008	1,976	6,362	2,301	312	862
Saitama-*ken*	Saitama-*shi*	7,195	7,239	3,798	2,574	1,902	2,806
Chiba-*ken*	Chiba-*shi*	6,216	6,197	5,157	3,532	1,201	1,753
Tokyo-*to*	Tokyo (*ku*-area)	13,159	13,390	2,189	1,392	6,077	9,554
Kanagawa-*ken*	Yokohama-*shi*	9,048	9,096	2,416	1,467	3,758	6,187
Niigata-*ken*	Niigata-*shi*	2,374	2,313	12,584	4,504	185	517
Toyama-*ken*	Toyama-*shi*	1,093	1,070	4,248	1,853	253	581
Ishikawa-*ken*	Kanazawa-*shi*	1,170	1,156	4,186	1,389	277	834
Fukui-*ken*	Fukui-*shi*	806	790	4,190	1,074	190	740
Yamanashi-*ken*	Kofu-*shi*	863	841	4,465	952	190	889
Nagano-*ken*	Nagano-*shi*	2,152	2,109	13,562	3,314	157	640
Gifu-*ken*	Gifu-*shi*	2,081	2,041	10,621	2,200	193	932
Shizuoka-*ken*	Shizuoka-*shi*	3,765	3,705	7,781	2,754	479	1,352
Aichi-*ken*	Nagoya-*shi*	7,411	7,455	5,165	2,975	1,441	2,502
Mie-*ken*	Tsu-*shi*	1,855	1,825	5,777	2,044	317	897
Shiga-*ken*	Otsu-*shi*	1,411	1,416	4,017	1,297	353	1,092
Kyoto-*fu*	Kyoto-*shi*	2,636	2,610	4,613	1,177	567	2,223
Osaka-*fu*	Osaka-*shi*	8,865	8,836	1,901	1,320	4,654	6,701
Hyogo-*ken*	Kobe-*shi*	5,588	5,541	8,396	2,775	662	2,003
Nara-*ken*	Nara-*shi*	1,401	1,376	3,691	851	375	1,624
Wakayama-*ken*	Wakayama-*shi*	1,002	971	4,726	1,096	207	893
Tottori-*ken*	Tottori-*shi*	589	574	3,507	911	165	635
Shimane-*ken*	Matsue-*shi*	717	697	6,708	1,288	105	545
Okayama-*ken*	Okayama-*shi*	1,945	1,924	7,113	2,227	271	867
Hiroshima-*ken*	Hiroshima-*shi*	2,861	2,833	8,480	2,291	335	1,240
Yamaguchi-*ken*	Yamaguchi-*shi*	1,451	1,408	6,114	1,716	232	827
Tokushima-*ken*	Tokushima-*shi*	785	764	4,147	1,024	186	752
Kagawa-*ken*	Takamatsu-*shi*	996	981	1,877	1,003	525	982
Ehime-*ken*	Matsuyama-*shi*	1,431	1,395	5,679	1,667	247	843
Kochi-*ken*	Kochi-*shi*	764	738	7,105	1,161	105	642
Fukuoka-*ken*	Fukuoka-*shi*	5,072	5,091	4,979	2,776	1,022	1,834
Saga-*ken*	Saga-*shi*	850	835	2,440	1,333	344	630
Nagasaki-*ken*	Nagasaki-*shi*	1,427	1,386	4,106	1,634	340	855
Kumamoto-*ken*	Kumamoto-*shi*	1,817	1,794	7,405	2,732	243	659
Oita-*ken*	Oita-*shi*	1,197	1,171	6,340	1,746	186	675
Miyazaki-*ken*	Miyazaki-*shi*	1,135	1,114	7,736	1,846	145	607
Kagoshima-*ken*	Kagoshima-*shi*	1,706	1,668	9,189	3,271	183	514
Okinawa-*ken*	Naha-*shi*	1,393	1,421	2,277	1,168	622	1,211

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)	2012	127,515	41,087	23,050	198,656	34,838
	2013	127,298	41,446	23,343	200,362	35,182
	2014	127,083	41,803	23,630	202,034	35,525
Projection (medium variant)	2050	97,076	51,024	33,735	231,120	45,228
Employed persons (1,000)	2013	a 63,510	b 16,085	11,465	95,880	17,691
Unemployed persons (1,000)	2013	a 2,360	b 1,139	687	6,637	1,347
Unemployment rates (%)	2013	a 3.6	b 6.6	5.7	6.5	7.1
Hours of work per week (manufacturing)	2013	a 41.4	c 43.0	37.5	d 43.6	36.8
Industrial production index (2010=100)	2013	96.9	…	…	…	106.1
	2014	98.7	…	…	…	111.0
Gross domestic product (US$ billion)	2012	5,938	605	1,578	2,249	1,833
	2013	4,899	612	1,531	2,244	1,839
Producer Price index (2010=100)	2013	e 101.8	148.5	104.0	122.7	108.6
	2014	e 105.1	187.8	107.2	128.4	111.3
Consumer price index (2010=100)	2013	100.0	…	107.8	119.4	105.5
	2014	102.8	105.5	110.5	126.9	107.5
Broad money						
Percent changes from the previous year (%)	End of 2013	3.4	25.5	6.7	7.3	9.3
	End of 2014	...	28.3	7.4	14.0	7.4
Exports, FOB (US$ billion)	2014	690.2	71.9	f 242.1	225.1	470.0
Imports, CIF (US$ billion)	2014	811.9	65.2	f 253.0	237.5	465.9
Gold and foreign exchange reserves (US$ million)	End of 2014	1,232,249	29,117	50,944	361,072	74,589
Foreign exchange rates (national currency per US$)		Yen	Pesos	Australian dollars	Reais	Canadian dollars
End of year	2014	120.64	8.5100	1.2192	2.6556	1.1599
Period average	2014	105.94	8.0753	1.1094	2.3536	1.1061

a) 2014. b) Urban areas only. c) 2012. d) 2007. e) Corporate Goods Price Index. f) 2013.

Appendix 2
Main Economic Indicators of Selected Countries (Continued)

Item	Year	China	Euro Area	France	Germany	India
Population (thousands)	2012	1,377,065	# 330,249	63,937	82,800	1,236,687
	2013	1,385,567	# 331,001	64,291	82,727	1,252,140
	2014	1,393,784	332,452	64,641	82,652	1,267,402
Projection (medium variant)	2050	1,384,977	…	73,212	72,566	1,620,051
Employed persons (1,000)	2013	769,770	…	25,749	39,531	a 374,286
Unemployed persons (1,000)	2013	b 9,260	…	2,816	2,182	c 39,112
Unemployment rates (%)	2013	b 4.0	…	9.9	5.2	4.5
Hours of work per week (manufacturing)	2013	c 47.9	…	36.6	37.5	d 46.9
Industrial production index (2010=100)	2013	…	…	98.7	107.7	106.2
	2014	…	…	97.6	109.8	107.9
Gross domestic product (US$ billion)	2012	8,229	…	2,687	3,533	1,893
	2013	9,181	…	2,806	3,730	1,938
Producer Price index (2010=100)	2013	…	108.5	107.0	106.9	125.1
	2014	…	106.8	105.5	105.8	130.0
Consumer price index (2010=100)	2013	…	…	105.0	105.7	132.0
	2014	…	…	105.5	106.7	140.4
Broad money						
Percent changes from the previous year (%)	End of 2013	13.6	1.0	…	…	14.9
	End of 2014	11.0	3.6	…	…	11.1
Exports, FOB (US$ billion)	2014	e 221.0	2,580.7	567.2	1,505.5	319.7
Imports, CIF (US$ billion)	2014	e 195.0	2,327.1	661.2	1,218.0	461.4
Gold and foreign exchange reserves (US$ million)	End of 2014	3,860,860	345,177	53,517	67,783	304,362
Foreign exchange rates (national currency per US$)		Yuan	Euros	Euros	Euros	Rupees
End of year	2014	6.1190	0.8237	0.8237	0.8237	63.332
Period average	2014	6.1434	0.7537	0.7537	0.7537	61.030

a) 2010. b) Urban areas only. c) 2008. d) 2006. e) 2013.

Appendix 2
Main Economic Indicators of Selected Countries (Continued)

Item	Year	Indonesia	Italy	Korea, Rep. of	Mexico	Russia
Population (thousands)	2012	246,864	60,885	49,003	120,847	143,170
	2013	249,866	60,990	49,263	122,332	142,834
	2014	252,812	61,070	49,512	123,799	142,468
Projection (medium variant)	2050	321,377	60,015	51,034	156,102	120,896
Employed persons (1,000)	2013	112,413	22,420	25,066	49,465	71,392
Unemployed persons (1,000)	2013	7,280	3,113	807	2,567	4,137
Unemployment rates (%)	2013	6.1	12.2	3.1	4.9	5.5
Hours of work per week (manufacturing)	2013	40.0	38.1	a 43.7	46.6	b 39.0
Industrial production	2013	…	91.4	106.8	105.7	109.0
index (2010=100)	2014	…	90.3	107.8	107.6	110.8
Gross domestic product	2012	877	2,092	1,223	1,185	2,017
(US$ billion)	2013	868	2,149	1,305	1,259	2,097
Producer Price index	2013	119.6	107.3	105.7	111.6	129.9
(2010=100)	2014	130.4	105.7	105.2	114.6	137.8
Consumer price index	2013	116.9	107.2	107.7	111.8	121.6
(2010=100)	2014	124.4	107.4	109.0	116.2	131.2
Broad money						
Percent changes from	End of 2013	12.8	…	4.6	8.8	15.7
the previous year (%)	End of 2014	11.9	…	8.1	10.9	15.5
Exports, FOB (US$ billion)	2014	176.3	528.0	572.7	c 391.0	496.5
Imports, CIF (US$ billion)	2014	178.2	470.4	525.5	c 380.1	337.8
Gold and foreign exchange reserves (US$ million)	End of 2014	108,962	51,686	358,953	191,122	341,337
Foreign exchange rates (national currency per US$)		Rupiah	Euros	Won	Pesos	Rubles
End of year	2014	12,440.0	0.8237	1,099.3	14.718	56.258
Period average	2014	11,865.2	0.7537	1,053.0	13.292	38.378

a) 2008. b) 2010. c) 2013.

Appendix 2
Main Economic Indicators of Selected Countries (Continued)

Item	Year	Saudi Arabia	South Africa	Turkey	U.K.	U.S.A.
Population (thousands)	2012	28,288	52,386	73,997	62,783	317,505
	2013	28,829	52,776	74,933	63,136	320,051
	2014	29,369	53,140	75,837	63,489	322,583
Projection (medium variant)	2050	40,388	63,405	94,606	73,131	400,853
Employed persons (1,000)	2013	10,682	14,137	25,520	29,953	143,929
Unemployed persons (1,000)	2013	642	4,691	2,442	2,441	11,460
Unemployment rates (%)	2013	5.7	24.9	8.7	7.5	7.4
Hours of work per week (manufacturing)	2013	a 54.4	43.2	49.9	39.9	42.1
Industrial production index (2010=100)	2013	…	…	116.3	96.0	110.4
	2014	…	…	120.3	97.5	114.9
Gross domestic product (US$ billion)	2012	734	397	789	2,615	16,163
	2013	748	366	822	2,678	16,768
Producer Price index (2010=100)	2013	108.1	119.6	123.1	108.4	110.1
	2014	108.7	128.5	135.8	108.4	111.2
Consumer price index (2010=100)	2013	112.7	117.0	124.6	110.2	106.8
	2014	115.7	124.4	135.7	111.8	108.6
Broad money Percent changes from the previous year (%)	End of 2013	10.9	5.9	21.1	4.5	5.5
	End of 2014	11.9	7.3	11.7	4.4	5.9
Exports, FOB (US$ billion)	2014	b 163.9	b 107.0	157.6	477.6	1,623.4
Imports, CIF (US$ billion)	2014	b 375.9	b 83.5	242.2	663.3	2,409.4
Gold and foreign exchange reserves (US$ million)	End of 2014	732,442	44,471	107,768	96,203	132,308
Foreign exchange rates (national currency per US$)		Riyals	Rand	Liras	Pounds	U.S. dollars
End of year	2014	3.7500	11.5810	2.3210	0.6407	1.0000
Period average	2014	3.7500	10.8527	2.1885	0.6077	1.0000

a) 2012. b) 2013.
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
2013	97.63	105.37
2014	105.85	119.80

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)