STATISTICAL HANDBOOK OF

JAPAN

2024

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Preface

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

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

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

We hope that this handbook 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 handbook on the website of the Statistics Bureau.

September 2024

IWASA Tetsuya
Director-General
Statistics Bureau
Ministry of Internal Affairs and Communications
Japan

Notes for Users

1. The present issue basically contains statistics that became available by April 30, 2024.

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. Refer to Appendix 2 for conversion factors.

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. 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

7. Data relating to "China" generally exclude those for Hong Kong SAR, Macao SAR and Taiwan.

8. All contents of the present issue, including tables, figures, and maps, are also available on the website:

   https://www.stat.go.jp/english/data/handbook/index.html

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

   Source: Statistical Handbook of Japan 2024, Statistics Bureau, Ministry of Internal Affairs and Communications, Japan.

10. "Statistics Bureau, MIC" in the tables and figures is an abbreviation of "Statistics Bureau, Ministry of Internal Affairs and Communications, Japan".

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Cover photo: Mt. Fuji

Lake Kawaguchi in Yamanashi, located at the northern foot of Mt. Fuji, is a dammed lake formed by the volcanic activity of Mt. Fuji. There are many sights to see along the lake, including cherry blossoms in the spring and autumn leaves in the fall. Mt. Fuji is the highest peak in Japan, with an elevation of 3,776 meters. In June 2013, it was registered as a World Cultural Heritage Site, making it the 17th World Heritage Site in Japan.

Chapter 1

Land and Climate

The Shinano River is the longest river in Japan, with the entire river system spanning 367 kilometers. The catchment area of the entire river system is 11,900 square kilometers, almost equal to the area of Niigata Prefecture, and ranks third after the Tone River and Ishikari River.

1. Land

Japan is an island country 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 land is located between approximately 20 to 45 degrees north latitude and between approximately 123 to 154 degrees east longitude. It consists of the main islands of Hokkaido, Honshu, Shikoku, Kyushu and Okinawa, and more than 14,000 smaller islands of various sizes. Its surface area totals 377,975 square kilometers.

Since the Japanese archipelago is located in the world's newest mobile belt, it is particularly prone to various geological 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 (2024)
(Square kilometers)

District	Area
Japan	377,975
Honshu	231,239
Hokkaido	83,422
Kyushu	42,230
Shikoku	18,802
Okinawa	2,282

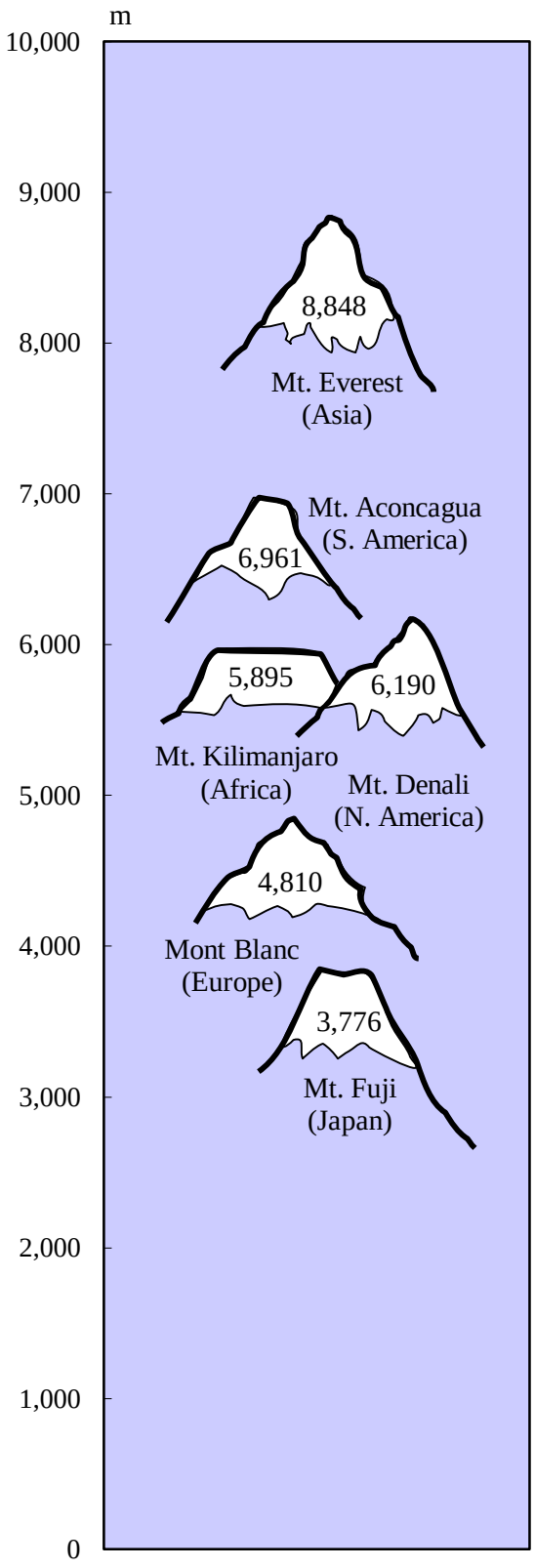
Source: Geospatial Information Authority of Japan.

Table 1.2
Top 10 Countries According to Surface Area (2022) [1)]
(1,000 square kilometers)

Country	Area
World [2)]	130,094
Russia	17,098
Canada	9,985
U.S.A.	9,834
China	9,600
Brazil	8,510
Australia	7,692
India	3,287
Argentina	2,796
Kazakhstan	2,725
Algeria	2,382

1) Comprising land area and inland waters. Excluding polar regions and uninhabited islands. 2) Land area only.
Source: United Nations.

Figure 1.1
Famous Mountains of the World



Source: National Astronomical Observatory of Japan.

Table 1.3
Mountains (As of June, 2023)

(Meters)

Name	Height
Mt. Fuji	3,776
Mt. Kitadake	3,193
Mt. Ainodake	3,190
Mt. Oku-Hotaka	3,190
Mt. Yarigatake	3,180
Mt. Higashidake	3,141
Mt. Akaishi	3,121
Mt. Karasawa	3,110
Mt. Kita-Hotaka	3,106
Mt. Obami	3,101

Source: Geospatial Information Authority of Japan.

Table 1.4
Rivers (As of April, 2023)

(Kilometers)

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

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

Table 1.5
Lakes (As of January, 2024)

(Square kilometers)

Name	Area
Lake Biwa	669.3
Lake Kasumigaura	168.2
Lake Saroma	151.6
Lake Inawashiro	103.2
Lake Nakaumi	85.8
Lake Kussharo	79.5
Lake Shinji	79.3
Lake Shikotsu	78.5
Lake Toya	70.7
Lake Hamana	64.9

Source: Geospatial Information Authority of Japan.

As of 2020, forestland and fields account for the largest portion of the nation's surface area. There are 25.34 million hectares of forestland and fields (which equates to 67.0 percent of the nation's surface area), followed by 4.37 million hectares of farmland (11.6 percent) combined. Together, forestland, fields and farmland thus cover approximately 80 percent of the nation. There are 1.97 million hectares of developed land (5.2 percent).

Table 1.6
Surface Area by Use

(Million hectares)

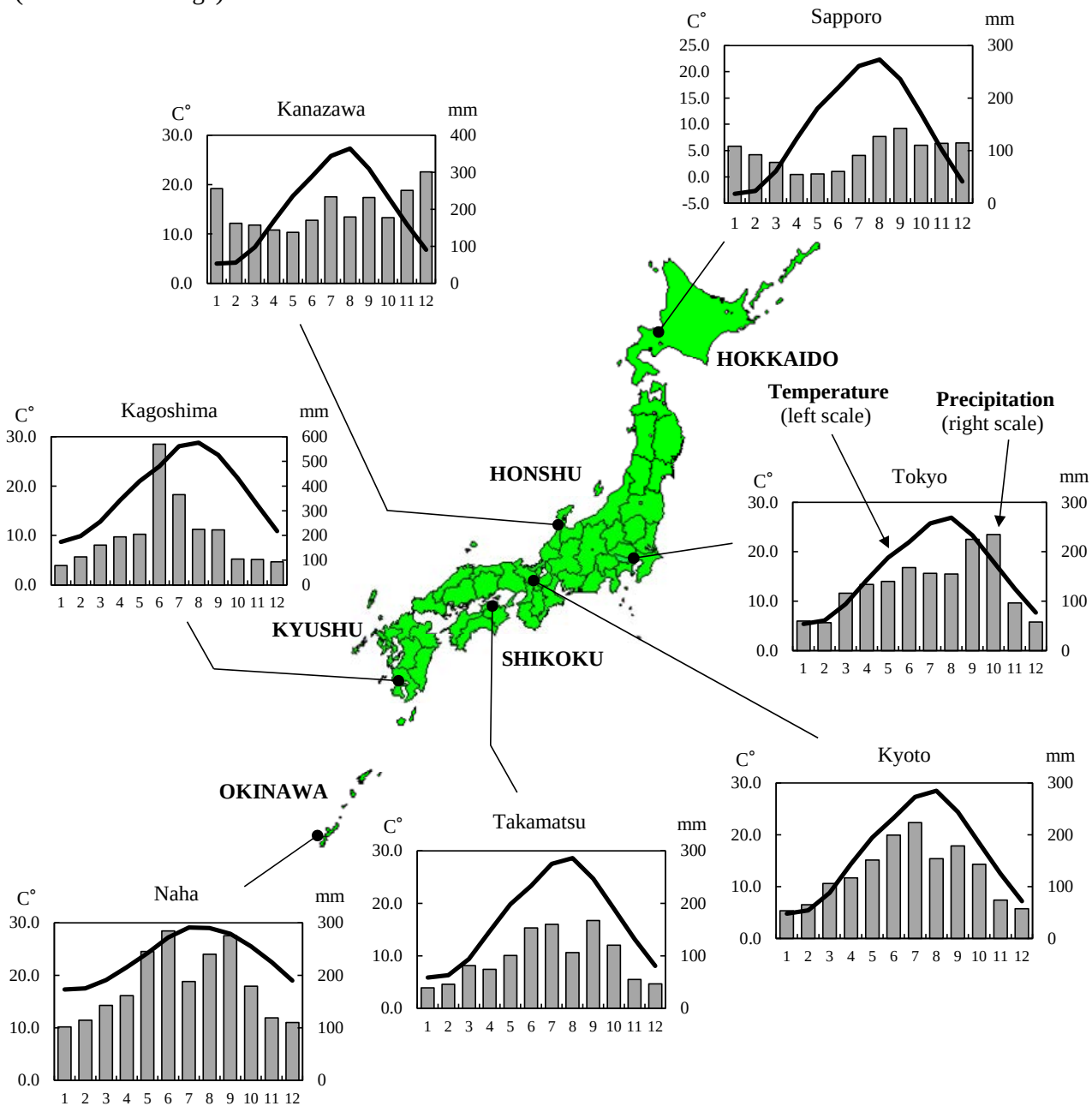
Year	Total	Forestland and fields	Farmland	Inland water	Roads [1)]	Developed land [2)]	Others
1980	37.77	25.68	5.59	1.31	0.99	1.39	2.81
1990	37.77	25.52	5.33	1.31	1.14	1.60	2.87
2000	37.79	25.38	4.91	1.35	1.27	1.79	3.09
2010	37.79	25.35	4.67	1.33	1.36	1.90	3.19
2020	37.80	# 25.34	# 4.37	1.35	1.42	# 1.97	3.34
Percentage distribution (%)							
2020	100.0	67.0	11.6	3.6	3.8	5.2	8.8

1) Including farm roads and forest roads, etc. 2) Such as residential and industrial land.
Source: Ministry of Land, Infrastructure, Transport and Tourism.

2. Climate

Although the Japanese archipelago has a temperate marine climate, it differs by region depending on the effects of seasonal winds and ocean currents. Due to the topography of Honshu featuring a series of mountain ranges running from north to south, 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 the summer, the southeast monsoon brings high temperatures and low rainfall on the Sea of Japan side, and high temperatures and high humidity on the Pacific Ocean side. 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 Pacific Ocean to the south develop into typhoons and hit Japan, sometimes causing storm and flood damage. In recent years, intense torrential rains exceeding previous expectations have caused localized damage.

Figure 1.2
Temperature and Precipitation (Normal value)
(1991-2020 average)



Source: Japan Meteorological Agency.

Table 1.7
Temperature and Precipitation (Normal value) (1991-2020 average)

Temperature (℃) Precipitation (mm)

Observing station			Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Annual [1)]
Sapporo	Temp.	High	-0.4	0.4	4.5	11.7	17.9	21.8	25.4	26.4	22.8	16.4	8.7	2.0	13.1
		Low	-6.4	-6.2	-2.4	3.4	9.0	13.4	17.9	19.1	14.8	8.0	1.6	-4.0	5.7
	Prec.		108	92	78	55	56	60	91	127	142	110	114	115	1,146
Tokyo	Temp.	High	9.8	10.9	14.2	19.4	23.6	26.1	29.9	31.3	27.5	22.0	16.7	12.0	20.3
		Low	1.2	2.1	5.0	9.8	14.6	18.5	22.4	23.5	20.3	14.8	8.8	3.8	12.1
	Prec.		60	57	116	134	140	168	156	155	225	235	96	58	1,598
Kanazawa	Temp.	High	7.1	7.8	11.6	17.3	22.3	25.6	29.5	31.3	27.2	21.8	15.9	10.2	19.0
		Low	1.2	1.0	3.4	8.2	13.6	18.4	22.9	24.1	19.9	13.9	8.1	3.5	11.5
	Prec.		256	163	157	144	138	170	233	179	232	177	251	301	2,402
Kyoto	Temp.	High	9.1	10.0	14.1	20.1	25.1	28.1	32.0	33.7	29.2	23.4	17.3	11.6	21.1
		Low	1.5	1.6	4.3	9.2	14.5	19.2	23.6	24.7	20.7	14.4	8.4	3.5	12.1
	Prec.		53	65	106	117	151	200	224	154	179	143	74	57	1,523
Takamatsu	Temp.	High	9.7	10.5	14.1	19.8	24.8	27.5	31.7	33.0	28.8	23.2	17.5	12.1	21.1
		Low	2.1	2.2	5.0	9.9	15.1	19.8	24.1	25.1	21.2	15.1	9.1	4.3	12.8
	Prec.		39	46	81	75	101	153	160	106	167	120	55	47	1,150
Kagoshima	Temp.	High	13.1	14.6	17.5	21.8	25.5	27.5	31.9	32.7	30.2	25.8	20.6	15.3	23.1
		Low	4.9	5.8	8.7	12.9	17.3	21.3	25.3	26.0	23.2	18.0	12.2	6.9	15.2
	Prec.		78	113	161	195	205	570	365	224	223	105	103	93	2,435
Naha	Temp.	High	19.8	20.2	21.9	24.3	27.0	29.8	31.9	31.8	30.6	28.1	25.0	21.5	26.0
		Low	14.9	15.1	16.7	19.1	22.1	25.2	27.0	26.8	25.8	23.5	20.4	16.8	21.1
	Prec.		102	115	143	161	245	284	188	240	275	179	119	110	2,161

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

Chapter 2

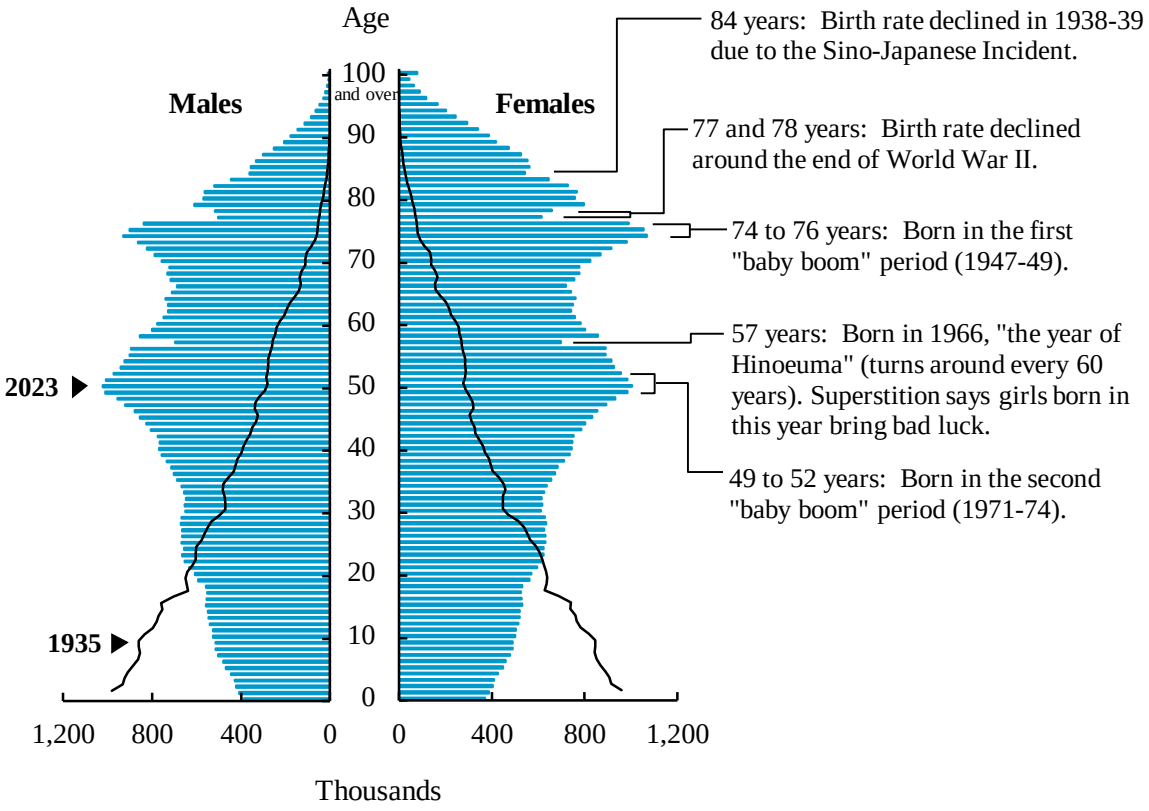
Population

One early afternoon.
Looking at private household size in "2020 Population Census" results, the largest number of households had one-person households, and the larger the number of members, the smaller the number of households.

1. Total Population

Japan's total population in 2023 was 124.35 million. This ranked 12th in the world and made up 1.5 percent of the world's total. Japan's population density measured 338.2 persons per square kilometer in 2020, ranking 12th among countries or areas with a population of 10 million or more.

Figure 2.1
Population Pyramid



Source: Statistics Bureau, MIC.

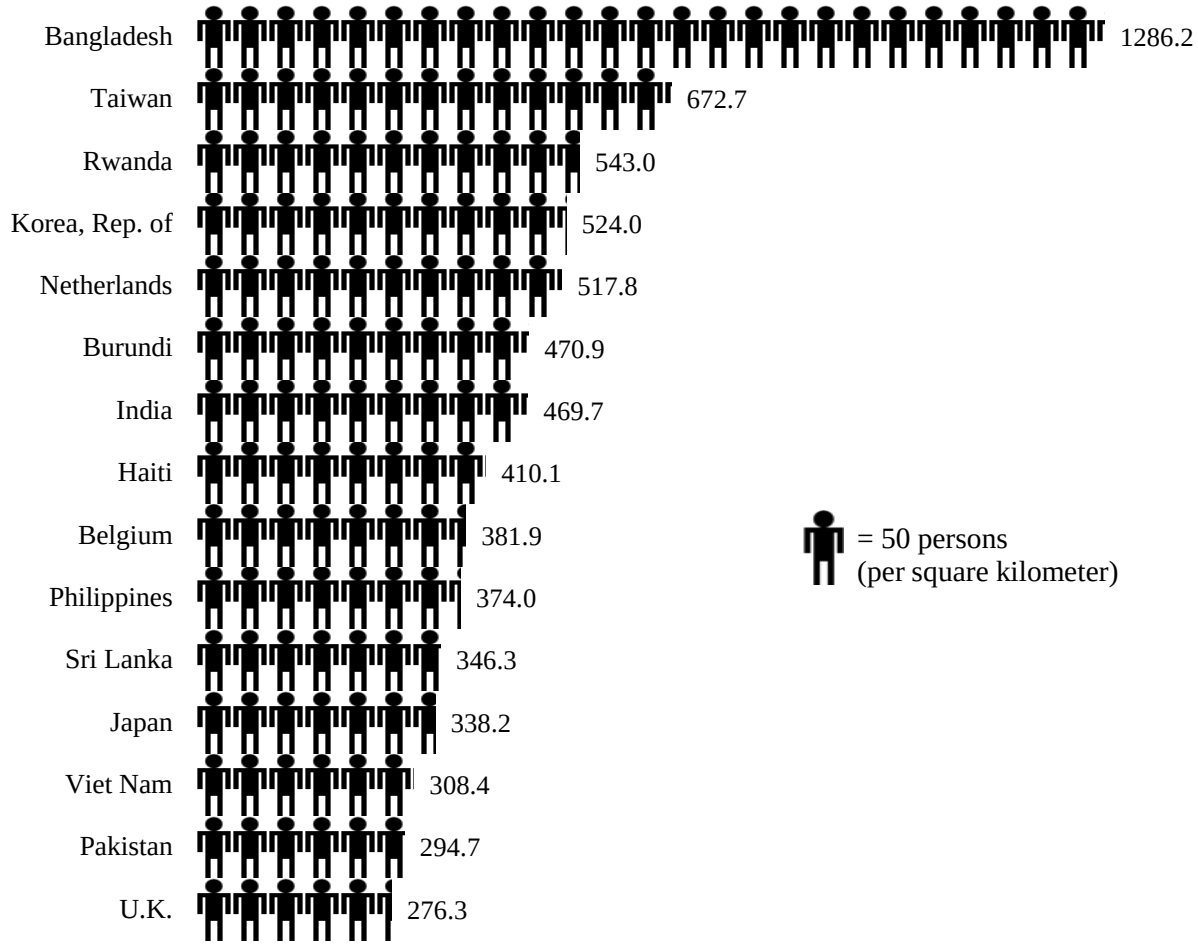
Table 2.1
Countries with a Large Population (2023)

(Millions)

Country	Population	Country	Population
World	8,045		
India	1,429	Brazil	216
China	1,426	Bangladesh	173
U.S.A.	340	Russia	144
Indonesia	278	Mexico	128
Pakistan	240	Ethiopia	127
Nigeria	224	Japan	124

Source: Statistics Bureau, MIC; United Nations.

Figure 2.2
Population Density by Country or Area [1] (2020)



1) Top 15 countries or areas with a population of 10 million or more.
Source: Statistics Bureau, MIC; United Nations.

From the 18th century through the first half of the 19th 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 1912, it reached 50 million, and in 1967, it surpassed the 100 million mark. However, Japan's population growth slowed afterward, with the rate of population change about 1 percent from the 1960s through the 1970s. Since the 1980s, it has declined sharply. Japan's total population was 126.15 million according to the Population Census in 2020. The Population Census in 2015 marked the first decline in Japan's total population since the initiation of the Census in 1920. The decline continued in the Population Census in 2020, with a decrease of 0.95 million people compared to the previous Census (2015). In 2023, it was 124.35 million, down by 0.60 million from the year before.

Table 2.2
Trends in Population (as of October 1)

Year	Population (1,000)	Age composition (%) [1]			Change rate of annual basis (%)	Population density (per km^2)
		0-14 years old	15-64	65 years old and over		
1872 [2]	34,806	...	...	...	...	91
1900 [2]	43,847	33.9	60.7	5.4	0.83	115
1910 [2]	49,184	36.0	58.8	5.2	1.16	129
1920	55,963	36.5	58.3	5.3	1.30	147
1930	64,450	36.6	58.7	4.8	1.42	169
1940	71,933	36.7	58.5	4.8	1.10	188
1950	84,115	35.4	59.6	4.9	1.58	226
1955	90,077	33.4	61.2	5.3	1.38	242
1960	94,302	30.2	64.1	5.7	0.92	253
1965	99,209	25.7	68.0	6.3	1.02	267
1970	104,665	24.0	68.9	7.1	1.08	281
1975	111,940	24.3	67.7	7.9	1.35	300
1980	117,060	23.5	67.4	9.1	0.90	314
1985	121,049	21.5	68.2	10.3	0.67	325
1990	123,611	18.2	69.7	12.1	0.42	332
1995	125,570	16.0	69.5	14.6	0.31	337
2000	126,926	14.6	68.1	17.4	0.21	340
2005	127,768	13.8	66.1	20.2	0.13	343
2010	128,057	13.2	63.8	23.0	0.05	343
2015	127,095	12.6	60.9	26.6	-0.15	341
2020	126,146	11.9	59.5	28.6	-0.15	338
2021	125,502	11.8	59.4	28.9	-0.51	336
2022	124,947	11.6	59.4	29.0	-0.44	335
2023	124,352	11.4	59.5	29.1	-0.48	333
(Projection, 2023)						
2030	120,116	10.3	58.9	30.8	-0.49	322
2040	112,837	10.1	55.1	34.8	-0.62	303
2050	104,686	9.9	52.9	37.1	-0.75	281
2060	96,148	9.3	52.8	37.9	-0.85	258
2070	86,996	9.2	52.1	38.7	-1.00	233

1) The ratios for 2015 and 2020 were calculated using imputation values for unknowns. The ratios for 2010 and earlier were calculated by excluding unknowns from the denominator. 2) As of January 1.
Source: Statistics Bureau, MIC; National Institute of Population and Social Security Research; Geospatial Information Authority of Japan.

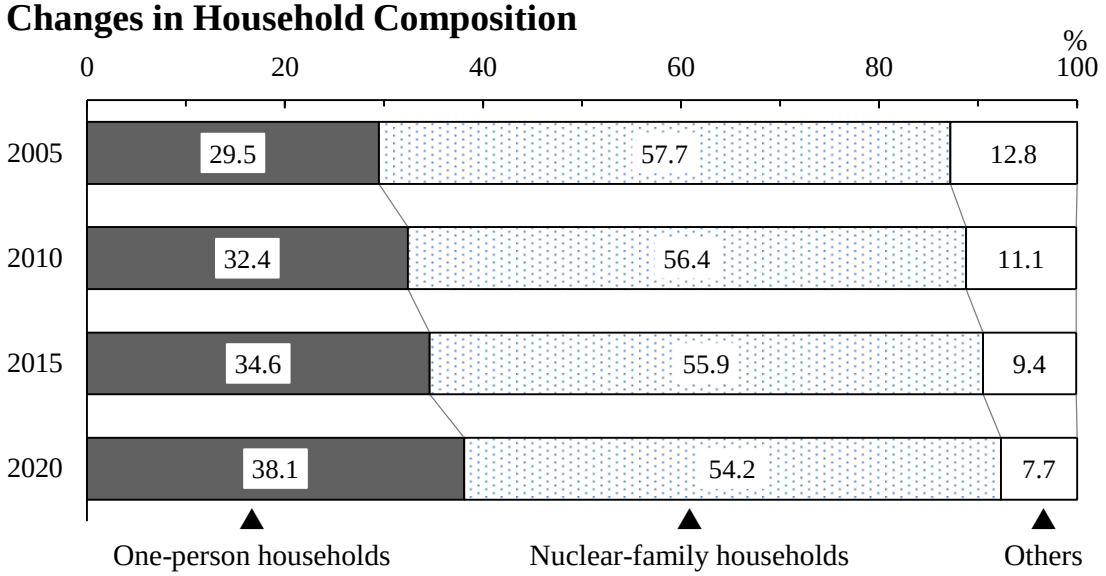
2. Households

(1) Household Size and Household Composition

The Population Census shows that Japan had 55.70 million private households (excluding "institutional households" such as students in

school dormitories) in 2020. Of that total, 54.2 percent were nuclear-family households, and 38.1 percent were one-person households.

Figure 2.3
Changes in Household Composition



Source: Statistics Bureau, MIC.

From the 1920s to the mid-1950s, the average number of household members remained about 5. However, due to the increase in one-person households and nuclear-family households 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 2.21 in 2020. Although the Japanese population shifted into the declining phase, the number of households is expected to continue to increase for some years to come, as the size of the average household will shrink at a slow pace. The number of households is projected to peak in 2030 and then decrease thereafter.

Table 2.3
Households and Household Members [1)]

Year	Private house-holds (1,000)	Rate of private households change (%) [2)]	Private household members (1,000)	Members per household	Population (1,000)	Rate of population change (%) [2)]
1960	22,539	…	93,419	4.14	94,302	4.7
1970	30,297	a) 15.9	103,351	3.41	104,665	5.5
1975	33,596	10.9	110,338	3.28	111,940	7.0
1980	35,824	6.6	115,451	3.22	117,060	4.6
1985	37,980	6.0	119,334	3.14	121,049	3.4
1990	40,670	7.1	121,545	2.99	123,611	2.1
1995	43,900	7.9	123,646	2.82	125,570	1.6
2000	46,782	6.6	124,725	2.67	126,926	1.1
2005	49,063	4.9	124,973	2.55	127,768	0.7
2010	51,842	5.7	125,546	2.42	128,057	0.2
2015	53,332	2.9	124,296	2.33	127,095	-0.8
2020	55,705	4.4	123,163	2.21	126,146	-0.7

1) In the 1965 Census, the definition of household differs, and it is not possible to recombine the survey subjects into private households.
2) Change over preceding Population Census.
a) The rate of change over 10 years is converted to a rate of change over 5 years.
Source: Statistics Bureau, MIC.

(2) Elderly Households

The number of elderly households (private households with household members aged 65 years old and over) in 2020 was 22.66 million. They accounted for 40.7 percent of the total private households. There were 6.72 million one-person elderly households. Among these, there were approximately two times as many females as males.

Table 2.4
Trends in Elderly Households

(Thousands)

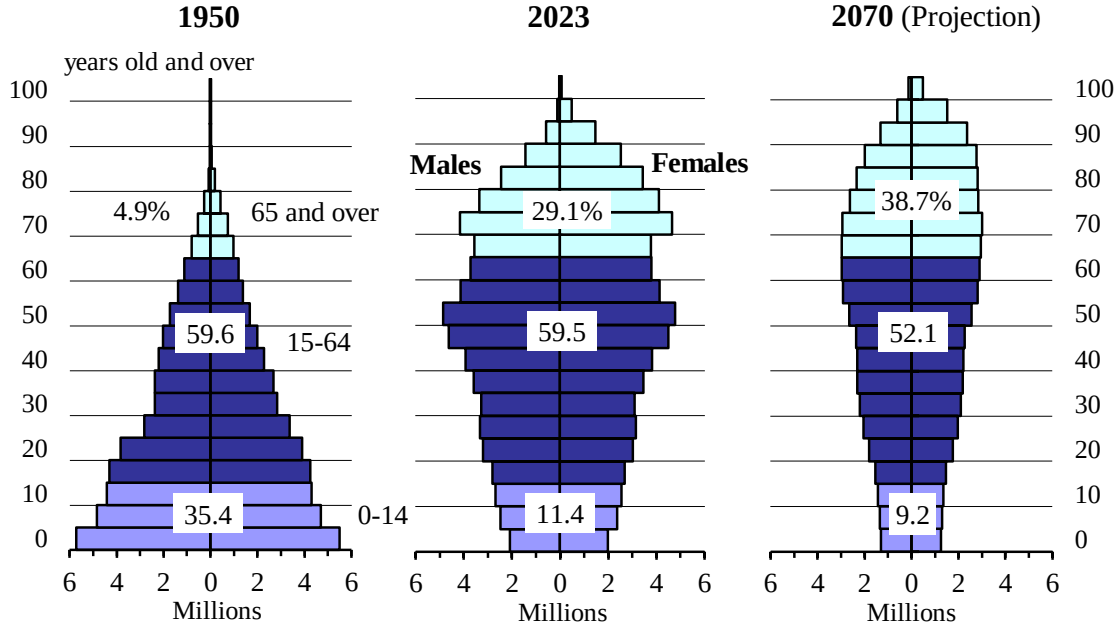
Type of households	2005	2010	2015	2020
Private households	49,063	51,842	53,332	55,705
Elderly households	17,220	19,338	21,713	22,655
(percentage)	35.1	37.3	40.7	40.7
One-person households	3,865	4,791	5,928	6,717
Males	1,051	1,386	1,924	2,308
Females	2,814	3,405	4,003	4,409
Nuclear-family households	8,398	10,011	11,740	12,528
Others	4,956	4,536	4,045	3,410

Source: Statistics Bureau, MIC.

3. Declining Birth Rate and Aging Population

The population pyramid of 1950 shows that Japan had a standard-shaped pyramid with a broad base. The shape, however, has changed dramatically as both the birth rate and death rate have declined. The aged population (65 years old and over) in 2023 was 36.23 million, a decrease of 9,000 persons from the previous year and the first decrease since 1950. On the other hand, the aged percentage of the total population has continued to rise consistently since 1950, reaching a record high of 29.1 percent. It is estimated that the figure will reach 38.7 percent by 2070.

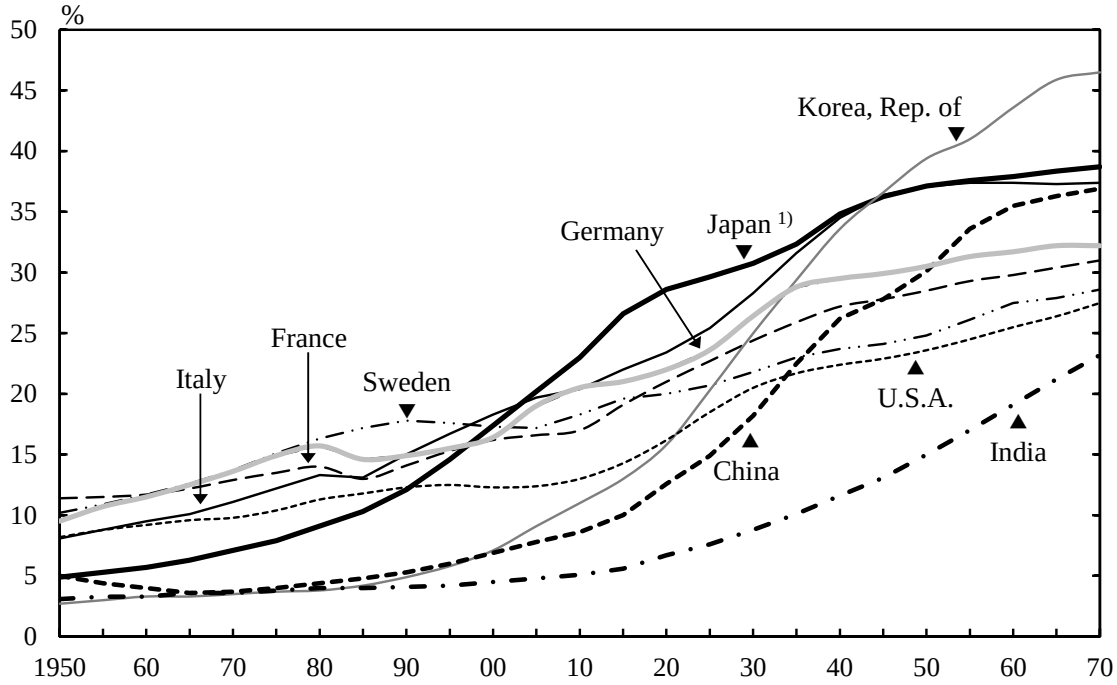
Figure 2.4
Changes in the Population Pyramid



Source: Statistics Bureau, MIC;
National Institute of Population and Social Security Research.

In Japan, the percentage of persons aged 65 years old and over exceeded 10 percent in 1985, but as of 1950, this percentage was already 11.4 percent in France and 10.2 percent in Sweden. The percentage exceeded 10 percent in 1955 in Germany, 1965 in Italy, and 1970 in the U.S.A., all earlier than in Japan. However, in 2020, the percentage of the population aged 65 years old and over in Japan was 28.6 percent, exceeding the U.S.A. (16.2 percent), Sweden (20.0 percent), France (21.0 percent), Germany (22.0 percent), and Italy (23.4 percent), indicating that the aging society in Japan is progressing quite rapidly as compared to the U.S.A. and European countries.

Figure 2.5
Proportion of Elderly Population by Country (Aged 65 years old and over)



1) The ratios for 2015 and 2020 were calculated using imputation values for unknowns in the Population Census results. The ratios for 2010 and earlier were calculated by excluding unknowns from the denominator of Population Census results.

Source: Statistics Bureau, MIC; National Institute of Population and Social Security Research; United Nations.

Table 2.5
Age Structure of Population by Country

(%)

Country	2020			2070 (projection)		
	0-14 years old	15-64	65 years old and over	0-14 years old	15-64	65 years old and over
Korea, Rep. of	12.2	72.0	15.8	8.0	45.5	46.5
Japan 1)	11.9	59.5	28.6	9.2	52.1	38.7
Italy	12.9	63.8	23.4	10.9	51.8	37.4
China	18.0	69.4	12.6	9.6	53.5	36.9
Germany	13.8	64.3	22.0	13.0	54.8	32.2
France	17.6	61.4	21.0	14.4	54.7	31.0
Brazil	20.8	69.9	9.3	13.4	57.1	29.5
U.K.	17.8	63.5	18.7	13.5	57.0	29.5
Canada	15.9	66.1	18.0	13.4	57.4	29.2
Sweden	17.7	62.2	20.0	14.0	57.5	28.6
U.S.A.	18.5	65.3	16.2	14.6	57.9	27.5
Russia	17.7	67.0	15.3	14.4	59.6	26.0
India	26.1	67.2	6.7	15.6	61.2	23.2

1) The ratios for 2020 were calculated using imputation values for unknowns in the Population Census results.

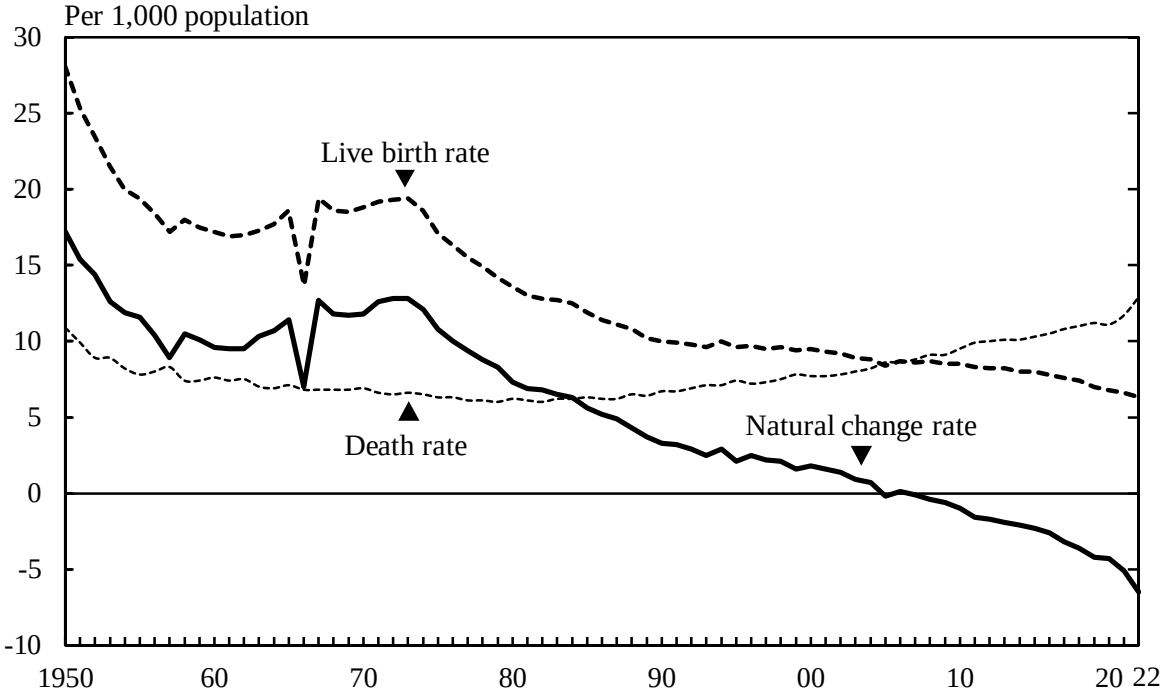
Source: Statistics Bureau, MIC; National Institute of Population and Social Security Research; United Nations.

On the other hand, in 2023, the child population (0-14 years old) in Japan amounted to 14.17 million, accounting for 11.4 percent of the total population, which was the lowest level on record. Since 1997, the aged population (65 years old and over) have surpassed the child population in their proportion of the total population. The working age population (15-64 years old) totaled 73.95 million, accounting for 59.5 percent of the entire population. This population has continued to decline since 1993, but increased in 2023 compared to the previous year, which was the lowest in history. As a result, the dependency ratio (the sum of aged and child population divided by the working age population) was 68.2 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) became negative for the first time since 1899, when statistics were first collected in the current form, aside from the years 1944 and 1946 when statistics could not be obtained. It has been on a declining trend since then. In 2022, the natural change rate was -6.5 and decreased for the 16th consecutive year.

Figure 2.6
Natural Population Change



Source: Ministry of Health, Labour and Welfare.

During the second baby boom between 1971 and 1973, the live birth rate (per 1,000 population) was at a level of 19. Since the late 1970s, it has continued to fall. The rate for 2022 was 6.3. 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 30.9 in 2022.

The total fertility rate was on a downward trend after dipping below 2.00 in 1975, and reached a record low of 1.26 in 2005. The rate was on a path of recovery with an increase after that. However, the total fertility rate decreased for 7 consecutive years and dropped to 1.26 in 2022.

The death rate (per 1,000 population) was steady at 6.0 - 6.3 between 1975 and 1987, and has maintained an uptrend since 1988, reflecting the aging of the population. It reached 12.9 in 2022.

Table 2.6
Vital Statistics

Year	Per 1,000 population				Total fertility rate [2)]	Life expectancy at birth (years)	
	Live birth rate	Death rate	Infant mortality rate [1)]	Natural change rate		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
2015	8.0	10.3	1.9	-2.3	1.45	80.75	86.99
2020	6.8	11.1	1.8	-4.3	1.33	81.56	87.71
2021	6.6	11.7	1.7	-5.1	1.30	81.47	87.57
2022	6.3	12.9	1.8	-6.5	1.26	81.05	87.09

1) Per 1,000 live births.
2) The sum of the age-specific fertility rates from age 15 to 49 years old.
a) 1950-1952 period.
Source: Ministry of Health, Labour and Welfare.

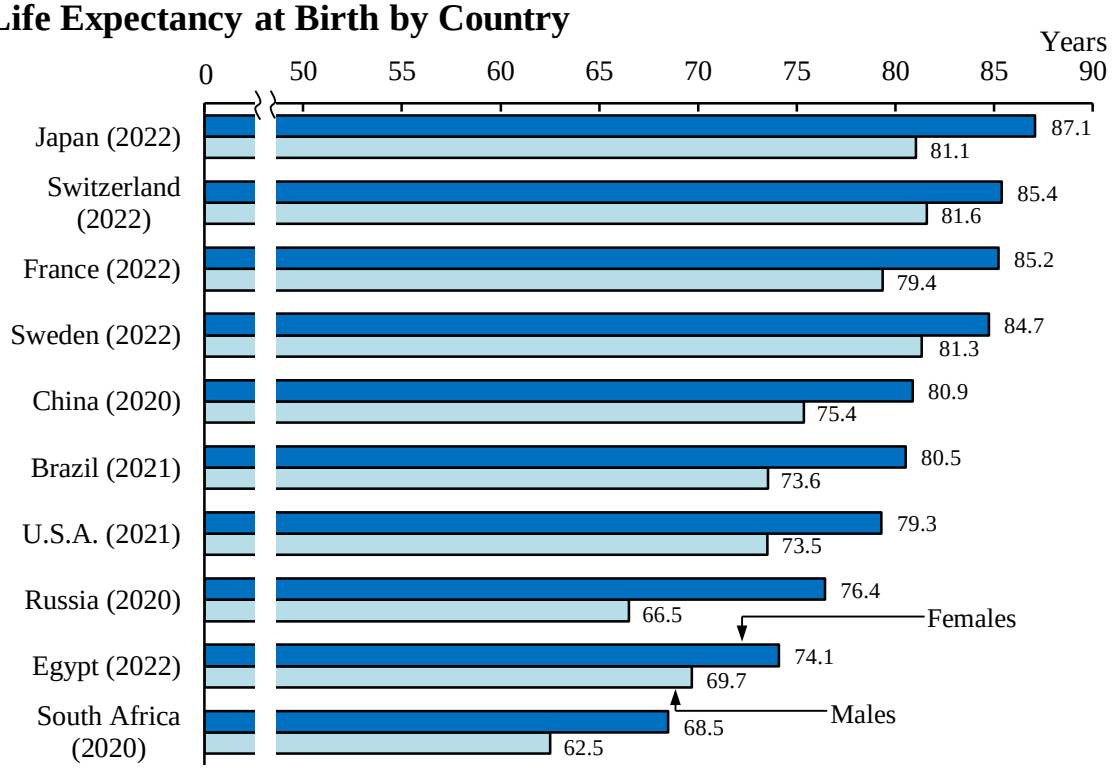
Table 2.7
Changes of Mothers' Age at Childbirth

Year	Number of births (1,000) [1]	Distribution of mothers' age (%) [2]						Mean age bearing first child (years)
		Under 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
1980	1,577	0.9	18.8	51.4	24.7	3.7	0.5	26.4
1990	1,222	1.4	15.7	45.1	29.1	7.6	1.0	27.0
2000	1,191	1.7	13.6	39.5	33.3	10.6	1.3	28.0
2010	1,071	1.3	10.4	28.6	35.9	20.5	3.3	29.9
2020	841	0.8	7.9	25.9	36.1	23.3	5.9	30.7
2021	812	0.7	7.4	25.9	36.0	23.8	6.2	30.9
2022	771	0.6	6.9	26.3	36.3	23.8	6.2	30.9

1) Including mothers' ages that were not reported. 2) Percentage in relation to number of births, excluding those for which mothers' ages were not reported.
Source: Ministry of Health, Labour and Welfare.

Life expectancy at birth in Japan climbed sharply after World War II, and is today at quite a high level in the world. In 2022, it was 87.1 years for females and 81.1 years for males, down from the previous year for both genders.

Figure 2.7
Life Expectancy at Birth by Country



Source: Ministry of Health, Labour and Welfare.

5. Marriages and Divorces

It showed an apparent marriage boom in the early 1970s that the annual number of marriages in Japan exceeded 1 million couples coupled with the marriage rate (per 1,000 population) hovering over 10.0. However, both the number of couples and the marriage rate have been on a declining trend thereafter. In 2022, 504,930 couples married, and the marriage rate was 4.1.

The mean age of first marriage was 31.1 for grooms and 29.7 for brides in 2022. The mean age of first marriage for grooms rose by 2.0 years, while that of brides rose by 2.3 years over the past 20 years (in 2002: grooms, 29.1; brides, 27.4). In addition, there has been an increasing trend in the proportion of those who have never married until he or she turns the exact age 50, reaching 28.3 percent for males and 17.8 percent for females in 2020, the highest percentages ever. The declining marriage rate, rising marrying age and increased choice of unmarried life in recent years as described above could explain the dropping birth rate.

Table 2.8
Mean Age of First Marriage

(Years)

Year	Grooms	Brides
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
2015	31.1	29.4
2020	31.0	29.4
2021	31.0	29.5
2022	31.1	29.7

Source: Ministry of Health, Labour and Welfare.

Table 2.9
Proportion of Never Married at Exact Age 50 by Sex [1)]

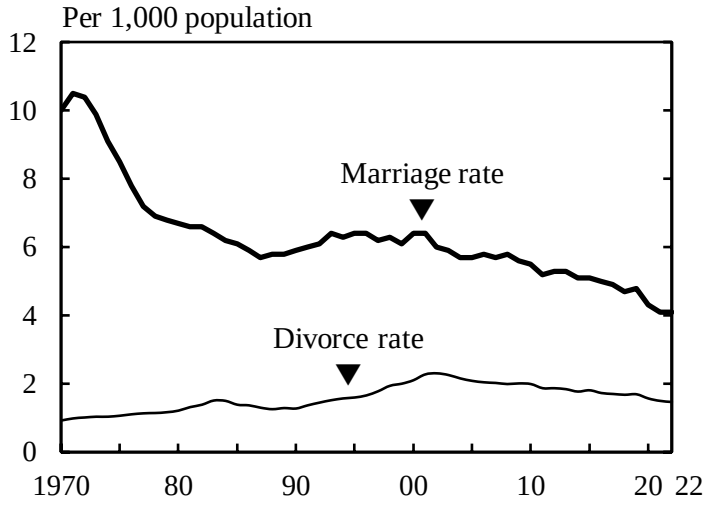
(%)

Year	Males	Females
1950	1.5	1.4
1960	1.3	1.9
1970	1.7	3.3
1980	2.6	4.5
1990	5.6	4.3
2000	12.6	5.8
2010	20.1	10.6
2015 [2)]	24.8	14.9
2020 [2)]	28.3	17.8

1) The proportion is computed as the mean value of the proportion remaining single at ages 45-49 and 50-54.
2) Based on results with imputation for persons of unknown marital status.
Source: National Institute of Population and Social Security Research.

In contrast, there was an upward trend about the divorces since the late 1960s, hitting a peak of 289,836 couples in 2002. Subsequently, both the number of divorces and the divorce rate have been declining since 2003. In 2022, the number of divorces totaled 179,099 couples, and the divorce rate (per 1,000 population) was 1.47.

Figure 2.8
Changes in Marriage Rate and Divorce Rate



Source: Ministry of Health, Labour and Welfare.

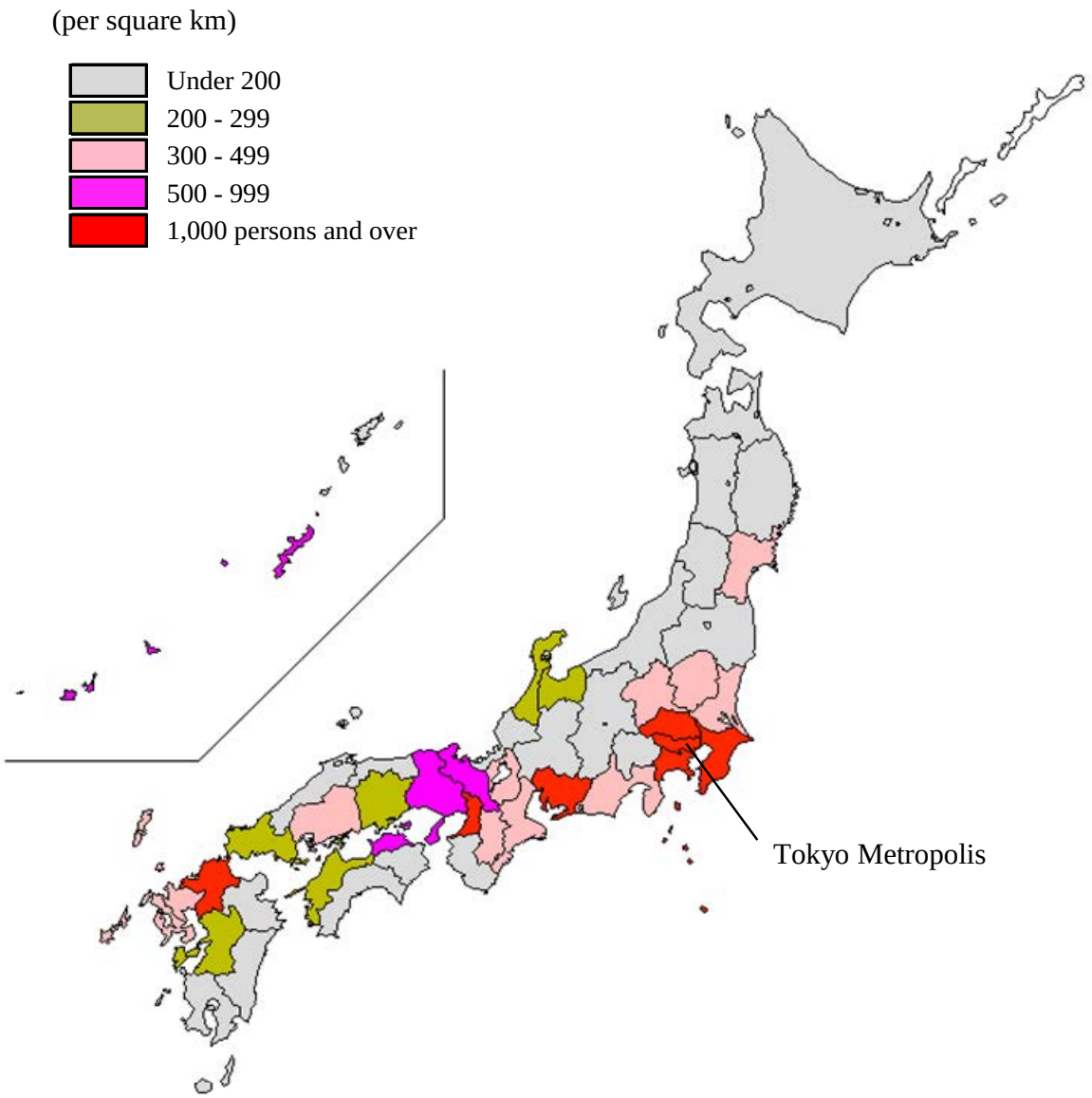
6. Population Density and Regional Distribution

(1) Population Density

In 2020, Tokyo Metropolis had the largest population of 14.05 million among Japan's 47 prefectures, followed in decreasing order by the prefectures of Kanagawa, Osaka, Aichi, Saitama, Chiba, Hyogo, and Hokkaido. The top 8 prefectures in terms of population had a total population of 63.98 million, and accounted for more than 50 percent (50.7 percent) of the total population.

In addition, the population density in Tokyo Metropolis was the highest among Japan's prefectures, at 6,402.6 persons per square kilometer. This was almost 19 times larger than the national average (338.2 persons per square kilometer).

Figure 2.9
Population Density by Prefecture (2020)



Source: Statistics Bureau, MIC.

In 2020, there were 12 cities in Japan with a population of 1 million or more. Their total population topped 30 million, a figure equivalent to 24.0 percent of the national total. The largest single city was the 23 Cities of Tokyo Metropolis, with 9.73 million citizens. It was followed in decreasing order by Yokohama City (3.78 million), Osaka City (2.75 million), and Nagoya City (2.33 million).

Table 2.10
Population of Major Cities

(Thousands)

Cities	Population		Cities	Population	
	2015	2020		2015	2020
Tokyo, 23 Cities	9,273	9,733	Kawasaki City	1,475	1,538
Yokohama City	3,725	3,777	Kobe City	1,537	1,525
Osaka City	2,691	2,752	Kyoto City	1,475	1,464
Nagoya City	2,296	2,332	Saitama City	1,264	1,324
Sapporo City	1,952	1,973	Hiroshima City	1,194	1,201
Fukuoka City	1,539	1,612	Sendai City	1,082	1,097

Source: Statistics Bureau, MIC.

(2) Population Distribution

In 2020, population was 38.0 million in the Kanto major metropolitan area, 19.2 million in the Kinki major metropolitan area, and 9.2 million in the Chukyo major metropolitan area. Total population of these three major metropolitan areas reached 66.4 million, accounting for 52.6 percent of Japan's population. Population density in the Kanto major metropolitan area was 2,804.7 persons per square kilometer. In the Kinki major metropolitan area, it was 1,464.9 persons per square kilometer, and in the Chukyo major metropolitan area, it was 1,323.0 persons per square kilometer.

Table 2.11
Population of 3 Major Metropolitan Areas [1] (2020)

Areas	Population (1,000)	Percentage of the total (%)	Surface Area (km^2)	Population density (per km^2)
Kanto major metropolitan area	38,034	30.2	13,561	2,804.7
Chukyo major metropolitan area	9,192	7.3	6,948	1,323.0
Kinki major metropolitan area	19,176	15.2	13,091	1,464.9
Total of three major metropolitan areas	66,403	52.6	33,599	1,976.3

1) Major metropolitan areas consist of central cities (Kanto: 23 Cities of Tokyo Metropolis, Yokohama City, Kawasaki City, Sagamihara City, Saitama City, and Chiba City; Chukyo: Nagoya City; Kinki: Osaka City, Sakai City, Kyoto City, and Kobe City) and surrounding areas (cities, towns and villages).
Source: Statistics Bureau, MIC.

Chapter 3

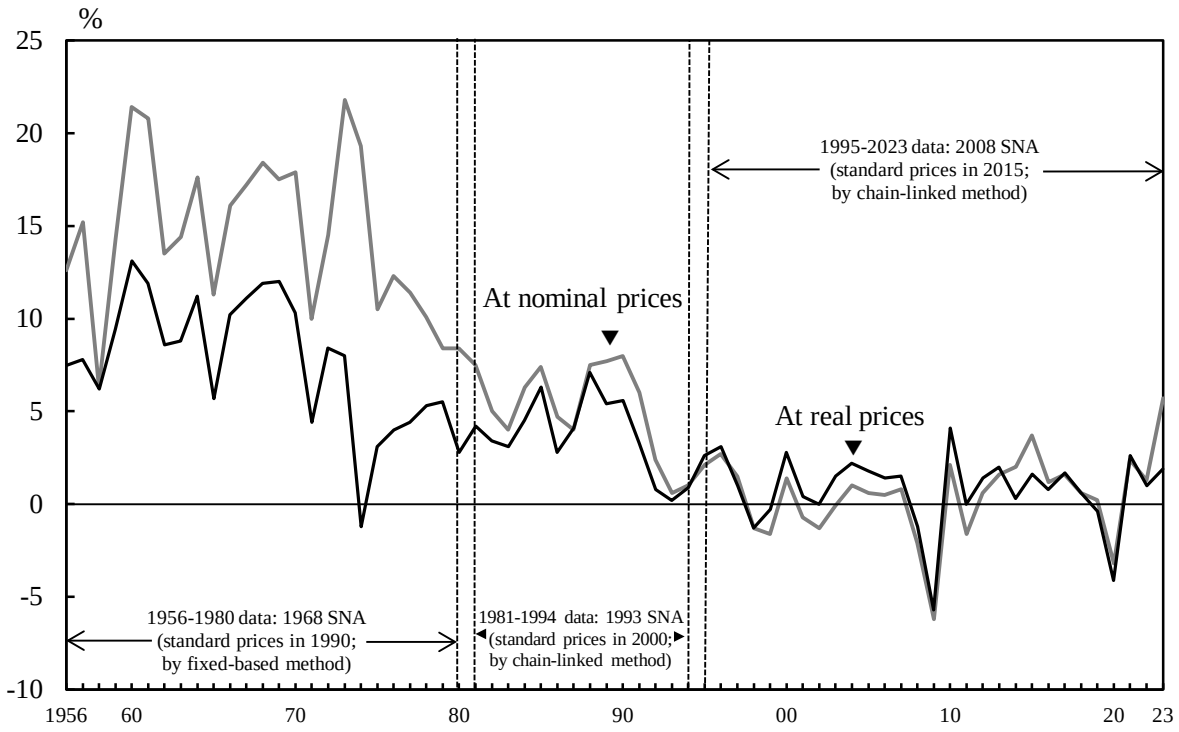
Economy

The number of people keeping pets increased during the COVID-19 pandemic, and the economic benefits of pets have been attracting attention in recent years.

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 labour 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



Source: Economic and Social Research Institute, 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.

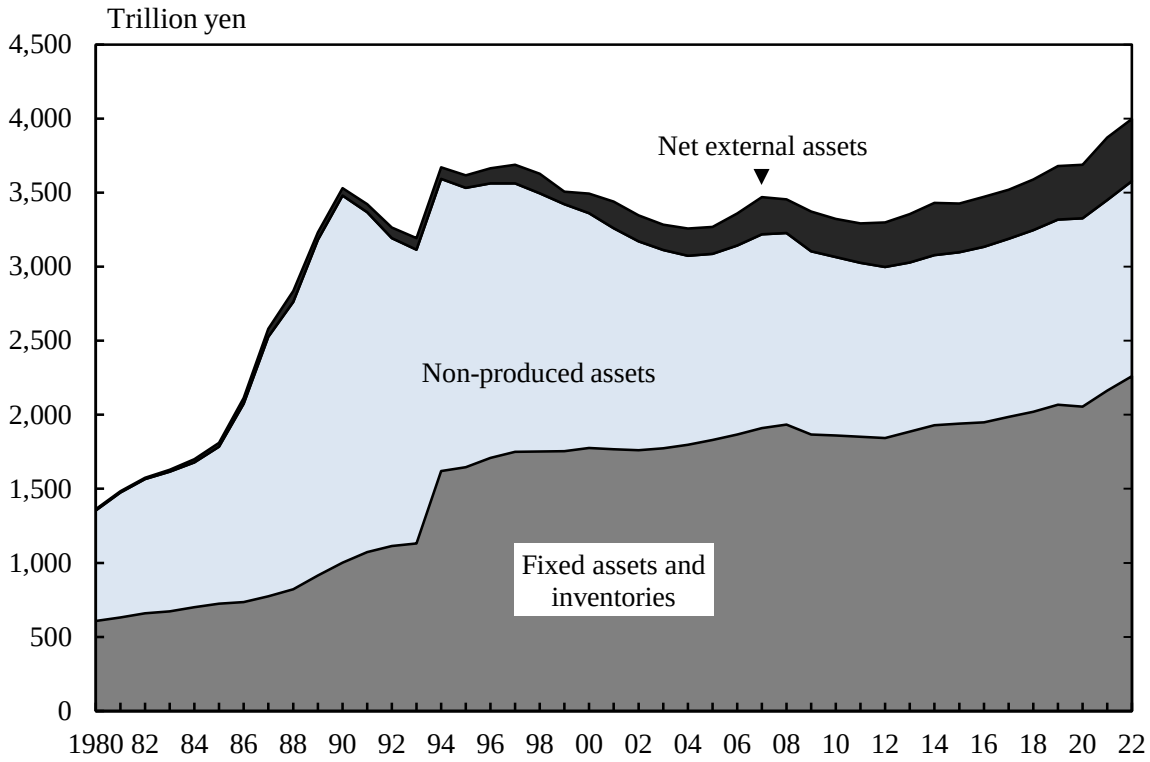
2. Bubble Economy and Its Collapse

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. 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.

Due to the collapse of the bubble economy, the national wealth decreased, and while there were fluctuations, continued on a downward trend. Since 2012, it has been in a gradual increasing trend. At the end of 2022, it was 3,999 trillion yen.

Figure 3.2
National Wealth 1)

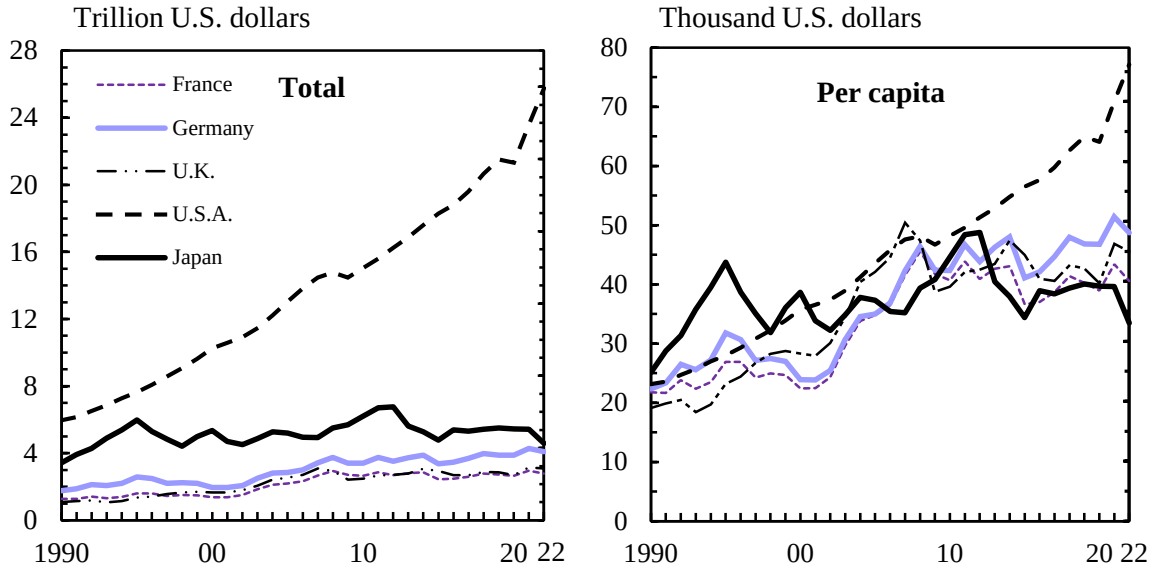


1) Data was estimated using a different method beginning in 1994.
Source: Economic and Social Research Institute, Cabinet Office.

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 recovery 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.

On the economic recovery phase starting at the beginning of 2002, the corporate sector, with export-related industries, as the central part, became favorable based on the steady recovery of the global economy, and shifted generally with a bullish tone up until mid-2007.

3. Economic Trends after Collapse of the Bubble Economy

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 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.

Table 3.1

Gross Domestic Product [1] (Expenditure approach)

(Billion yen)

Item	2020	2021	2022	2023
Gross domestic product (GDP)	529,621.1	543,175.8	548,375.4	558,921.0
Domestic demand	533,983.8	542,124.2	550,038.3	554,992.1
Private demand	391,886.3	396,763.0	405,566.3	408,799.5
Private final consumption expenditure	287,369.1	289,619.3	295,858.4	297,747.9
Private residential investment	19,063.0	19,010.1	18,346.2	18,545.4
Private plant and equipment	86,515.6	86,940.2	88,623.0	90,474.4
Changes in inventories of private sectors	-1,068.9	1,321.9	2,926.5	2,278.7
Public demand	142,095.7	145,365.4	144,451.2	146,181.8
Government final consumption expenditure	113,110.1	116,916.1	118,856.9	119,889.5
Gross capital formation by public sectors	29,077.1	28,549.6	25,807.0	26,522.6
Changes in inventories of public sectors	-67.1	-19.8	21.6	-12.3
Net exports of goods and services	-4,732.2	1,207.8	-1,357.5	3,374.3
Exports of goods and services	91,877.0	102,784.8	108,214.7	111,483.5
(less) Imports of goods and services	96,609.2	101,577.0	109,572.2	108,109.2
(Reference)				
Trading gains/losses	3,069.3	-3,942.4	-15,931.7	-11,084.0
Gross domestic income (GDI)	532,690.4	539,233.5	532,443.7	547,837.0
Net income from the rest of the world	19,581.2	25,816.7	32,281.9	31,406.6
Incomes from the rest of the world	29,997.7	37,349.0	46,550.1	51,054.1
(less) Incomes to the rest of the world	10,416.5	11,532.3	14,268.2	19,647.6
Gross national income (GNI)	552,271.6	565,050.2	564,725.6	579,243.5

1) Quarterly estimates of GDP, real prices, 2008 SNA (standard prices in 2015; by chain-linked method).

Source: Economic and Social Research Institute, Cabinet Office.

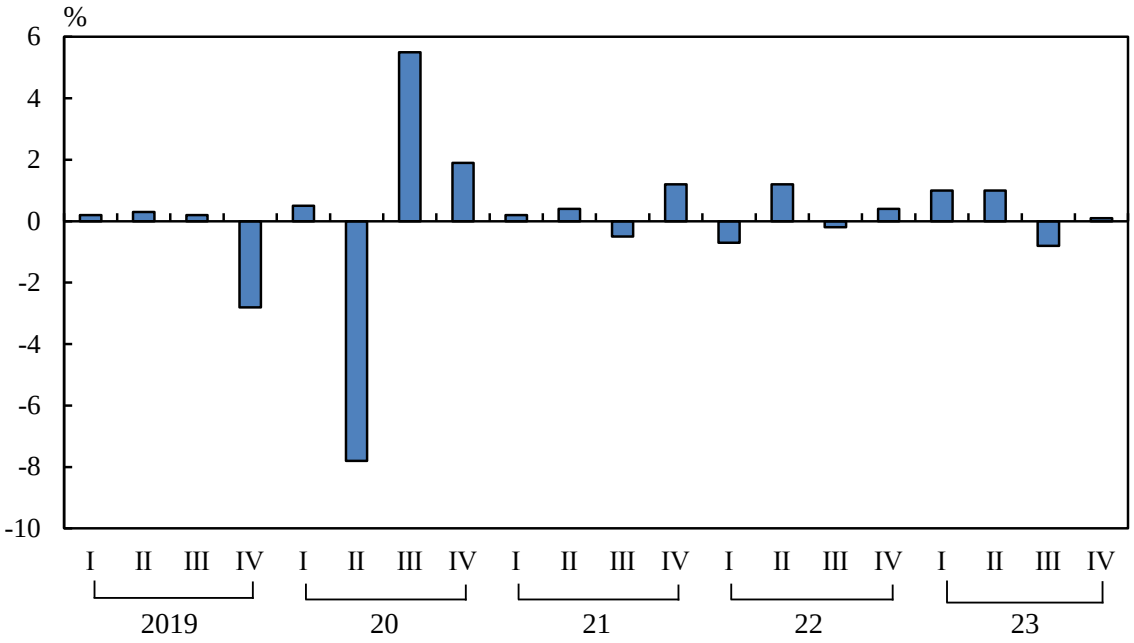
Subsequently, the Japanese economy recovered with foreign demand and economic measures after April 2009, and came to a standstill starting around October 2010. In early 2011, however, it began to rally. The Great East Japan Earthquake taking place on March 11, 2011, and the nuclear power plant accident caused by it weakened the economic recovery.

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").

After that the economy picked up, and signs indicated that the protracted deflation would reverse. There was some weakening due to the rebound from last-minute demand brought on by the consumption tax increase in April 2014, but as the moderate recovery continued and the real economy improved, prices mildly increased, and the economy moved steadily

toward overcoming deflation. In part due to factors like the impact of falling crude oil prices near the end of 2014, the economy continued its moderate recovery into 2015. From the latter half of 2016, a virtuous cycle developed, against a backdrop of moderate recovery in the overseas economy, starting from the corporate sector, e.g., with recovery in exports and production, and with the dramatic improvement in the employment situation, labor shortages intensified to level like that during the bubble era. The new "Reiwa" era began in 2019, and amid improvement in the employment/income environment and high corporate profits, a moderate recovery continued in areas such as increasing personal consumption and capital investment, the mainstays of domestic demand. However, in 2020 conditions abruptly worsened due to the effects of the COVID-19 pandemic. In 2021, improvement continued from the second half of the previous year, but suppression of economic activity aimed at preventing the spread of disease continued intermittently from the start of the year, and GDP did not manage to recover its level from before the crisis. Since the spring of 2022, the global rise in prices has spread to consumer prices in Japan, primarily goods prices, through rising import prices. Prices for many services, on the other hand, have remained stable. However, since the beginning of 2023, signs of changing price trends have begun to appear, such as increasing frequency of price revision for both goods and services.

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



1) Quarterly estimates of GDP, real prices, 2008 SNA (standard prices in 2015; by chain-linked method; seasonally adjusted).
Source: Economic and Social Research Institute, Cabinet Office.

4. Industrial Structure

Japan's industrial structure has undergone a major transformation 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 share of them have risen consistently.

Table 3.2
Changes in Industrial Structure

(%)

Year	Employed persons [1) 2)]			Gross domestic product (GDP) [3)]		
	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	# 1.7	# 31.5	# 66.9
2000	5.2	29.5	65.3	1.5	29.2	69.3
2005	4.9	26.4	68.6	1.1	26.8	72.1
2010	4.2	25.2	70.6	1.1	25.5	73.4
2015	3.7	24.6	71.7	1.0	25.9	73.1
2020	3.2	23.4	73.4	1.1	26.0	73.0

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) Ratios for 2015 and 2020 use imputation values for unknowns. 3) Nominal prices. The data for 1955 to 1975 are based on the 1968 SNA, the data for 1980 to 1990 are based on the 1993 SNA, and the data for 1995 onwards are based on the 2008 SNA.
Source: Statistics Bureau, MIC; Economic and Social Research Institute, 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 2020, the corresponding shares of these three sectors were 3.2 percent, 23.4 percent and 73.4 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 2020, these figures were 1.1 percent, 26.0 percent and 73.0 percent, respectively.

Table 3.3
Gross Domestic Product by Type of Economic Activity (Nominal prices)

(%)

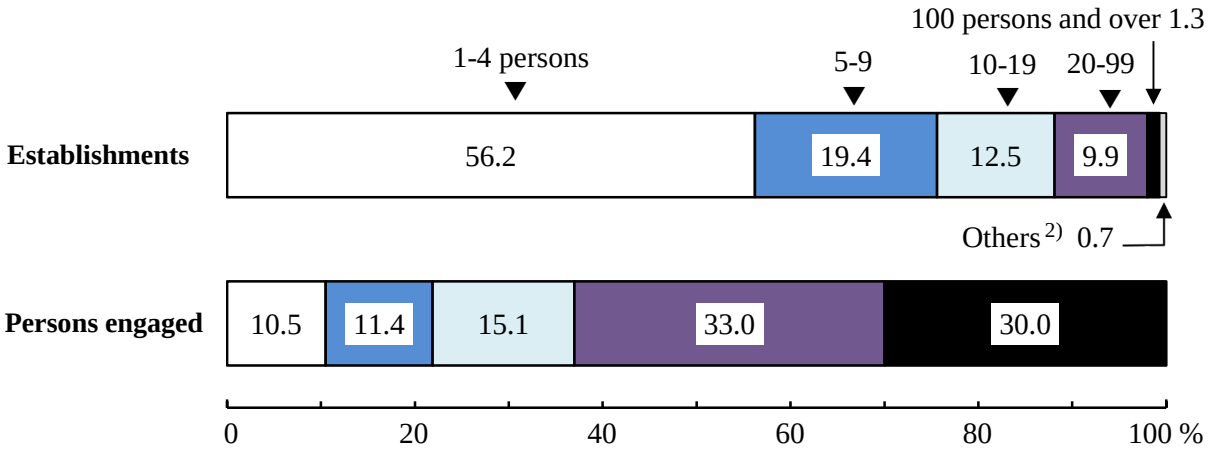
	1995	2000	2005	2010	2015	2020
Primary industry						
Agriculture, forestry and fishing	1.6	1.5	1.1	1.1	1.0	1.1
Secondary industry						
Mining	0.2	0.1	0.1	0.1	0.1	0.1
Manufacturing	23.5	22.5	21.4	20.8	20.5	20.1
Construction	7.6	6.7	5.4	4.6	5.2	5.7
Tertiary industry						
Electricity, gas and water supply and waste management service	3.1	3.3	3.0	2.9	2.9	3.2
Wholesale and retail trade	13.8	13.0	14.1	13.4	13.0	12.8
Transport and postal services	5.5	4.9	5.1	5.1	5.3	4.2
Accommodation and food service activities	3.0	3.1	2.7	2.6	2.4	1.7
Information and communications	3.3	4.7	5.0	5.0	4.9	5.1
Finance and insurance	5.1	5.0	6.1	4.8	4.3	4.2
Real estate	10.3	10.8	11.0	12.3	12.0	12.2
Professional, scientific and technical activities	4.5	5.5	6.2	7.2	7.8	8.7
Public administration	4.7	5.0	5.0	5.1	4.9	5.2
Education	3.6	3.6	3.6	3.7	3.5	3.5
Human health and social work activities	4.2	5.1	5.7	6.7	7.4	8.2
Other service activities	5.2	5.2	4.9	4.6	4.2	3.7

Source: Economic and Social Research Institute, Cabinet Office.

According to the "2021 Economic Census for Business Activity", there were 5.2 million establishments (excluding businesses whose operational details are unknown, national government services, and local government services) in Japan, at which a total of 57.9 million persons were employed.

The average number of persons engaged per establishment was 11.2 and establishments with less than 10 persons accounted for 75.6 percent of the total.

Figure 3.5
Shares of Establishments and Persons Engaged by Scale of Operation [1)]
(2021)



1) Excluding businesses whose operational details are unknown, national government services, and local government services. 2) Establishments consisting of only loaned or dispatched employees.
Source: Statistics Bureau, MIC; Ministry of Economy, Trade and Industry.

With regard to the number of establishments by the major groupings of the Japan Standard Industrial Classification, the most numerous category was the "wholesale and retail trade", numbering 1.2 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 11.6 million persons, followed by "manufacturing" and "medical, health care and welfare".

Table 3.4
Number of Establishments and Persons Engaged [1] (2021)

Item	Establishments	Persons engaged
Total	5,156,063	57,949,915
By industry		
Primary industry		
Agriculture, forestry and fisheries	42,458	453,703
Secondary industry		
Mining and quarrying of stone and gravel	1,865	19,697
Construction	485,135	3,737,415
Manufacturing	412,617	8,803,643
Tertiary industry		
Electricity, gas, heat supply and water	9,139	202,149
Information and communications	76,559	1,986,839
Transport and postal activities	128,224	3,264,734
Wholesale and retail trade	1,228,920	11,611,924
Finance and insurance	83,852	1,494,436
Real estate and goods rental and leasing	374,456	1,618,138
Scientific research, professional and technical services	252,340	2,118,920
Accommodations, eating and drinking services	599,058	4,678,739
Living-related and personal services and amusement services	434,209	2,176,139
Education, learning support	163,357	1,950,734
Medical, health care and welfare	462,531	8,162,398
Compound services	32,131	435,970
Services, n.e.c.	369,212	5,234,337
By type of legal organizations		
Individual proprietorships	1,640,810	4,573,854
Corporations	3,486,590	53,258,019
Companies	3,010,602	44,144,737
Organizations other than corporations	28,663	118,042

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 domestic manufacturing industry has progressed in the relocation of production bases overseas, for the cutback on production costs, the production in consumption areas, and the evasion of fluctuations in exchange rates.

The number of overseas affiliates in the manufacturing industry was 10,433 companies at the end of fiscal 2022, and the overseas production ratio was 27.1 percent in actual performance in fiscal 2022. The value of sales for overseas affiliated companies in the manufacturing industry decreased from 138.6 trillion yen in fiscal 2018 to 112.8 trillion yen in fiscal 2020, but sales recovered starting in fiscal 2021, and reached a record high of 162.1 trillion yen in fiscal 2022.

Table 3.5
Trends of Overseas Affiliated Company (Manufacturing industries)

Fiscal year	Number of overseas affiliates [1)]	Value of sales (Million yen)	Overseas production ratio [2)] (%)	Value of capital investment (Million yen)	Ratio of overseas capital investment [3)] (%)
2013	10,545	116,997,649	22.9	4,646,055	29.4
2014	10,592	129,712,997	24.3	4,649,364	28.1
2015	11,080	134,996,164	25.3	4,571,639	25.5
2016	10,919	123,636,074	23.8	3,766,446	20.7
2017	10,838	138,024,661	25.4	3,961,088	20.8
2018	11,344	138,584,467	25.1	4,384,020	21.5
2019	11,199	121,618,532	23.4	4,292,606	22.1
2020	11,070	112,790,400	23.6	3,219,364	19.4
2021	10,902	139,441,614	25.8	3,670,889	20.8
2022	10,433	162,082,259	27.1	4,350,870	22.0

1) End of fiscal year. 2) Overseas production ratio = Sales of overseas affiliates/(Sales of overseas affiliates + Sales of domestic companies) × 100.
3) 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.

There are many companies that are planning on expanding their business in the future to India, Vietnam, China, and the U.S.A.

Chapter 4

Finance

Golden rice terraces. Japan has a system called "hometown tax". All residents in Japan are required to pay an inhabitant tax to the city or town they are living in. However, since most of Japan’s population is concentrated in urban areas, there is a huge tax revenue disparity between urban and rural municipalities. The "hometown tax" system is a way to balance out that disparity in tax revenue. It is called a tax, but in fact, is a system for donating to prefectures, municipalities, etc.

1. National and Local Government Finance

Finance refers to revenue and expenditure of administrative services from national and local governments.

(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 approved usually before the fiscal year begins in April (initial budget). 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. The initial budget for fiscal 2024 responds precisely to structural issues confronting Japan, with programs such as promoting initiatives to "achieve wage growth that keeps up with rising prices", and speedy implementation of an "acceleration plan" based on the "Children's Future Strategy".

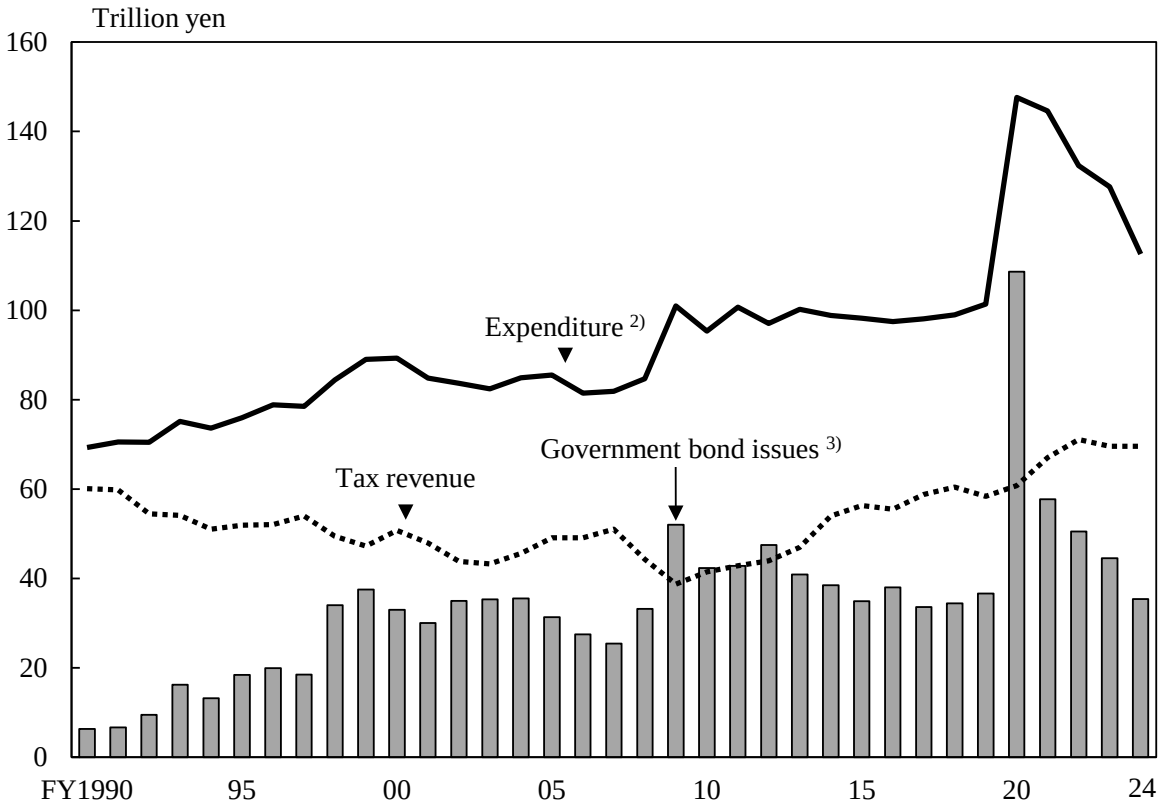
Japan's national budget consists of the general account budget, special account budgets, and the budgets of government-affiliated agencies. Using revenues from general sources such as taxes, the general account covers core national expenditures such as social security, public works, education and science, and national defense.

Special accounts are accounts established for the national government to carry out projects with specific objectives, and their management and administration are independent of the general account. The number and particulars of special accounts change from year to year; for fiscal 2024, there are a total of 13 special accounts, including the National debt consolidation fund, the Local allocation tax and local transfer tax, and the Reconstruction from the Great East Japan Earthquake.

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

for International Cooperation, and the Japan International Cooperation Agency (Finance and Investment Account) are operated.

Figure 4.1
Revenue and Expenditure in the General Account [1)]



1) Based on settled figures until FY2022, supplementary budget for FY2023, and draft budget for FY2024. 2) Total expenditure of FY2023 includes the carry-over (4.4 trillion yen) from Defense Buildup Funds which is the resource for the national defense expenditure for FY2024 and years after. 3) Excludes some special accounts.
Source: Ministry of Finance.

In the national government finance, expenditure has continued to surpass revenue. Since fiscal 2008 in particular, the worsening economy has decreased tax revenue, contributing to an increasing gap between revenue and expenditure. From fiscal 2009 to fiscal 2012, bond issues exceeded tax revenue in most years, but starting in fiscal 2013, tax revenue began to exceed borrowing. However, in fiscal 2020, the supplementary budget for the contingency fund for COVID-19 was covered solely by government bonds, leading to bond issues exceeding tax revenue.

The size of the general account budget for fiscal 2024 was 113 trillion yen, a decrease of 1.8 trillion yen (1.6 percent) from the initial budget of fiscal 2023. This is equivalent to 18.3 percent of the fiscal 2024 GDP, forecasted

by the government at 615 trillion yen.

Table 4.1
Expenditures of General Account

(Billion yen)

Fiscal year	Total (A)+(B)+(C)	General expenditures (A)	Social security	Education and science	Pensions	National defense	Public works
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
2015	98,230	58,966	31,398	5,574	387	5,130	6,378
2020	147,597	109,016	42,998	9,194	169	5,505	8,413
2022	132,386	91,002	43,868	8,669	113	5,529	8,126
2023 1)	127,580	84,724	38,134	8,507	97	12,019	8,313
2024 2)	112,572	67,776	37,719	5,472	77	7,917	6,083

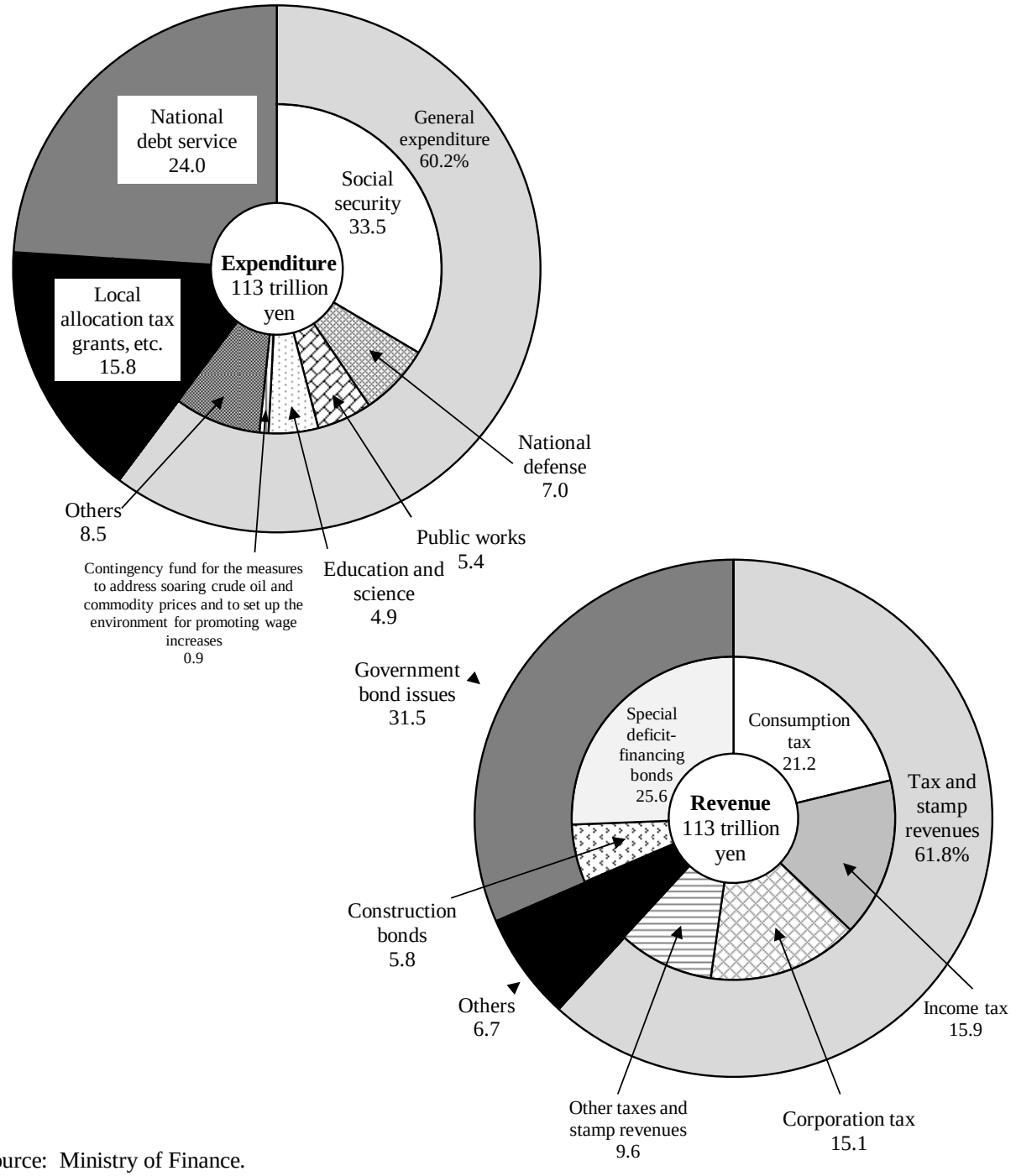
Fiscal year	Economic cooperation	Small and medium-sized business promotion	Energy measures	Food stable supply	Others	National debt service (B)	Local allocation tax grants, etc. (C)
2000	1,012	933	677	247	6,434	21,446	15,829
2005	784	237	493	657	6,536	18,736	17,441
2010	746	830	845	1,122	7,953	19,544	18,790
2015	661	340	968	1,276	6,854	22,464	16,801
2020	763	16,257	1,027	1,498	23,190	22,326	16,256
2022	900	3,396	2,001	1,947	16,453	23,870	17,513
2023 1)	793	735	1,028	1,701	13,397	25,675	17,181
2024 2)	504	169	833	1,262	7,740	27,009	17,786

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

In fiscal 2024, major expenditures from the initial general account budget include social security (33.5 percent), national debt service (24.0 percent), local allocation tax grants, etc. (15.8 percent), national defense (7.0 percent), public works (5.4 percent), and education and science (4.9 percent).

With regard to revenue sources for the fiscal 2024 initial general account budget, consumption tax, income tax and corporation tax account for 52.2 percent. Even with the addition of other taxes and stamp revenues, these revenue sources only amount to 61.8 percent of the total revenue.

Figure 4.2
Composition of Revenue and Expenditure of General Account Budget
(Initial budget, FY2024)



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 systems,

hospitals, etc.), the national health insurance accounts, and the latter-stage elderly medical care accounts.

While expenditures such as defense expenses are administered solely by the national government, a large portion of expenditures that directly relate to the people's daily lives are disbursed chiefly through local governments. Those disbursed mainly through local governments are: sanitation expenses, which include areas such as health centers and garbage disposal; school education expenses; judicial, police, and fire service expenses; and public welfare expenses, which cover child welfare and elderly welfare such as nursing care, etc.

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 2022 (net) revenues came from local taxes, accounting for 36.1 percent of the total. The second-largest source, 21.9 percent, was national treasury disbursements.

Table 4.2

Local Government Finance [1] (Ordinary accounts)

(Million yen)

Item	FY2018	FY2019	FY2020	FY2021	FY2022
Revenues	101,345,285	103,245,881	130,047,239	128,291,063	121,945,175
Local taxes	40,751,442	41,211,450	40,825,620	42,408,938	44,052,157
Local transfer tax	2,650,873	2,613,842	2,232,335	2,446,767	2,762,111
Special local grants	154,400	468,271	225,609	454,707	222,707
Local allocation tax	16,548,225	16,739,246	16,988,952	19,504,879	18,630,969
National treasury disbursements	14,885,189	15,834,380	37,455,724	32,071,593	26,711,474
Local bonds	10,508,424	10,870,548	12,260,718	11,745,371	8,781,233
Expenditures	98,020,611	99,702,189	125,458,842	123,367,701	117,355,662
General administration	9,285,987	9,670,029	22,534,636	12,431,790	11,884,746
Public welfare	25,665,947	26,533,656	28,694,223	31,312,993	30,272,017
Sanitation	6,236,691	6,353,956	9,120,199	11,375,080	12,224,953
Agriculture, forestry and fishery	3,251,691	3,319,243	3,410,589	3,304,462	3,362,361
Commerce and industry	4,760,301	4,782,097	11,533,589	14,980,239	10,316,279
Civil engineering work	11,880,636	12,127,421	12,690,157	12,685,803	12,444,425
Education	16,878,150	17,523,493	18,096,094	17,789,581	17,768,123

1) Settled figures of the net total of prefectural and municipal government accounts after deducting duplications. The breakdown consists of major items only.

Source: Ministry of Internal Affairs and Communications.

(3) National and Local Government Finance

In the initial budget for fiscal 2023, the gross total of national government expenditure was 559 trillion yen, the net total was 256 trillion yen after eliminating duplications between both accounts. 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 92 trillion yen. Therefore, after eliminating duplications between national and local accounts (37 trillion yen), the net total of both national and local government expenditures combined was 311 trillion yen.

Table 4.3
Expenditures of National and Local Governments (Initial budget)

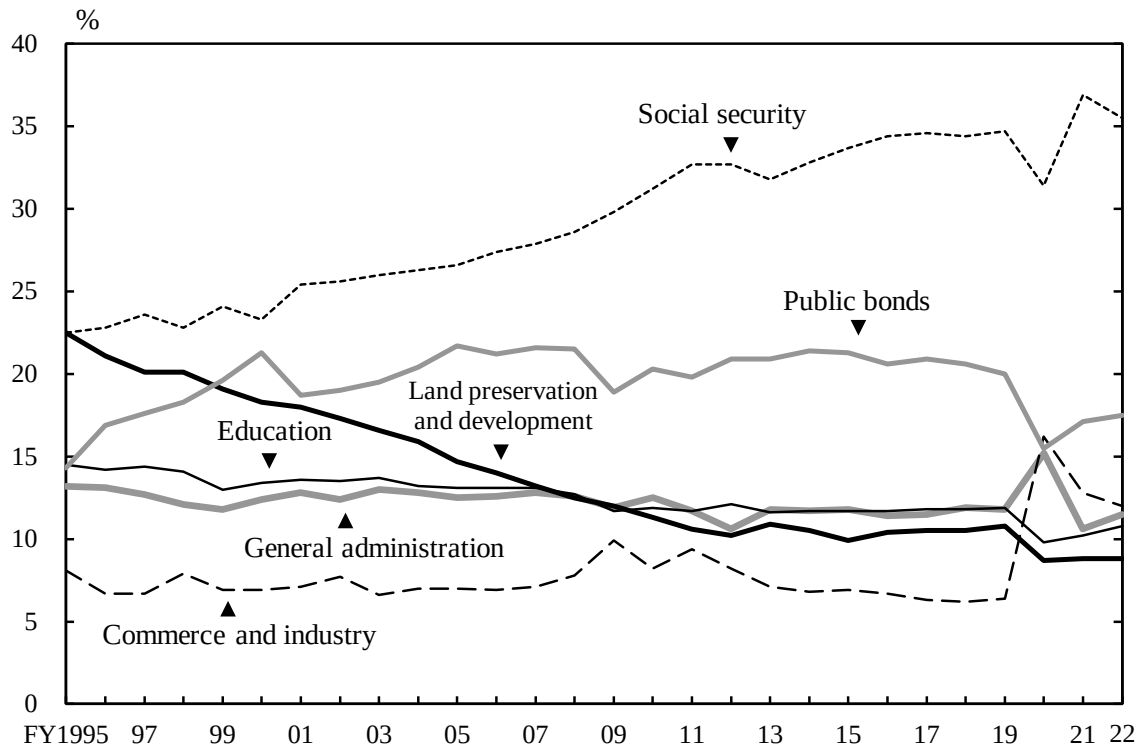
(Billion yen)

Item	FY2005	FY2010	FY2015	FY2020	FY2022	FY2023
General account	82,183	92,299	96,342	102,658	107,596	114,381
Special accounts	411,944	367,074	403,553	391,759	467,282	441,909
Government-affiliated agencies	4,678	3,135	2,216	1,722	2,519	2,646
Gross total (national)	498,805	462,508	502,111	496,139	577,398	558,936
Duplications	257,490	244,744	262,184	250,273	305,521	302,846
Net total (national)	241,316	217,764	239,927	245,867	271,877	256,091
Local public finance plan	83,769	82,127	87,768	91,747	90,993	92,358
Gross total (national + local)	325,084	299,891	327,694	337,614	362,870	348,449
Duplications	32,689	31,563	35,484	36,241	36,684	37,056
Net total (national + local)	292,395	268,328	292,211	301,373	326,185	311,393

Source: Policy Research Institute, Ministry of Finance.

The settlement amount for fiscal 2022, the net total of national and local government expenditures was 208 trillion yen. The national government disbursed 44.1 percent of this amount, while the local governments disbursed 55.9 percent.

Figure 4.3
Ratio of Net Total National and Local Expenditures by Function

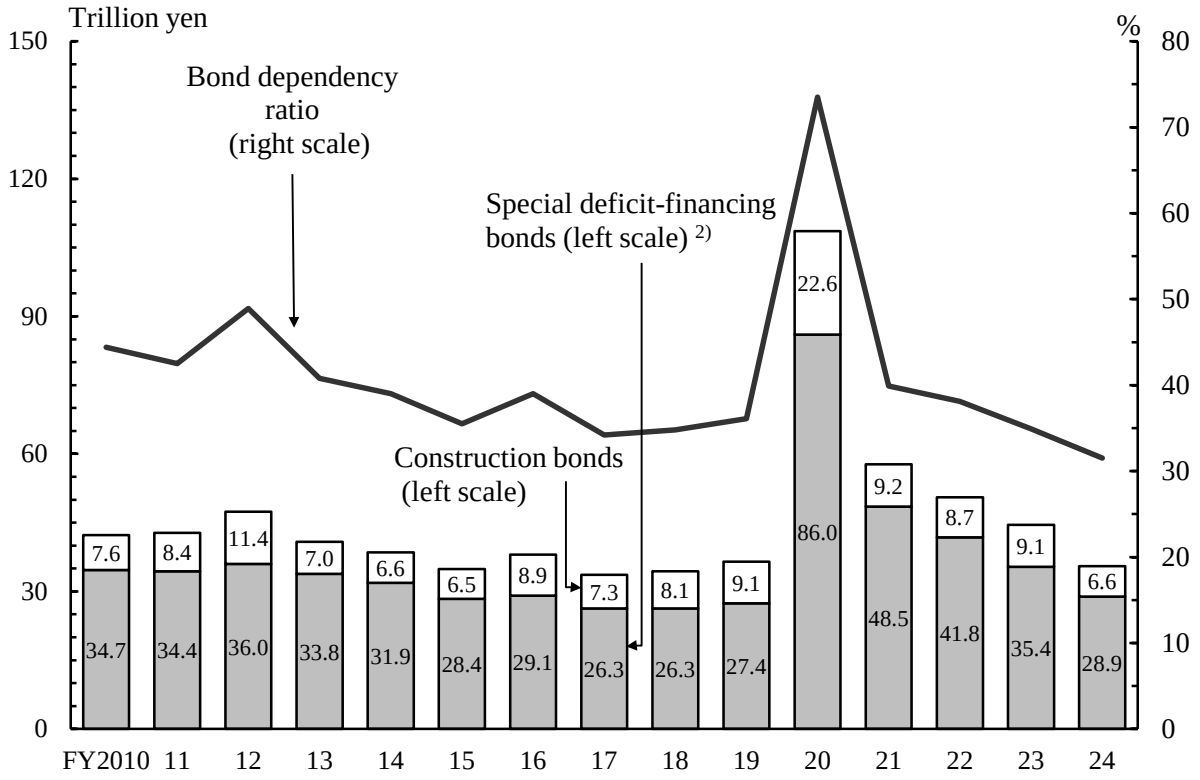


Source: Ministry of Internal Affairs and Communications.

A function-by-function breakdown of these expenditures showed that social security expenditure accounted for the largest portion (35.5 percent), followed by public bonds (17.5 percent), commerce and industry (12.0 percent), general administration (11.5 percent), education (10.8 percent), and then land preservation and development (8.8 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. The 2007-2008 Global Financial Crisis and the Great East Japan Earthquake of 2011 led to a major economic downturn, and for 4 years from fiscal 2009, bond issues continued to exceed tax revenue, but from fiscal 2013 to 2019, tax revenue picked up and exceeded bond issues. However, the spread of COVID-19 in 2020 caused a sudden contraction of the economy, and a huge supplementary budget for fiscal 2020 was financed by an additional issue of government bonds. As a result, bond issues in fiscal 2020 reached 109 trillion yen, exceeding the initial budget, but this dropped to 36 trillion yen at the

beginning of fiscal 2023, below the level prior to the COVID-19 pandemic.

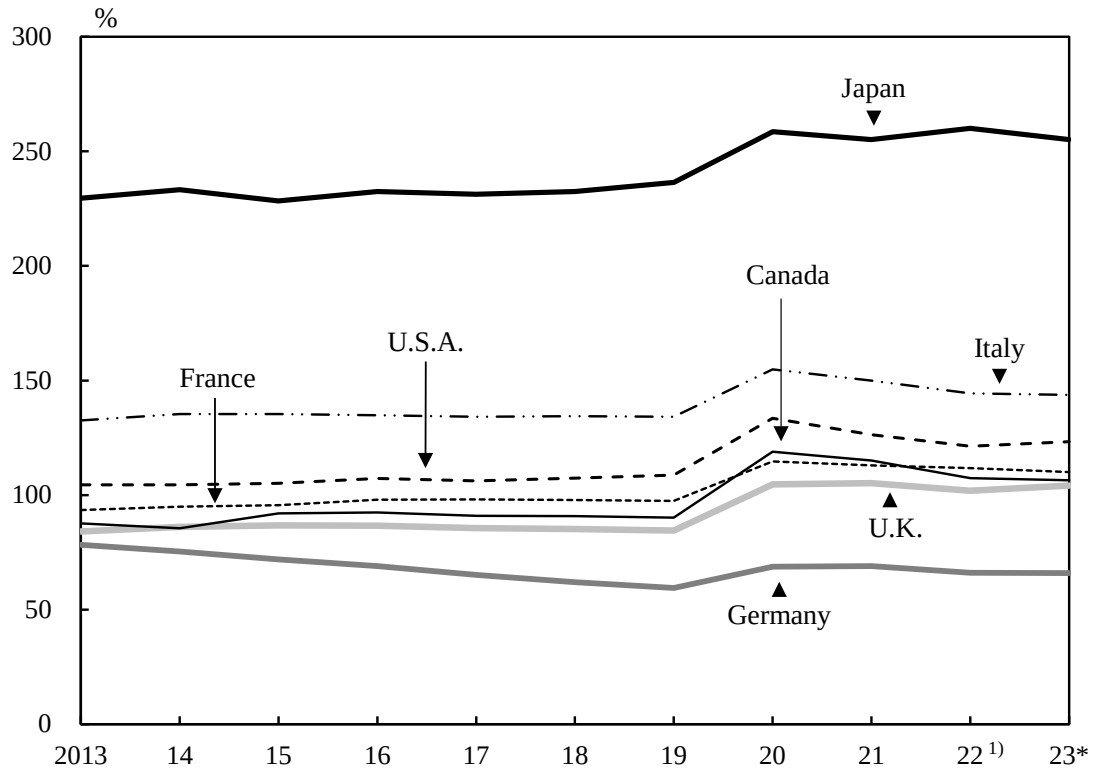
Figure 4.4
National Government Bond Issue and Bond Dependency Ratio [1)]



1) Based on settled figures until FY2022, supplementary budget for FY2023, and draft budget for FY2024. 2) Excludes some special accounts.
Source: Ministry of Finance.

Japan's ratio of outstanding general government debt to GDP, a stock measure in a fiscal context, is particularly high even compared to other major industrialized countries.

Figure 4.5
Ratio of General Government Gross Debt to GDP



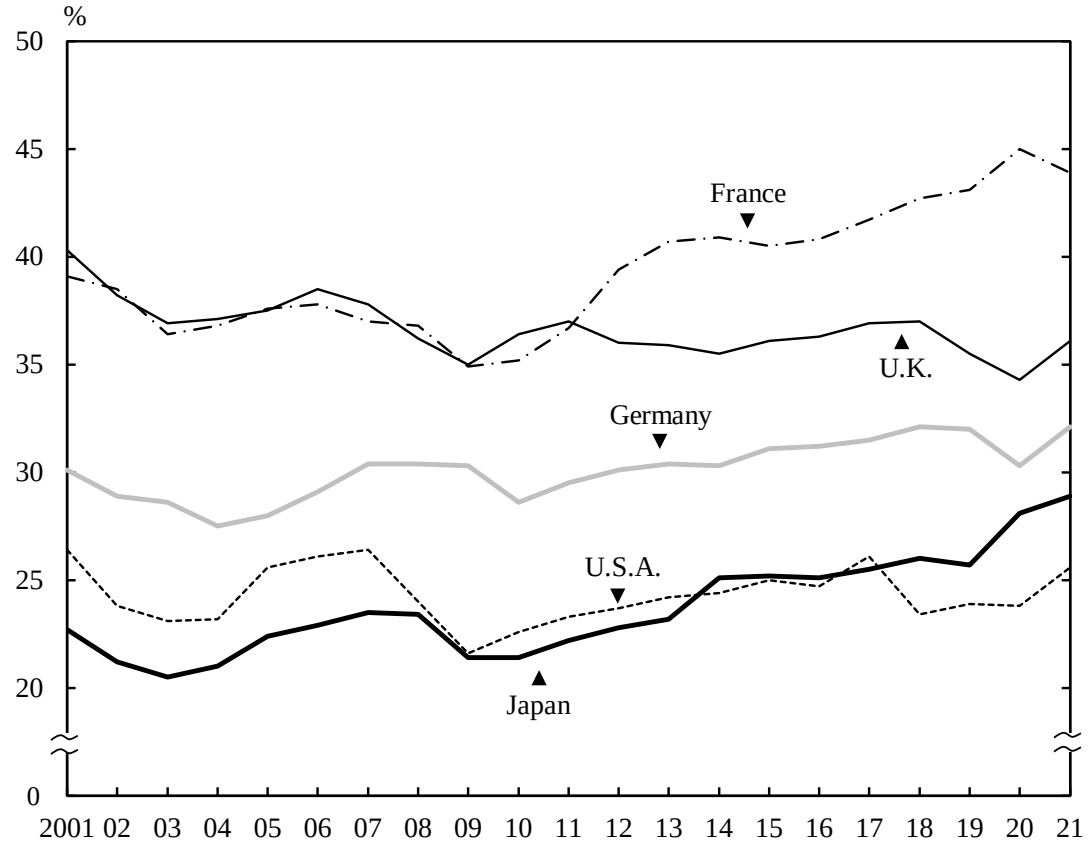
1) The data for Japan indicates estimated figure.
Source: Ministry of Finance.

(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 payer's residence. The ratio of taxation burden, which is the ratio of national and local taxes to national income, gradually increased until the fiscal 1990s, but the ratio subsequently decreased due to the decline in tax revenue arising from the recession after the bubble economy ended, reaching 20.5 percent in fiscal 2003. After that, the ratio gradually trended upward against a background of economic improvement, but declined in fiscal 2019 due to the COVID-19 pandemic. In fiscal 2021 it was 28.9 percent (18.2 percent for national tax and 10.7 percent for local tax). Japan's ratio is lower in comparison with other major industrial countries. However, the consumption tax rate was raised from 8 to 10

percent on October 1, 2019 due to the need to transition Japan's social security system, which is currently focused on benefits for the elderly, to an "all-generation type" usable by anyone, from children and youth to the elderly.

Figure 4.6
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 banknotes; (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 2023, currency in circulation totaled 129.4 trillion yen (124.6 trillion yen in banknotes and 4.8 trillion yen in coins), down 0.4 percent from the year before.

Table 4.4

Currency in Circulation (Outstanding at year-end)

(Billion yen)

Item	2019	2020	2021	2022	2023
Total	117,695	123,381	127,026	129,923	129,368
Banknotes	112,742	118,328	121,964	125,068	124,608
Coins	4,954	5,053	5,062	4,855	4,760

Source: Bank of Japan.

The Bank of Japan compiles and publishes statistics on the following indices of money stock: (i) M1, or currency in circulation plus deposit money deposited at depository institutions; (ii) M2, or currency in circulation plus deposits deposited at domestically licensed banks, etc.; (iii) M3, or currency in circulation plus deposits deposited at depository institutions; and (iv) L, or M3 plus pecuniary trusts plus investment trusts plus bank debentures plus straight bonds issued by banks plus commercial paper issued by financial institutions plus government securities plus foreign bonds. The average amounts outstanding of money stock in 2023 was 1,067 trillion yen in M1 and 1,231 trillion yen in M2.

Table 4.5

Money Stock [1] (Average amounts outstanding)

(Billion yen)

Year	M2	M3	M1	Quasi-money	CDs	L (Broadly-defined liquidity)
2019	1,026,190	1,359,446	795,672	534,908	28,866	1,805,939
2020	1,092,598	1,432,408	882,253	521,668	28,487	1,879,275
2021	1,162,665	1,511,654	968,976	508,400	34,278	1,982,216
2022	1,201,202	1,555,806	1,023,363	496,546	35,897	2,057,115
2023	1,231,152	1,586,417	1,066,648	488,726	31,043	2,109,160

1) "Money stock" indicates the aggregate amount of money, including currency in circulation and deposit money, held by money holders such as non-financial corporations, individuals, and local governments.

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 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. The Bank of Japan first introduced Quantitative and Qualitative Monetary Easing (QQE) in April 2013; in January 2016, it decided to introduce "QQE with a Negative Interest Rate". In September 2016, it was decided to introduce "QQE with Yield Curve Control" by strengthening these two policy frameworks, in order to achieve as early as possible the "price stability target" of a 2 percent year-on-year increase in consumer prices. After that, the target for the consumer price index was achieved due to rising crude oil and grain prices brought about by the situation in Ukraine and other factors. However, there was also a sharp depreciation of the yen due to widening of the interest differential with the U.S.A. and other countries, and rising prices were not reflective of economic recovery. Therefore, there is a cautious stance toward lifting the policy of 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 deposit in the Bank of Japan. It was 696.3 trillion yen as of the end of April 2024, up 2.3 percent from the same month of the previous year.

Table 4.6
Financial Markets (Interest rates, etc.)

(% per annum)

End of year	Basic discount rate and basic loan rate	Call rates [1)]	Prime lending rates [2)]	Average contract interest rates on loans and discounts [3)]	10 years' newly issued Govt. bond yields [4)]
2014	0.30	0.066	1.475	0.850	0.330
2015	0.30	0.038	1.475	0.778	0.270
2016	0.30	-0.058	1.475	0.623	0.040
2017	0.30	-0.062	1.475	0.584	0.045
2018	0.30	-0.055	1.475	0.597	-0.010
2019	0.30	-0.068	1.475	0.602	-0.025
2020	0.30	-0.033	1.475	0.481	0.020
2021	0.30	-0.018	1.475	0.475	0.070
2022	0.30	-0.022	1.475	0.440	0.410
2023	0.30	-0.039	1.475	0.452	0.620

1) Uncollateralized overnight. 2) Principal banks. Short-term loans.
3) Outstanding loans and bills discounted. Short-term loans and discounts. Figures are those of banking accounts of domestically licensed banks (excluding several banks) that conduct transactions with the Bank of Japan. 4) Simple yields. Figures are based on closing price.

Source: Bank of Japan; Japan Bond Trading Co., Ltd.

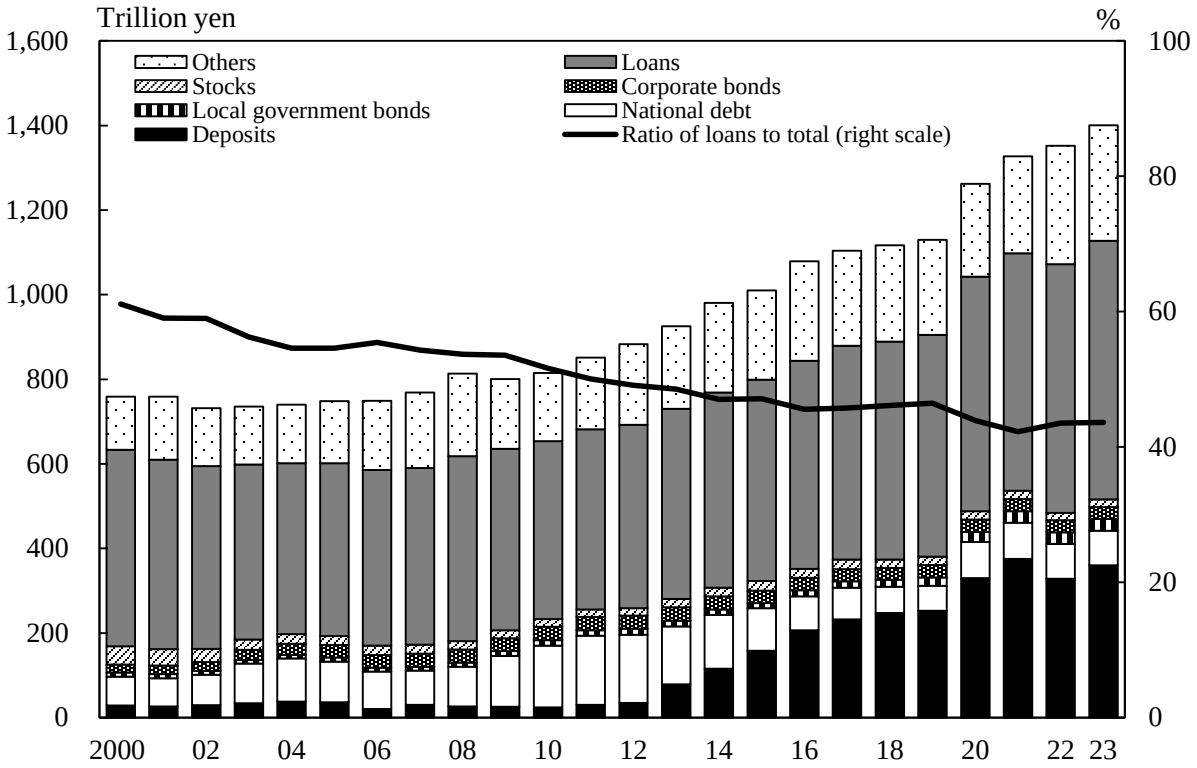
3. Financial Institutions

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.).

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. The number of regional banks and credit depositories has also declined significantly due to the progress of corporate mergers. As of the end of September 2023, in the number of offices operated domestically, including the branches of financial institutions, post offices had the largest network with 23,603 offices. Domestically licensed banks, including city banks and regional banks, had a combined total of 13,447 offices and branches.

The fundamental role of the bank sector is to adjust the surplus and deficiency of funds. In recent years, fund surplus in the corporate sector and fund deficiency in the government sector have continued, with various effects on the financial intermediation structure. As that structure changes, the percentage of loans to bank assets is exhibiting a downward trend over the long term.

Figure 4.7
Assets of Domestically Licensed Banks (Banking accounts, end of year)



Source: Bank of Japan.

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 9,242 trillion yen at the end of March 2023. Of these assets, those of the domestic nonfinancial sector were 4,321 trillion yen. Of this sector, the household sector (including the business funds of individual proprietorships) had assets of 2,056 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 and deposits.

Table 4.7
Financial Assets and Liabilities of Japan (End of fiscal year)

(Billion yen)

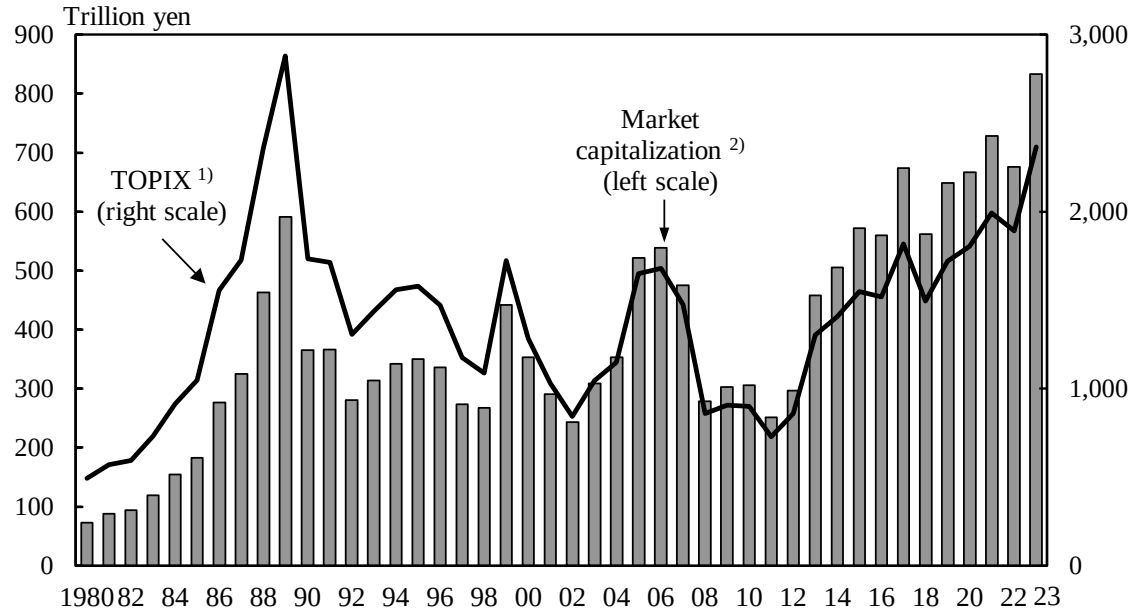
Sectors	FY2021	FY2022	Annual change (%)
Financial assets			
Domestic sectors	9,072,905	9,241,608	1.9
Financial institutions	4,863,734	4,920,474	1.2
Domestic nonfinancial sector	4,209,171	4,321,134	2.7
Nonfinancial corporations	1,372,443	1,422,636	3.7
General government	752,780	775,880	3.1
Households (incl. individual proprietorships)	2,021,388	2,055,876	1.7
Private nonprofit institutions serving households	62,560	66,742	6.7
Overseas	858,124	911,143	6.2
Financial liabilities			
Domestic sectors	8,641,015	8,797,540	1.8
Financial institutions	4,727,497	4,817,161	1.9
Domestic nonfinancial sector	3,913,518	3,980,379	1.7
Nonfinancial corporations	2,082,081	2,130,411	2.3
General government	1,426,655	1,436,591	0.7
Households (incl. individual proprietorships)	374,306	382,663	2.2
Private nonprofit institutions serving households	30,477	30,715	0.8
Overseas	1,283,588	1,348,043	5.0

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, it started to fall in 1990 ahead of land prices. The Tokyo Stock Price Index (TOPIX) rose sharply from the end of 1980 to the end of 1989, but suddenly dropped by the end of 1992. There was some subsequent rebound, but 1998 saw a further drop as a result of factors like financial worries due to the growth of non-performing assets at banks. After that, the index repeatedly fell and rose, but events such as the 2007-2008 Global Financial Crisis and the Great East Japan Earthquake had a major impact on corporate profits, and by the end of 2011, TOPIX had fallen to a level roughly one-fourth that at the end of 1989. Since 2012, there has been a major upturn as a result of the effects of various measures, including a comprehensive economic policy package called "Abenomics".

Figure 4.8
Stock Price Index and Market Capitalization
(Tokyo Stock Exchange, end of year)



1) A market benchmark with functionality as an investable index, covering an extensive proportion of the Japanese stock market. It is a free-float adjusted market capitalization-weighted index. It shows the measure of current market capitalization assuming that market capitalization as of the base date (January 4, 1968) is 100 points.
2) Until 2021, market capitalization indicates that of the First Section. From 2022, it indicates that of the Prime Market.
Source: Tokyo Stock Exchange, Inc.

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. In April 2013, changes in policies of the Bank of Japan 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 that of the end of 2012 (10,395.18 yen) and the first significant gain in 8 years. Afterwards, the Nikkei Stock Average in April 2015 recovered to the 20,000 yen level for the first time in 15 years. The closing price at the end of 2023 was 33,464.17 yen, up 7,369.67 yen, or 28.2 percent for the year, the first increase in 2 years. This was the highest year-end closing price since the 1989 all-time-high of 38,915.87 yen.

Table 4.8
Stock Prices (Tokyo Stock Exchange)

Year	Number of listed companies 1) 2)	Market capitalization 1) 2) (million yen)	Total trading value 2) 3) (million yen)	TOPIX 1) 4) Tokyo stock price index, average	Nikkei Stock Average (225 issues) 1) 5) (yen)
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	1,934	571,832,889	696,509,496	1,547.30	19,033.71
2016	2,002	560,246,997	643,205,780	1,518.61	19,114.37
2017	2,062	674,199,186	683,218,254	1,817.56	22,764.94
2018	2,128	562,121,332	740,746,041	1,494.09	20,014.77
2019	2,160	648,224,522	598,213,662	1,721.36	23,656.62
2020	2,186	666,862,093	671,671,658	1,804.68	27,444.17
2021	2,182	728,424,514	765,249,832	1,992.33	28,791.71
2022	1,838	676,270,419	605,604,601	1,891.71	26,094.50
2023	1,657	833,007,509	943,955,094	2,366.39	33,464.17

1) End of year. 2) Until 2021, they indicate that of the First Section. From 2022, they indicate that of the Prime Market. 3) The figure for 2022 excludes First Section trading value of 211,610,492 (million yen). 4) A market benchmark with functionality as an investable index, covering an extensive proportion of the Japanese stock market. It is a free-float adjusted market capitalization-weighted index. It shows the measure of current market capitalization assuming that market capitalization as of the base date (January 4, 1968) is 100 points. 5) Closing price.
Source: Tokyo Stock Exchange, Inc.; Nikkei Inc.

At the end of March 2023, 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 69.8 million. In terms of value, the ratio of stocks they possessed was 17.6 percent, up 1.0 percentage points from the previous fiscal year. The ratio of Japanese stocks held by foreign investors (non-Japanese corporations and individuals) was 30.1 percent in terms of value, down 0.3 percentage points from the previous fiscal year, and exceeding 30 percent for the third consecutive year.

A survey conducted by the Japan Securities Dealers Association (JSDA) showed that 34.6 percent of 269 securities firms offered Internet trading at the end of September 2023. Internet trading thus accounted for 24.9 percent of the total value of stock brokerage transactions from April to September 2023.

Chapter 5

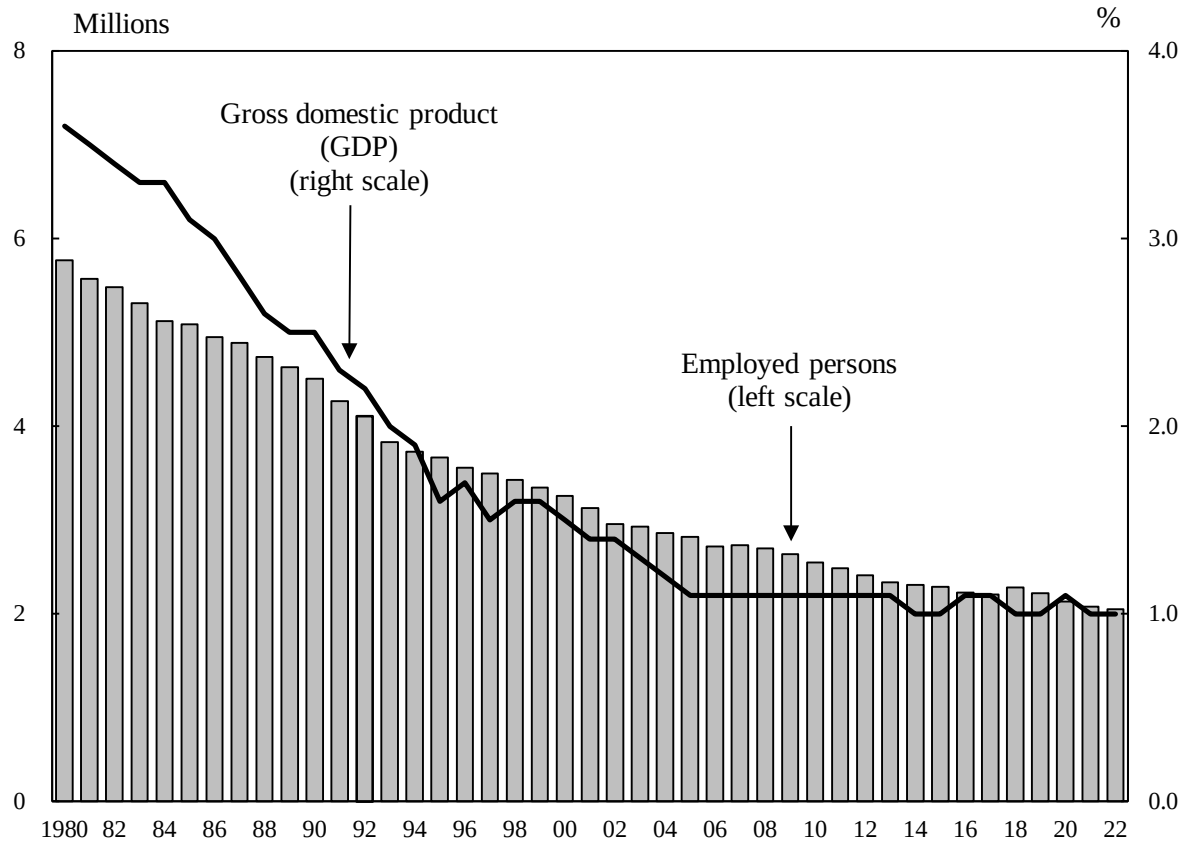
Agriculture, Forestry, and Fisheries

A scene of seaweed seeding.
Seaweed grows when spores attached to oyster shells are placed in a net and spread out in the sea. The process of spreading nets with oyster shells and their attached seaweed spores in the sea is called seeding, and it is an important time in seaweed cultivation.

1. Overview of Agriculture, Forestry, and Fisheries

Over the course of Japan's economic growth, its agricultural, forestry and fishing industries have employed fewer and fewer workers every year, and their nominal GDP share has also dropped. The number of employed persons decreased from 5.77 million in 1980 (10.4 percent of the total employed persons) to 2.05 million in 2022 (3.0 percent), and the GDP share of the industries fell from 3.6 percent in 1980 to 1.0 percent in 2022.

Figure 5.1
Number of Employed Persons and Percentage of Gross Domestic Product (Nominal prices) [1] **for Agriculture, Forestry, and Fisheries**



1) 1980-1993 data: 1993 SNA, Benchmark year = 2000. 1994-2022 data: 2008 SNA, Benchmark year = 2015.
Source: Statistics Bureau, MIC; Economic and Social Research Institute, Cabinet Office.

2. Agriculture

(1) Agricultural Production

Japan's total agricultural output in 2022 was 9.00 trillion yen, up 1.8 percent from the previous year. Among this, crops yielded 5.48 trillion yen, up 1.8 percent from the previous year. Livestock yielded 3.47 trillion yen, up 1.9 percent from the previous year.

Table 5.1
Total Agricultural Output

(Billion yen)

Item	2018	2019	2020	2021	2022
Total	9,056	8,894	8,937	8,838	9,002
Crops	5,782	5,630	5,656	5,379	5,477
Rice	1,742	1,743	1,643	1,370	1,395
Vegetables	2,321	2,152	2,252	2,147	2,230
Fruits and nuts	841	840	874	916	923
Livestock and its products	3,213	3,211	3,237	3,405	3,468
Beef cattle	762	788	739	823	826
Dairy cattle	911	919	925	922	901
Pigs	606	606	662	636	671
Chickens	861	823	833	936	972

Source: Ministry of Agriculture, Forestry and Fisheries.

Table 5.2
Agricultural Harvest

(Thousand tons)

Products	2018	2019	2020	2021	2022
Cereal grains					
Rice	7,782	7,764	7,765	7,564	7,270
Wheat	765	1,037	949	1,097	994
Vegetables, sweet potatoes, and beans					
Potatoes	2,260	2,399	2,205	2,175	2,283
Sweet potatoes	797	749	688	672	711
Soybeans	211	218	219	247	243
Cucumbers	550	548	539	551	549
Tomatoes	724	721	706	725	708
Cabbages	1,467	1,472	1,434	1,485	1,458
Chinese cabbages	890	875	892	900	875
Onions	1,155	1,334	1,357	1,096	1,219
Lettuces	586	578	564	547	553
Japanese radishes	1,328	1,300	1,254	1,251	1,181
Carrots	575	595	586	636	582
Fruits					
Mandarins	774	747	766	749	682
Apples	756	702	763	662	737
Grapes	175	173	163	165	163
Japanese pears	232	210	171	185	197
Industrial crops					
Crude tea [1)]	86	82	70	78	77
Sugar beets [2)]	3,611	3,986	3,912	4,061	3,545

1) Production. 2) Area of Hokkaido Prefecture.
Source: Ministry of Agriculture, Forestry and Fisheries.

(2) Agriculture Management Entity and Cultivated Land

In 2020, there were 1.076 million agriculture management entities (entities producing agricultural products, or performing contract agricultural work, where the area or number of animals involved in the production or work is as stipulated), a decrease of around 302,000 entities (21.9 percent) compared to 2015.

Among agriculture management entities, there were 1.037 million individual management entities (non-corporate family management entities), a decrease of around 303,000 entities (22.6 percent) compared to 2015. Group management entities (entities other than individual

management entities) increased by around 1,000 entities (2.8 percent) to around 38,000 entities.

Table 5.3
Number of Agriculture Management Entities

(Thousand entities)

Year	Agriculture management entities	Individual management entities	Group management entities	Corporated management entities
2010	1,679	1,644	36	22
2015	1,377	1,340	37	27
2020	1,076	1,037	38	31
Percent change (%)				
2015 / 2010	-18.0	-18.5	4.9	25.3
2020 / 2015	-21.9	-22.6	2.8	13.3

Source: Ministry of Agriculture, Forestry and Fisheries.

Average agriculture gross income for all farming types and all agriculture management entities (individual management entities and corporated management entities) in 2022 was 11.66 million yen, an increase of 8.2 percent compared to the previous year. On the other hand, agriculture expenditures increased 12.2 percent compared to the previous year to 10.67 million yen. As a result, agriculture income decreased by 21.7 percent compared to the previous year to 0.98 million yen.

Japan's cultivated acreage shrank year after year from 6.09 million hectares in 1961 to 4.30 million hectares in 2023. After 1989, the cultivated acreage has continued to decrease due to diversion into residential land, ruined land continuously resulting from devastated land, etc.

3. Forestry

As of 2022, Japan's forest land area is 25.02 million hectares (approximately 70 percent of the entire surface area of the country). Among Japan's forests, natural forests account for 13.55 million hectares, while planted forests make up 10.09 million hectares.

Japan's forest growing stock is 5,560 million cubic meters as of 2022, 3,545 million cubic meters of which are from planted forests. The stock rose mainly with the increase of that from planted forests on deforested sites right after World War II and during the period of rapid economic growth. Such forests are in a period of full-scale use as resources. Use of lumber also contributes to the sustained manifestation of the diverse functions of forests, such as mitigation of global warming, and revitalization of regional economies. In recent years, efforts have been made to use lumber in diverse ways beyond the housing field, such as for structures and interiors/exteriors in the non-housing field, including both public and private sector buildings, and as woody biomass for energy.

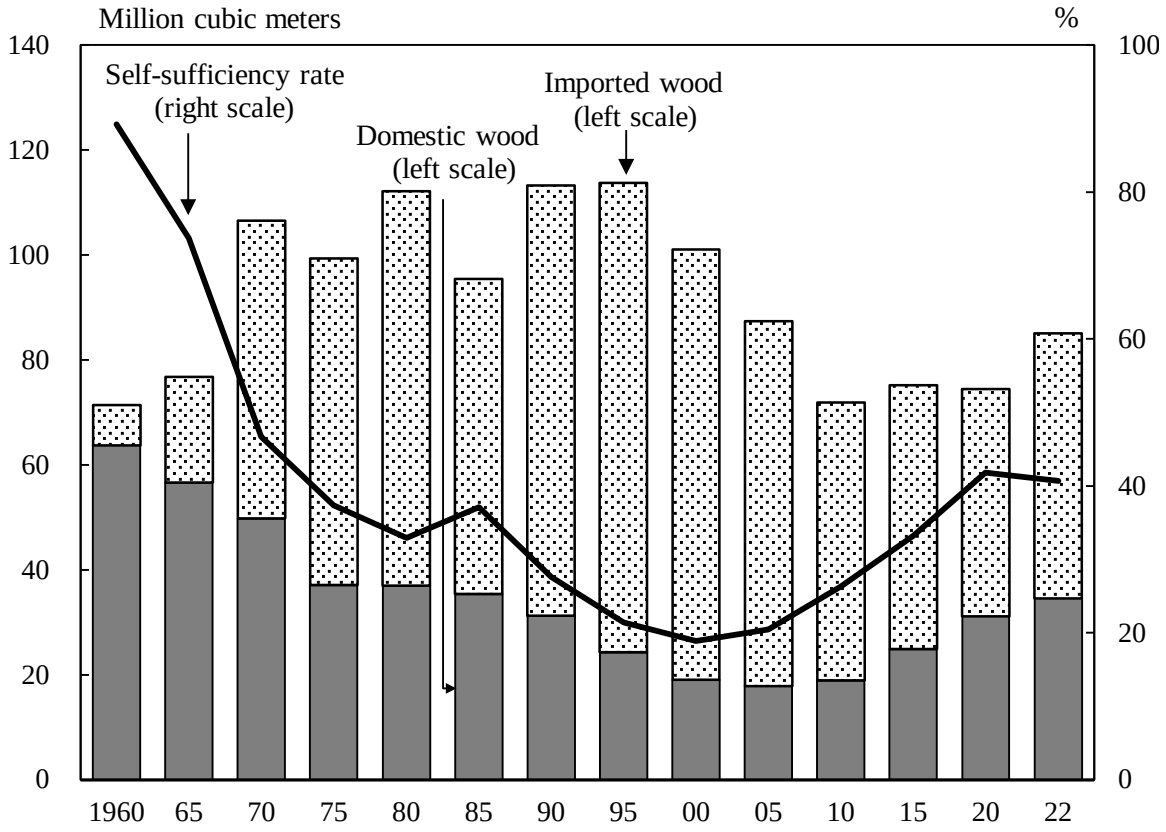
Table 5.4
Forest Land Area and Forest Resources (2022)

Item	Total	National forest	Non-national forest		
			Public	Private	Others
Forest land area (1,000 ha)	25,025	7,657	3,009	14,311	47
Forest growing stock (million m^3) ...	5,560	1,301	659	3,597	4
Planted forest					
Land area (1,000 ha)	10,093	2,247	1,334	6,500	12
Growing stock (million m^3)	3,545	554	428	2,562	2
Natural forest					
Land area (1,000 ha)	13,553	4,756	1,548	7,220	28
Growing stock (million m^3)	2,014	746	231	1,034	2

Source: Ministry of Agriculture, Forestry and Fisheries.

After reaching a low of 16.9 million cubic meters in 2002, domestic wood supply is on a rising trend, against the background of an enrichment of forest resources, increase in the use of domestic timber such as Japanese cedar for plywood material, increase in use of fuel timber in wood biomass power generation facilities, etc.

Figure 5.2
Wood Supply and Self-Sufficiency Rate [1)]



1) Wood supply refers to the sum of wood for industrial use, wood for mushroom production, fuel wood, etc. and imported wood products, converted into a log equivalent.
Source: Ministry of Agriculture, Forestry and Fisheries.

Securing a forestry labour force will be vital not only for forestry, but also for creating employment based on local resources, and revitalizing mountain villages by promoting permanent residence. The number of workers engaged in forestry occupations such as stand tending and tree felling is in a declining trend over the long term, and decreased by 8,463 workers from 52,173 in 2005 to 43,710 in 2020.

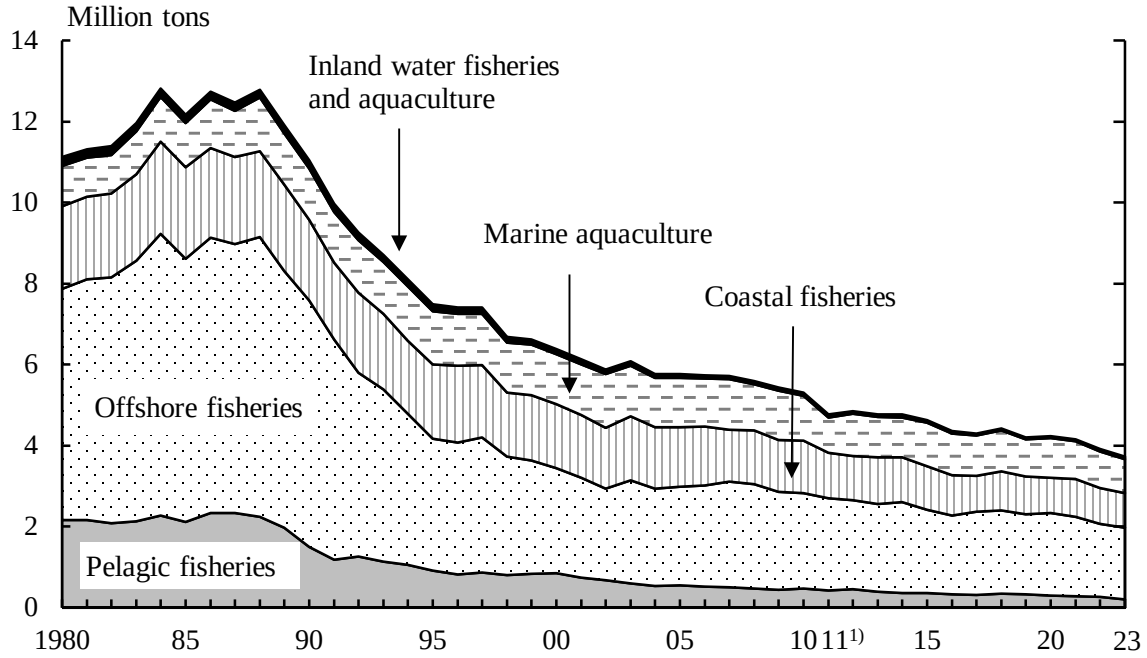
4. Fisheries

(1) Fishery Production

Japan is facing a problem in that its fishery production is in a declining trend over the long term. This is likely due to a variety of factors, such as changes in the marine environment and more intensive operations by foreign fishing boats in waters surrounding Japan. There are thought to be many fishery resources whose decline could have been prevented or mitigated with more appropriate resource management.

After peaking in 1984, Japan's fishery output decreased rapidly until around 1995, and has continued to decrease gradually afterwards. Its 2023 fishery production totaled 3.72 million tons.

Figure 5.3
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 5.5

Production by Fishery Type and Major Kinds of Fish

(Thousand tons)

Fishery type and species	2019	2020	2021	2022	2023*
Total	4,204	4,236	4,158	3,917	3,724
Marine fishery	3,235	3,215	3,179	2,951	2,823
Tunas	161	177	148	122	130
Skipjack, Frigate mackerel	237	196	239	197	167
Sardine	561	698	640	642	681
Mackerels	452	390	442	320	261
Shellfishes	386	382	389	373	363
Crabs	23	21	21	20	21
Cuttlefishes	73	82	64	59	47
Marine aquaculture	915	970	927	912	849
Yellowtails	136	138	134	114	123
Oysters	162	159	159	166	146
Laver ("nori")	251	289	237	232	201
Seaweed ("wakame")	45	54	44	47	50
Pearl (tons)	19	16	13	13	12
Inland water fishery	22	22	19	23	22
Salmons, trouts	7	7	5	10	8
Sweet fish	2	2	2	2	2
Fresh water clams	10	9	9	8	9
Inland water aquaculture	31	29	33	32	30
Eel	17	17	21	19	18
Trouts	7	6	6	7	7
Sweet fish	4	4	4	4	3

Source: Ministry of Agriculture, Forestry and Fisheries.

(2) Fishery Workers

The number of fishery workers (those aged 15 years old and over who have worked at sea for 30 days or more in the past year) continues to decline. In 2022, the number of such workers was 123,100 workers, down 4.8 percent compared to the previous year.

Table 5.6
Enterprises and Workers Engaged in the Marine Fishery/ Aquaculture Industry

Year	Enterprises			Workers		
	Total	Individual households	Corporate entities	Total	Self-employed	Hired
2005	126,020	118,930	7,090	222,170	…	…
2010	103,740	98,300	5,440	202,880	128,270	74,610
2015	85,210	80,570	4,640	166,610	100,520	66,100
2020	69,560	65,310	4,250	135,660	75,810	59,850
2022	61,360	57,440	3,930	123,100	67,720	55,370

Source: Ministry of Agriculture, Forestry and Fisheries.

While the aging of workers and fishing vessels progresses, a considerable number of people from the city are interested in fishing as a field of work or new occupation due to the diversification of values regarding work and life.

5. Self-Sufficiency in Food

Japan's food self-sufficiency ratio in terms of calories has shown a downward trend over the long term. It fell to 40 percent in fiscal 1998, and has fluctuated roughly around that level since. It was 38 percent in fiscal 2022. The major reasons behind the low food self-sufficiency ratio are a decline in consumption of rice, for which demand can be met with domestic production, and increased consumption of livestock products, oils and fats, etc., which are dependent on overseas sources for most feed and raw materials.

In fiscal 2022, the self-sufficiency ratio per item (on weight basis) was 99 percent for rice, 15 percent for wheat, 7 percent for beans, 79 percent for vegetables, 39 percent for fruits, 53 percent for meat, and 54 percent for seafood. While almost completely self-sufficient in rice, the staple food of its people, Japan rely almost entirely on imports for the supply of wheat and beans.

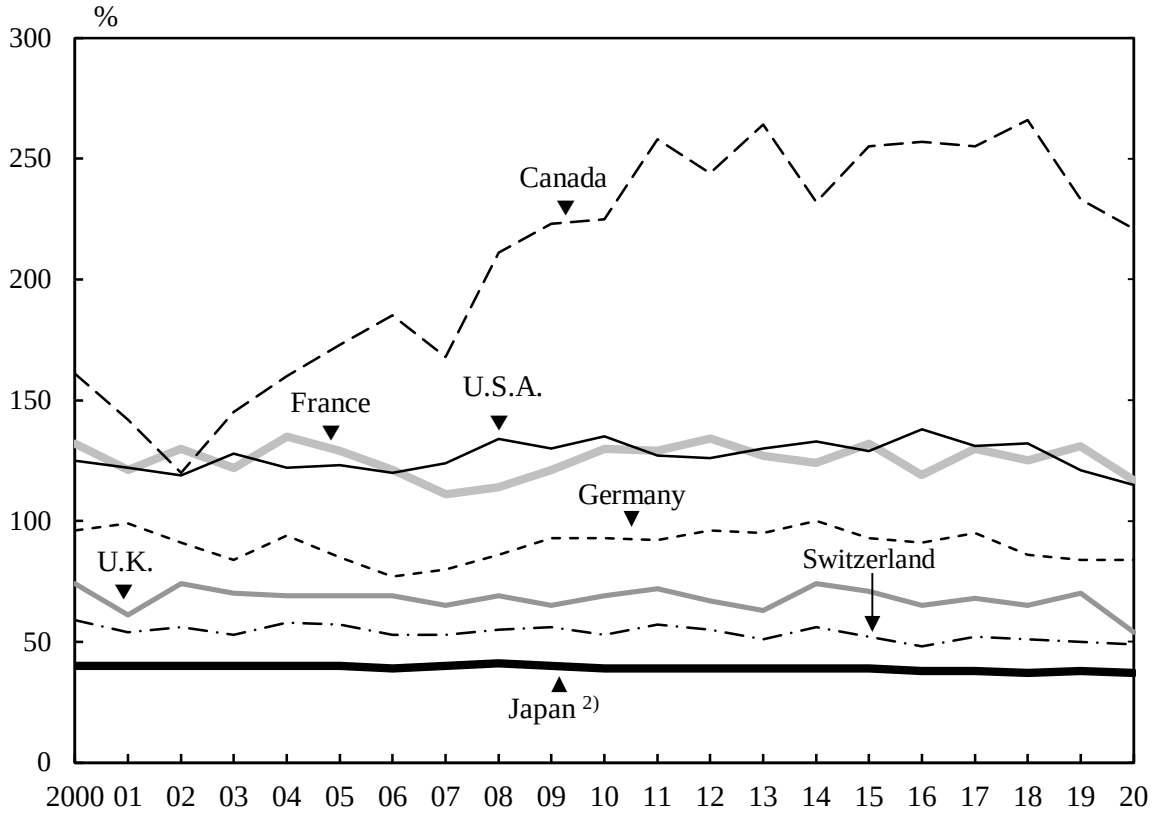
Table 5.7
Food Supply and Demand

Fiscal year	Domestic production (1,000 t)	Supplies for domestic consumption (1,000 t)	Imports (1,000 t)	Food self-sufficiency ratio (%)
Rice				
2005	8,998	9,222	978	95
2010	8,554	9,018	831	97
2015	8,429	8,600	834	98
2020	8,145	7,855	814	97
2022*	8,073	8,236	832	99
Wheat				
2005	875	6,213	5,292	14
2010	571	6,384	5,473	9
2015	1,004	6,583	5,660	15
2020	949	6,412	5,521	15
2022*	994	6,469	5,512	15
Beans				
2005	352	4,790	4,482	7
2010	317	4,035	3,748	8
2015	346	3,789	3,511	9
2020	290	3,843	3,411	8
2022*	313	4,279	3,969	7
Vegetables				
2005	12,492	15,849	3,367	79
2010	11,730	14,508	2,783	81
2015	11,856	14,776	2,941	80
2020	11,511	14,438	2,987	80
2022*	11,237	14,172	2,970	79
Fruits				
2005	3,703	9,036	5,437	41
2010	2,960	7,719	4,756	38
2015	2,969	7,263	4,351	41
2020	2,674	7,104	4,504	38
2022*	2,645	6,783	4,233	39
Meat				
2005	3,045	5,649	2,703	54
2010	3,215	5,769	2,588	56
2015	3,269	6,036	2,769	54
2020	3,449	6,531	3,037	53
2022*	3,473	6,570	3,191	53
Seafood				
2005	5,152	10,201	5,782	51
2010	4,782	8,701	4,841	55
2015	4,194	7,663	4,263	55
2020	3,772	6,838	3,885	55
2022*	3,477	6,425	3,781	54

Source: Ministry of Agriculture, Forestry and Fisheries.

Japan's present food self-sufficiency ratio is the lowest among major industrialized countries, and Japan is thus the world's leading importer of food products.

Figure 5.4
Trends in Food Self-Sufficiency Ratio of Major Countries 1)
(On calorie supply basis)



1) Estimates except for Japan. 2) Fiscal year.
Source: Ministry of Agriculture, Forestry and Fisheries.

Chapter 6

Manufacturing and Construction

Twilight.
In the composition ratio of manufactured goods shipments by industrial classification in the "2022 Annual Business Survey", the highest value is for "manufacture of transport equipment" (63.1 trillion yen, composition ratio 19.1 percent), including automobiles, ships, etc.

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, but it still plays a role as a core industry supporting the Japanese economy.

In years past, Japan's manufacturing industry has faced a variety of unforeseeable circumstances and drastic changes in the business environment. These include the Nixon Shock and two oil crises in the 1970s, the strong yen recession following the Plaza Accord in the 1980s, the bursting of the bubble economy and the Asian currency crisis in the 1990s, and the 2007-2008 Global Financial Crisis, the European debt crisis, and the Great East Japan Earthquake in the 21st century. Since 2020, the environment surrounding the manufacturing industry has continued to change due to factors such as the COVID-19 pandemic, increased risk of supply chain breakdowns brought on by instability in the international situation due to events like Russia's invasion of Ukraine, and the rising global trend toward decarbonization. Business models themselves have also changed in the manufacturing industry due to increasing utilization of digital technology and data at manufacturing sites, and there are still many issues that must be addressed for the Japanese manufacturing industry to maintain and strengthen its competitiveness.

In 2022, there were 222,770 establishments (excluding individual proprietorships) in the manufacturing sector. By industry, "fabricated metal products" had the most, with 30,648 establishments (component ratio of 13.8 percent), followed by "food" with 24,654 establishments (11.1 percent) and "production machinery" with 23,478 establishments (10.5 percent).

In 2022, there were 7.71 million persons engaged, and by industry, "food" had the most, with 1.11 million persons engaged (component ratio of 14.3 percent), followed by "transportation equipment" with 1.04 million persons engaged (13.4 percent) and "production machinery" with 0.66 million persons engaged (8.6 percent).

The value of manufactured goods shipments in 2021 was 330.22 trillion yen, and by industry, "transportation equipment" had the most at 63.12 trillion yen (component ratio of 19.1 percent), followed by "chemical and allied products" at 31.71 trillion yen (9.6 percent) and "food" at 29.93 trillion yen (9.1 percent).

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

Industries	Number of establish-ments (2022)	Number of persons engaged (2022)	Value of manu-factured goods shipments (2021) (billion yen)
Manufacturing	222,770	7,714,495	330,220
Food	24,654	1,105,543	29,935
Beverages, tobacco and feed	5,159	106,717	9,570
Textile products	13,316	230,550	3,653
Lumber and wood products [2)]	6,223	92,450	3,246
Furniture and fixtures	6,366	92,147	2,009
Pulp, paper and paper products	5,960	180,748	7,214
Printing and allied industries	13,536	252,593	4,856
Chemical and allied products	5,623	390,918	31,708
Petroleum and coal products	1,281	27,892	14,433
Plastic products [3)]	13,719	449,270	13,030
Rubber products	2,378	113,806	3,376
Leather tanning, leather products and fur skins	1,261	18,088	280
Ceramic, stone and clay products	10,871	243,516	7,975
Iron and steel	5,010	221,240	19,719
Non-ferrous metals and products	3,060	145,892	11,951
Fabricated metal products	30,648	610,218	15,881
General-purpose machinery	8,124	329,433	12,215
Production machinery	23,478	661,660	22,879
Business oriented machinery	4,811	213,168	6,577
Electronic parts, devices and electronic circuits	4,490	414,194	16,442
Electrical machinery, equipment and supplies	9,942	504,943	19,499
Information and communication electronics equipment	1,277	112,178	6,135
Transportation equipment	11,113	1,035,398	63,120
Miscellaneous manufacturing industries	10,470	161,933	4,518

1) Excluding individual proprietorships. 2) Excluding furniture.
3) Excluding plastic furniture, plastic plate making for printing, etc., which are included in other industrial classification.
Source: Statistics Bureau, MIC; Ministry of Economy, Trade and Industry.

With regard to the "Indices on Mining and Manufacturing" (2020 average=100), the production index for 2023 was 103.9, down 1.3 percent from the previous year, while shipments stood at 103.2, a decrease of 0.7 percent from the year before.

Table 6.2

Indices on Mining and Manufacturing (2023)

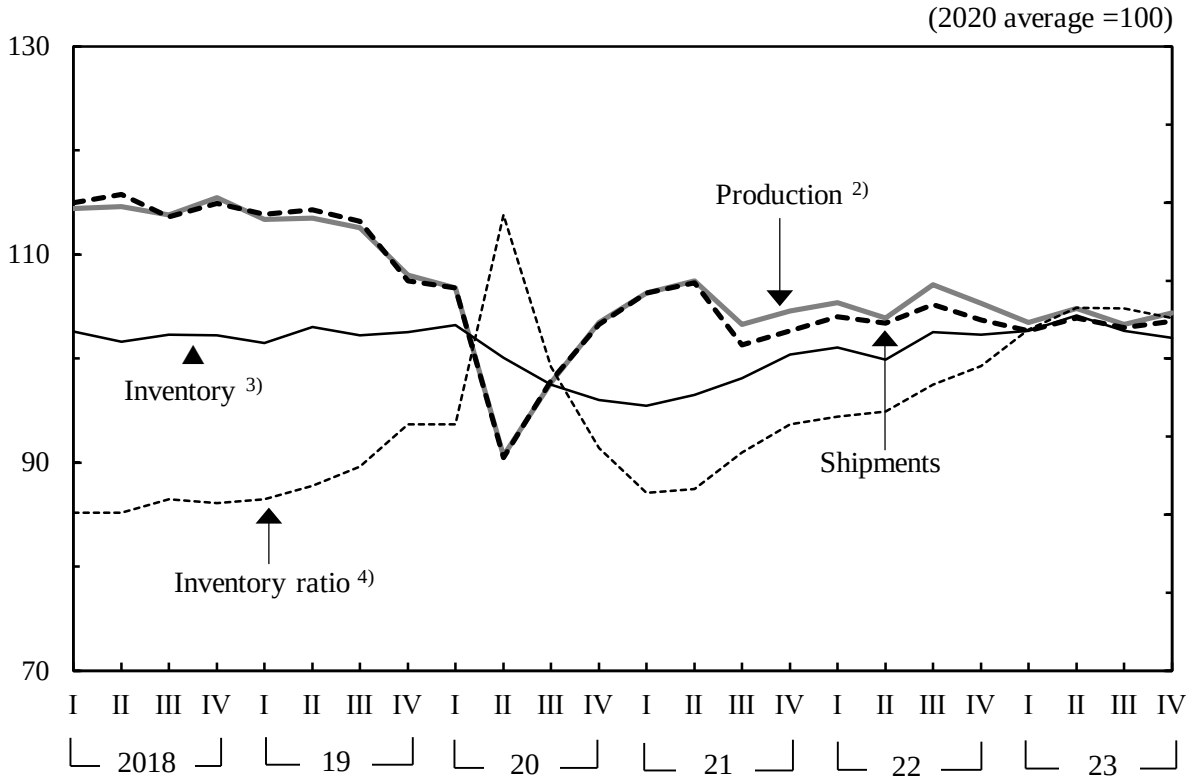
(2020 average =100)

Industries	Production [1]		Shipments		Inventory [2]		Inventory Ratio [3]	
		Annual growth (%)		Annual growth (%)		Annual growth (%)		Annual growth (%)
Mining and manufacturing	103.9	-1.3	103.2	-0.7	100.7	-0.5	104.0	7.7
Manufacturing	104.0	-1.2	103.3	-0.6	100.7	-0.5	104.0	7.7
Iron, steel and non-ferrous metals	104.5	-2.9	103.3	-3.1	97.4	-9.6	97.8	-1.5
Iron and steel	106.1	-2.3	104.2	-3.2	94.6	-6.9	92.8	-3.9
Fabricated metals	99.2	-3.7	97.0	-3.7	94.9	-0.2	113.1	14.7
Production machinery	120.7	-9.9	120.9	-9.4	110.5	10.5	97.2	16.5
General-purpose and business oriented machinery	111.6	-3.1	110.4	-3.3	128.4	8.7	114.5	18.3
General-purpose machinery	110.4	-4.7	110.9	-4.3	109.0	-1.4	100.3	9.1
Electronic parts and devices	94.6	-9.7	99.0	-8.8	88.9	-25.1	133.0	29.3
Electrical machinery, and information and communication electronics equipment	106.0	1.3	102.7	1.4	107.6	-9.1	114.4	2.5
Electrical machinery	110.2	0.6	109.1	1.5	109.9	-12.8	113.9	-2.4
Information and communication electronics equipment	90.8	4.6	83.8	0.8	99.9	8.4	115.7	18.5
Transport equipment	111.5	14.2	110.8	13.8	117.2	12.4	101.3	-0.1
Ceramics, stone and clay products	94.1	-5.1	94.6	-4.7	98.9	-2.4	108.9	4.8
Chemicals	99.7	-3.8	97.6	-3.3	92.4	-3.0	100.1	8.6
Petroleum and coal products	102.1	-4.2	99.8	-2.7	101.2	-4.1	103.7	8.2
Plastic products	98.8	-2.0	98.6	-1.0	110.7	-0.2	117.8	7.8
Pulp, paper and paper products	96.2	-5.6	94.8	-7.0	86.0	0.0	96.0	6.1
Foods and tobacco	98.3	-0.4	97.4	-0.7	96.4	24.2	97.1	4.2
Other manufacturing	100.3	-4.0	98.2	-4.8	98.2	1.6	97.2	9.1
Mining	88.6	-6.6	93.9	-6.2	100.4	4.8	104.4	11.1
(Reference) Electricity, gas, heat supply and water	99.8	-3.5	100.0	-3.2	-	-	-	-

1) Value added weights. 2) End of the year. 3) Inventory ratio = Inventory quantity / Shipments quantity.

Source: Ministry of Economy, Trade and Industry.

Figure 6.1
Trends in Indices on Mining and Manufacturing [1)]



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 "2022 Annual Business Survey", and (b) is described by the "Indices on Mining and Manufacturing" (2020 average = 100).

(1) Transport Equipment Industry

(a) In 2022, a total of 11,113 establishments employed 1,035,398 persons, and shipped 63.1 trillion yen worth of products in 2021.

(b) In 2023, production and shipments increased by 14.2 percent and 13.8 percent, respectively, from the previous year, representing their first increase in 5 years. These increases (in both production and shipments)

were due to an increase in "passenger cars", "car body and automobile parts", etc.

(2) Chemical Industry

(a) In 2022, a total of 5,623 establishments employed 390,918 persons, and shipped 31.7 trillion yen worth of products in 2021.

(b) In 2023, production and shipments decreased by 3.8 percent and 3.3 percent, respectively, from the previous year, representing their second consecutive years of decrease. These decreases (in both production and shipments) were due to a decrease in "cosmetics", "plastic", etc.

(3) Iron and Steel Industry

(a) In 2022, a total of 5,010 establishments employed 221,240 persons, and shipped 19.7 trillion yen worth of products in 2021.

(b) In 2023, production and shipments decreased by 2.3 percent and 3.2 percent, respectively, from the previous year, representing their second consecutive years of decrease. The decrease in production was due to a decrease in "hot rolled steel", "iron and steel crude products", etc. The decrease in shipments was due to a decrease in "hot rolled steel", "non-ferrous metal refined and purified goods", etc.

(4) Fabricated Metals Industry

(a) In 2022, a total of 30,648 establishments employed 610,218 persons, and shipped 15.9 trillion yen worth of products in 2021.

(b) In 2023, production and shipments both decreased by 3.7 percent from the previous year, representing their second consecutive years of decrease. These decreases (in both production and shipments) were due to a decrease in "cans", "metal products of building", etc.

3. Construction

The construction industry is indispensable in supporting the development of social capital, and fulfills a large role in building a vibrant future for Japan, such as through urban regeneration and regional revitalization. It also plays an extremely important role as a "local guardian" in disaster recovery, disaster prevention/reduction, deterioration countermeasures, etc.

Construction investments at nominal prices was on a declining trend after reaching a peak of 84 trillion yen in fiscal 1992, and fell to about half of this peak (42 trillion yen) in fiscal 2010. Since then, they have been on a recovery trend due to such factors as the recovery from the Great East Japan Earthquake.

Construction investments in fiscal 2022 amounted to 68.8 trillion yen at nominal prices, up 1.5 percent compared to the previous fiscal year.

A breakdown of construction investment (nominal prices) shows that building construction totaled 43.2 trillion yen (up 0.6 percent from the previous fiscal year), while civil engineering works amounted to 25.6 trillion yen (up 3.0 percent).

In terms of public and private construction investment (nominal prices) in fiscal 2022, public sector amounted to 24.3 trillion yen (up 0.9 percent from the previous fiscal year), while private sector totaled 44.5 trillion yen (up 1.8 percent). Public sector accounted for 35.3 percent of total construction investment, while private sector accounted for 64.7 percent.

Table 6.3

Construction Investment (Nominal prices)

(Billion yen)

Item	FY2019	FY2020	FY2021*	FY2022*
Total	62,328	66,445	67,800	68,790
Building construction	40,182	40,887	42,910	43,160
Dwellings	16,748	16,112	17,140	17,320
Public sector	436	434	390	400
Private sector	16,312	15,678	16,750	16,920
Non-dwellings	15,538	14,725	14,990	15,000
Public sector	3,908	4,037	3,970	3,810
Private sector	11,631	10,688	11,020	11,190
Extension and renovation	7,896	10,051	10,780	10,840
Public sector	1,406	1,882	1,920	1,900
Private sector	6,489	8,169	8,860	8,940
Civil engineering works	22,146	25,558	24,890	25,630
Public sector	16,730	18,783	17,750	18,140
Private sector	5,416	6,774	7,140	7,490
Total				
Public sector	22,480	25,136	24,030	24,250
Private sector	39,848	41,309	43,770	44,540
Building construction				
Public sector	5,750	6,352	6,280	6,110
Private sector	34,432	34,535	36,630	37,050
Civil engineering works				
Public sector	16,730	18,783	17,750	18,140
Private sector	5,416	6,774	7,140	7,490

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

In 2023, the number of new construction starts for dwellings (in the case of apartment buildings, the number of apartment units) decreased 4.6 percent from the previous year to 0.82 million units, the first decrease in 3 years, as occupier-owned housing units, housing units for rent, and housing units built for sale all decreased.

The floor space (public and private) of the entire building whose construction started in 2023 was 111.21 million square meters, down 6.9 percent compared to the previous year.

Table 6.4
Building Construction Started by Types of Investor, Dwellings, and Structure

Types	Floor space (1,000 m^2)		Construction cost (billion yen)	
	2022	2023	2022	2023
Total	119,466	111,214	26,747	28,565
Investor				
Public	4,204	4,634	1,435	1,982
Private	115,263	106,580	25,312	26,583
Dwellings				
Dwelling	72,263	67,766	15,326	16,084
Non-dwelling	47,203	43,448	11,421	12,481
Structure				
Wooden	49,537	45,620	8,729	9,314
Non-wooden	69,930	65,594	18,018	19,251

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

Chapter 7

Energy

A white Greek windmill on a small hill of Shodoshima Island in Kagawa, overlooking the Seto Inland Sea. Among renewable energy sources in Japan, wind power generation is expected to grow significantly in the future.

1. Supply and Demand

Japan is dependent on imports for 87.4 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 40.3 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, increased to 44.4 percent in fiscal 2012. However, it is once again on a declining trend as the switch to LNG power and renewable energy progresses.

In fiscal 2022, the domestic supply of primary energy in Japan was 18,314 petajoules, down 2.1 percent from the previous fiscal year. Its breakdown was: 36.1 percent in petroleum, 25.7 percent in coal, 21.5 percent in natural gas and city gas, 7.5 percent in renewable energy (excluding hydro), 3.6 percent in hydro power, and 2.6 percent in nuclear power. Renewable energy sources include photovoltaic, wind power, biomass, geothermal, and other natural energy sources. In addition, effective recovery use of wasted energy is also used.

Energy units

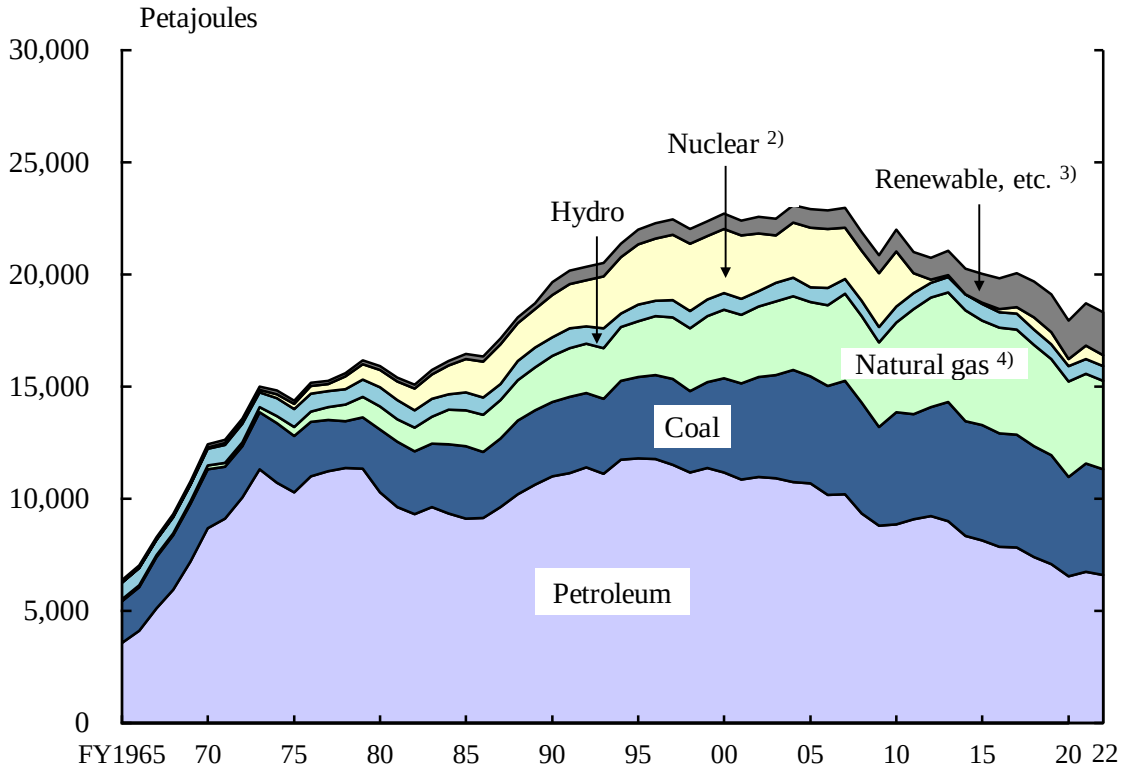
Joule (J) is employed as a common unit (International System of Units: SI) for energy across all energy sources in presenting international statistical information. The unit Petajoule (PJ: 10^{15} or quadrillion joules), etc. is used here to reduce the number of digits. The energy of one kiloliter of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

1 kiloliter of petroleum = 3.87×10^{10} joules
1 gigajoule = 10^{9} joules
1 petajoule = 10^{15} joules
1 exajoule = 10^{18} joules

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

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.

Figure 7.1
Domestic Supply of Primary Energy by Energy Source [1)]



1) A different statistical method was used for the figures since FY1990. 2) In fiscal 2014, the domestic supply of nuclear energy was zero due to the suspended operation of all nuclear power plants in Japan. 3) Excluding hydro. Photovoltaic, wind power, geothermal, effective recovery use of wasted energy, etc. 4) Natural gas and city gas.
Source: Agency for Natural Resources and Energy.

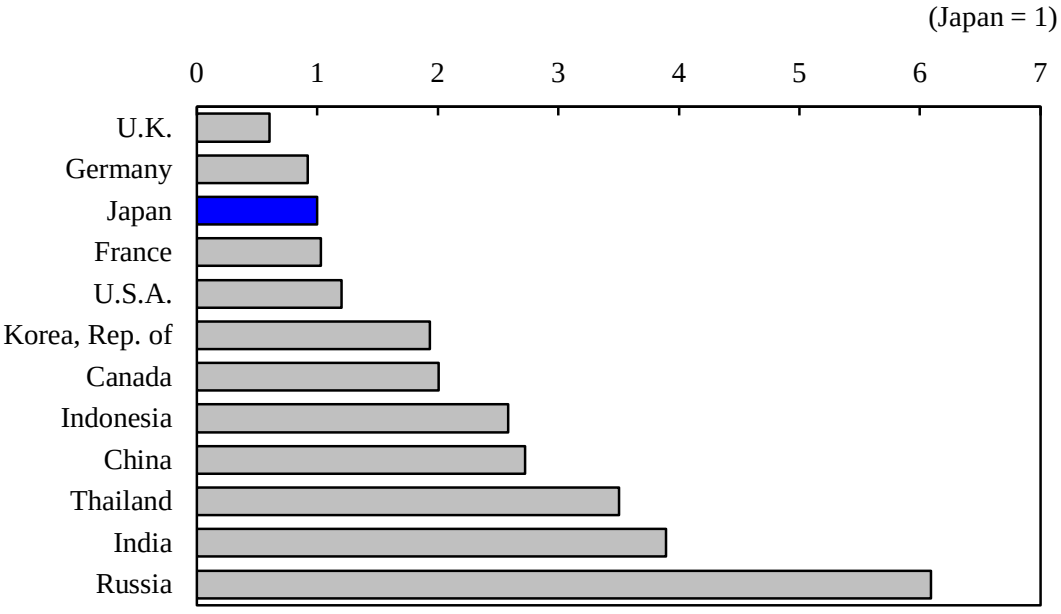
Table 7.1
Trends in Domestic Supply of Primary Energy and Percentage by Energy Source

(Petajoules)

Item	FY2010	FY2015	FY2020	FY2021	FY2022
Domestic supply of primary energy	21,995	20,020	17,959	18,715	18,314
Energy self-sufficiency (%) [1]	20.2	7.3	11.3	13.3	12.6
Petroleum	8,858	8,138	6,550	6,752	6,613
Coal	4,997	5,154	4,419	4,811	4,716
Natural gas and city gas	3,995	4,661	4,272	4,001	3,939
Hydro	716	726	663	673	660
Nuclear	2,462	79	326	605	479
Renewable [2]	436	726	1,186	1,324	1,370
Effective recovery use of wasted energy	530	536	543	549	537
Percentage					
Petroleum	40.3	40.6	36.5	36.1	36.1
Coal	22.7	25.7	24.6	25.7	25.7
Natural gas and city gas	18.2	23.3	23.8	21.4	21.5
Hydro	3.3	3.6	3.7	3.6	3.6
Nuclear	11.2	0.4	1.8	3.2	2.6
Renewable [2]	2.0	3.6	6.6	7.1	7.5
Effective recovery use of wasted energy	2.4	2.7	3.0	2.9	2.9

1) Domestic production of primary energy (including nuclear) / Domestic supply of primary energy × 100. 2) Excluding hydro. Photovoltaic, wind power, geothermal energy, etc.
Source: Agency for Natural Resources and Energy.

Figure 7.2
International Comparison of Energy Consumption/GDP [1] (2020)

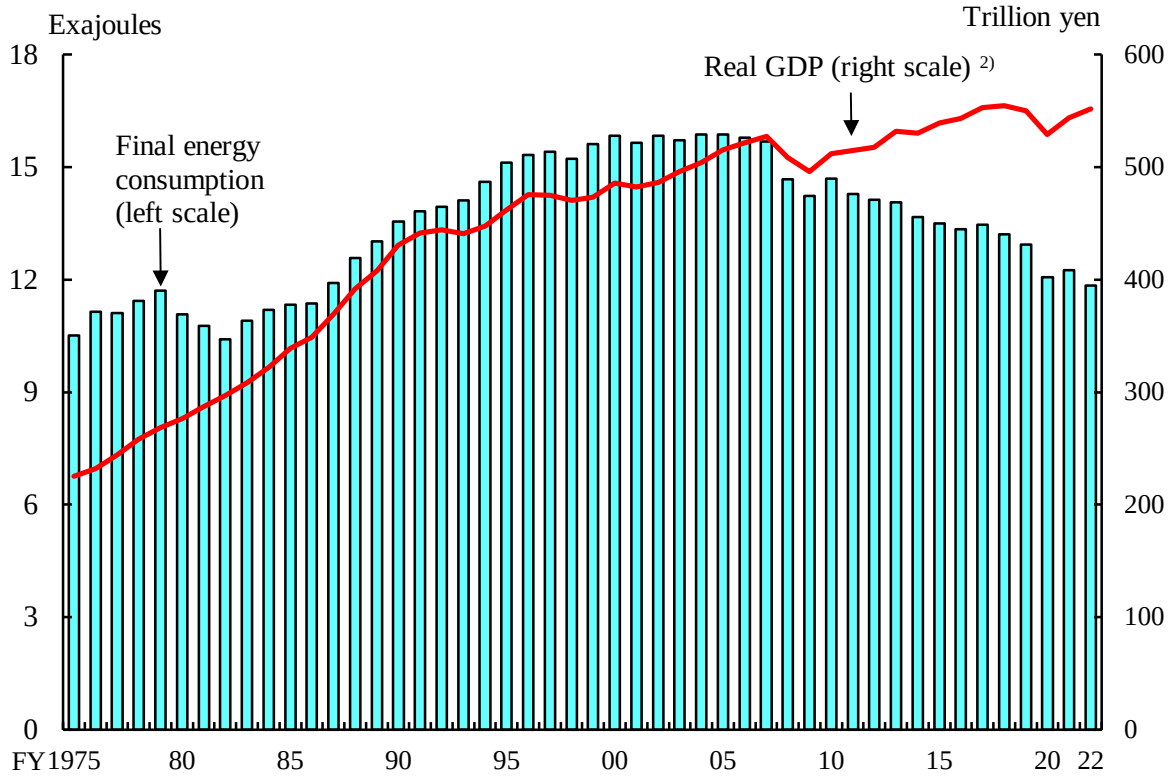


1) Primary energy consumption (tons of oil equivalent) / Real GDP (2015 U.S. dollars).
Source: Agency for Natural Resources and Energy.

Energy consumption 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.

During the period of high economic growth from the 1950s to the 1970s, Japan's final energy consumption increased at a higher rate than GDP. In the wake of the two oil crises of the 1970s, Japan promoted energy conservation and achieved economic growth while curbing energy consumption. Energy consumption increased in the 1990s due to lower crude oil prices. However, in the 2000s, crude oil prices rose again, leading to final energy consumption peaking in fiscal 2005 and entering a declining trend. In fiscal 2022, real GDP increased by 1.5 percent while final energy consumption decreased by 3.3 percent, compared to the previous fiscal year.

Figure 7.3
Trends in Final Energy Consumption and Real GDP 1)

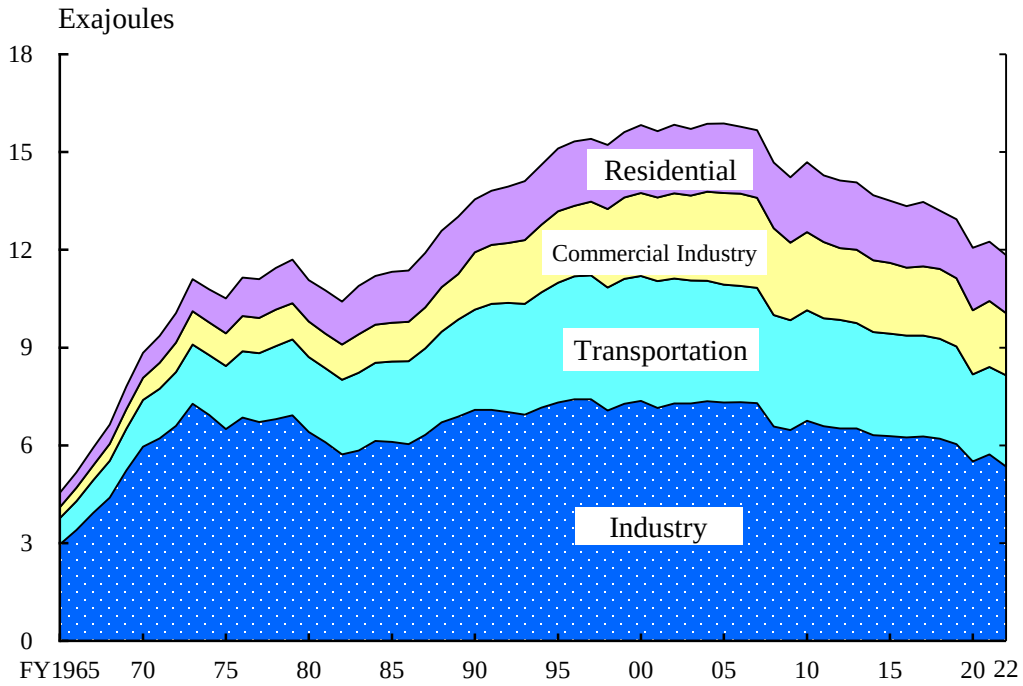


1) A different statistical method was used for the figures since FY1990. 2) Figures are based on 2015 standards.
Source: Cabinet Office; Agency for Natural Resources and Energy.

Final energy consumption in fiscal 2022 decreased by 3.3 percent from the previous fiscal year. By sector, it decreased in the industry sector due to factors such as reduced production activities in the manufacturing industry

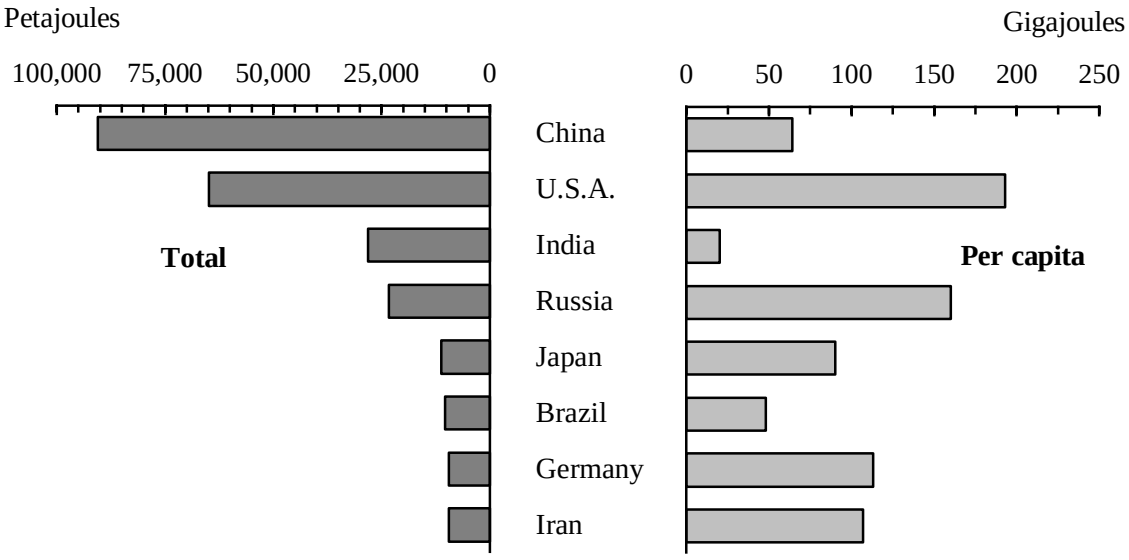
and a warm winter, and decreased in the residential sector due to factors such as a warm winter. Meanwhile, it increased for the second consecutive year in the transportation sector due to recovery of transport passenger volume, etc.

Figure 7.4
Trends in Final Energy Consumption by Sector 1)



1) A different statistical method was used for the figures since FY1990.
Source: Agency for Natural Resources and Energy.

Figure 7.5
Final Energy Consumption by Country (2021)



Source: United Nations.

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 939 billion kWh in fiscal 2022, down 3.2 percent from the previous fiscal year. Of this total, thermal power accounted for 80.8 percent; hydro power, 9.1 percent; nuclear power, 5.7 percent.

Table 7.2

Trends in Electricity Output and Power Consumption [1)]

(Million kWh)

Item	FY2010	FY2015	FY2020	FY2021	FY2022
Electricity Output					
Total	1,156,888	1,024,179	948,979	970,249	939,025
Thermal	771,306	908,779	789,725	776,326	758,485
Hydro	90,681	91,383	86,310	87,632	85,034
Nuclear	288,230	9,437	37,011	67,767	53,524
Others [2)]	6,671	14,580	35,933	38,524	41,982
Percentage					
Total	100.0	100.0	100.0	100.0	100.0
Thermal	66.7	88.7	83.2	80.0	80.8
Hydro	7.8	8.9	9.1	9.0	9.1
Nuclear	24.9	0.9	3.9	7.0	5.7
Others [2)]	0.6	1.4	3.8	4.0	4.5
Electricity Power Consumption [3)]					
Total	1,056,441	955,345	935,491	956,666	940,317
Generated by electric power suppliers	931,059	841,542	863,159	881,516	866,540
Consumption of in-house generation	125,382	113,803	72,332	75,150	73,777

1) Including in-house generation. 2) Photovoltaic, wind power, geothermal energy, etc.
3) Changes were made to the categorization of Electricity Suppliers since FY2016.
Source: Agency for Natural Resources and Energy.

3. Gas

Gas production was 1,581 petajoules in fiscal 2022, down 3.2 percent from the previous fiscal year. Of this total, natural gas plus vaporized liquefied natural gas accounted for 94.8 percent; and the remaining 5.2 percent was made up of petroleum gases, such as vaporized liquefied petroleum gas and other petroleum-based gas. Gas purchases for fiscal 2022 totaled 711 petajoules.

Gas sales for fiscal 2022 totaled 1,684 petajoules, or a year-on-year drop of 2.2 percent. Of this total, 59.4 percent was sold to industry, 23.2 percent to residential use, and 9.5 percent to the commercial sector.

Table 7.3
Trends in Production and Purchases, and Sales of Gas [1) 2)]

(Petajoules)

Item	FY2015		FY2020		FY2021		FY2022	
Production and purchases [3)]	1,610		2,204		2,335		2,292	
Production	1,372	(100.0)	1,574	(100.0)	1,633	(100.0)	1,581	(100.0)
Petroleum gases [4)]	48	(3.5)	57	(3.6)	68	(4.2)	83	(5.2)
Natural gas and vaporized liquefied natural gas [5)]	1,324	(96.5)	1,517	(96.4)	1,565	(95.8)	1,498	(94.8)
Others	…	(…)	…	(…)	…	(…)	…	(…)
Purchases	238	(100.0)	630	(100.0)	702	(100.0)	711	(100.0)
Petroleum gases [6)]	3	(1.1)	…	(…)	…	(…)	…	(…)
Natural gas and vaporized liquefied natural gas	236	(98.9)	624	(99.1)	696	(99.2)	705	(99.2)
Others	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)
Sales	1,526	(100.0)	1,654	(100.0)	1,723	(100.0)	1,684	(100.0)
Residential	387	(25.3)	419	(25.4)	415	(24.1)	391	(23.2)
Commercial	177	(11.6)	153	(9.2)	155	(9.0)	160	(9.5)
Industrial	842	(55.2)	953	(57.6)	1,020	(59.2)	1,001	(59.4)
Others	120	(7.9)	129	(7.8)	132	(7.7)	132	(7.9)

1) Figures in parentheses indicate a percentage. 2) A different statistical method was used for the figures since 2017. 3) Since there are some concealed sources, the breakdown totals may not match the overall totals. 4) Figures up until FY2016 are a total of volatile oil gas, liquefied petroleum gas, and other petroleum-based gas. Starting FY2017, figures are a total of vaporized liquefied petroleum gas and other petroleum-based gas. 5) Figures up until FY2016 are a total of natural gas and liquefied natural gas. 6) Vaporized liquefied petroleum gas, other petroleum-based gas.

Source: The Japan Gas Association.

Chapter 8

Science and Technology/

Information and Communication

© NEMOTO Hiroyuki

Waiting for recycling.
According to the "2023 Survey of Research and Development", Japan's fiscal 2022 research and development (R&D) expenditures on environmental issues, such as natural environment protection and waste collection, were 1.4 trillion yen.

1. Science and Technology

(1) Researchers and R&D Expenditures

Japan's expenditures 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 2023 totaled 910,400. The total R&D expenditures in fiscal 2022 amounted to 20.7 trillion yen, an increase of 4.9 percent from the previous fiscal year. Relative to GDP, R&D expenditures was 3.65 percent, a 0.09 percentage point increase from the previous fiscal year.

Table 8.1

Trends in Researchers and Expenditures on R&D

Fiscal year	Number of researchers [1) 2)]	Females	R&D expenditures	GDP	Ratio of R&D expenditures to GDP
		(%)	(billion yen)	(billion yen)	(%)
2013	841,600	14.6	18,134	512,678	3.54
2014	866,900	14.7	18,971	523,423	3.62
2015	847,100	15.3	18,939	540,741	3.50
2016	853,700	15.7	18,433	544,830	3.38
2017	867,000	16.2	19,050	555,713	3.43
2018	874,800	16.6	19,526	556,571	3.51
2019	881,000	16.9	19,576	556,845	3.52
2020	890,500	17.5	19,237	539,009	3.57
2021	908,300	17.8	19,741	553,642	3.57
2022	910,400	18.3	20,704	566,490	3.65

1) As of the end of each fiscal year. 2) Business enterprises, non-profit institutions and public organizations: Prorated by the percentage of time that researchers are actually engaged in R&D activities. Universities and colleges: headcount.

Source: Statistics Bureau, MIC.

As of the end of March 2023, the number of researchers amounted to 530,600 persons in business enterprises, 37,300 persons in non-profit institutions and public organizations, and 342,500 persons in universities and colleges. In terms of R&D expenditures in fiscal 2022, business enterprises spent 15.1 trillion yen (73.1 percent of total R&D expenditures), non-profit institutions and public organizations spent 1.7 trillion yen (8.4 percent), and universities and colleges spent 3.8 trillion yen (18.6 percent).

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

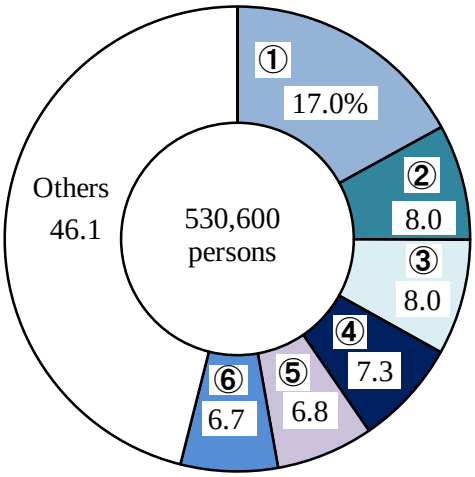
With regard to the portion in the R&D expenditures in fiscal 2022 by specific objective, 3.4 trillion yen went to the life sciences field (16.3 percent of total R&D expenditures), 3.0 trillion yen (14.6 percent) to the information technology field, 1.4 trillion yen (6.9 percent) to the environmental science and technology field and 1.2 trillion yen (5.8 percent) to the materials field, etc.

Approximately 80 percent of the 530,600 researchers at business enterprises at the end of March 2023, or 424,600 persons, were in the manufacturing industries; the largest number was in the motor vehicles, parts and accessories industry, followed by the electronic parts, devices and electronic circuits industry, then by the information and communication electronics equipment industry.

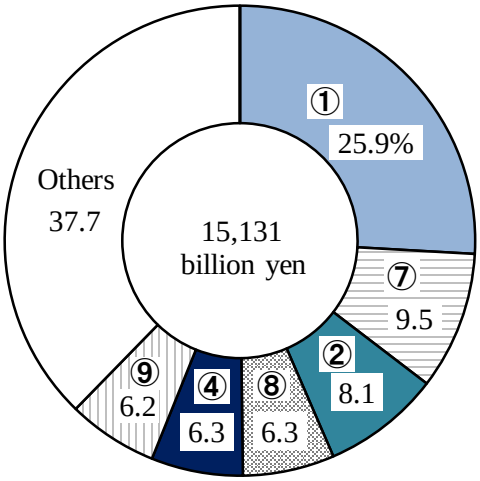
In terms of R&D expenditures in fiscal 2022, of 15.1 trillion yen spent by business enterprises, 12.8 trillion yen was spent by manufacturing industries. The motor vehicles, parts and accessories industry spent the most, followed by the medicines industry, then by the electronic parts, devices and electronic circuits industry.

Figure 8.1
Researchers and Expenditures by Industry (Business enterprises)

Researchers (as of end-March 2023)



Expenditures (FY2022)



① Motor vehicles, parts and accessories ② Electronic parts, devices and electronic circuits
③ Information and communications ④ Chemical products
⑤ Information and communication electronics equipment ⑥ Business oriented machinery
⑦ Medicines ⑧ Scientific research, professional and technical services
⑨ Electrical machinery, equipment and supplies
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 2022, Japan earned 4,995.9 billion yen from technology exports, which was up 38.0 percent from the previous fiscal year. It increased for 2 consecutive years. Of the total receipts, 63.6 percent was from overseas parent/subsidiary companies. Meanwhile, payments to technology imports stood at 713.7 billion yen, an increase of 15.1 percent compared with the previous fiscal year. It increased for 3 consecutive years. Of this figure, 38.8 percent was for payments to overseas parent/subsidiary companies.

Table 8.2

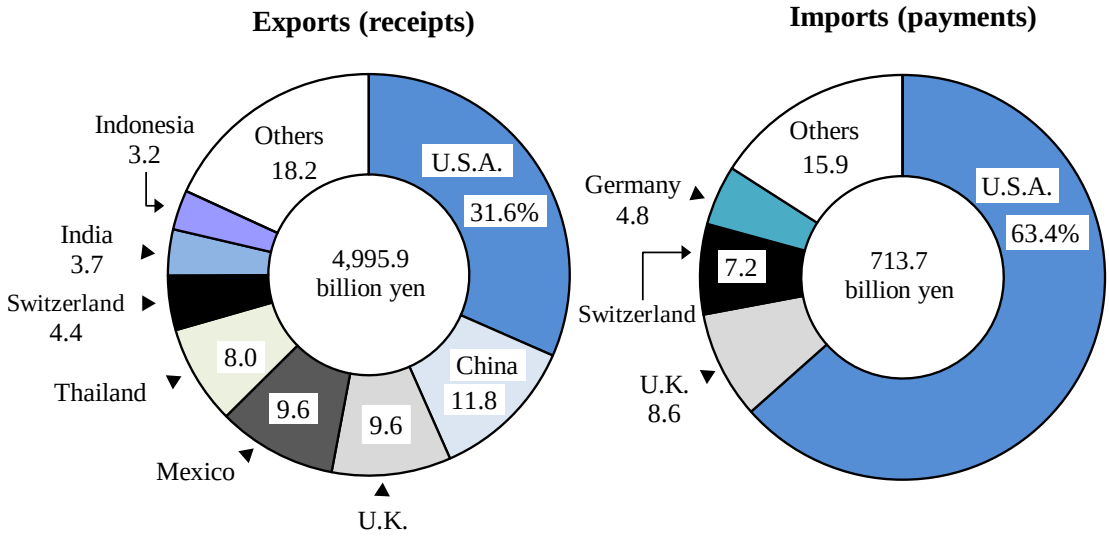
Technology Trade by Business Enterprises

Fiscal year	Exports		Imports		Exports value / Imports value
	Value (billion yen)	Annual increase rate (%)	Value (billion yen)	Annual increase rate (%)	
2013	3,395.2	24.8	577.7	28.8	5.88
2014	3,660.3	7.8	513.0	-11.2	7.13
2015	3,949.8	7.9	602.6	17.5	6.55
2016	3,571.9	-9.6	452.9	-24.8	7.89
2017	3,884.4	8.7	629.8	39.1	6.17
2018	3,871.1	-0.3	591.0	-6.2	6.55
2019	3,662.6	-5.4	543.6	-8.0	6.74
2020	3,101.0	-15.3	559.8	3.0	5.54
2021	3,620.6	16.8	620.1	10.8	5.84
2022	4,995.9	38.0	713.7	15.1	7.00

Source: Statistics Bureau, MIC.

In fiscal 2022, Japan exported 4,995.9 billion yen of technologies; major export destinations were: the U.S.A. (1,578.4 billion yen, or 31.6 percent of total exports), followed by China (588.3 billion yen), the U.K. (480.9 billion yen), and Mexico (477.3 billion yen). On the other hand, Japan imported 713.7 billion yen of technologies, mainly from the U.S.A. (452.1 billion yen, or 63.4 percent of total imports), followed by the U.K. (61.7 billion yen), Switzerland (51.6 billion yen) and Germany (34.6 billion yen).

Figure 8.2
Composition of Technology Trade by Major Country (FY2022)



Source: Statistics Bureau, MIC.

2. Patents

The total number of patent applications to the Japan Patent Office has been flat since 2020, and in 2022 the figure was 289,530, up 0.11 percent from the previous year.

Table 8.3
Patents

(Cases)

Item	2018	2019	2020	2021	2022
Applications	313,567	307,969	288,472	289,200	289,530
Registrations	194,525	179,910	179,383	184,372	201,420
Existing vested rights	2,054,276	2,053,879	2,039,040	2,020,424	2,029,223

Source: Japan Patent Office.

Table 8.4
PCT International Applications by Country

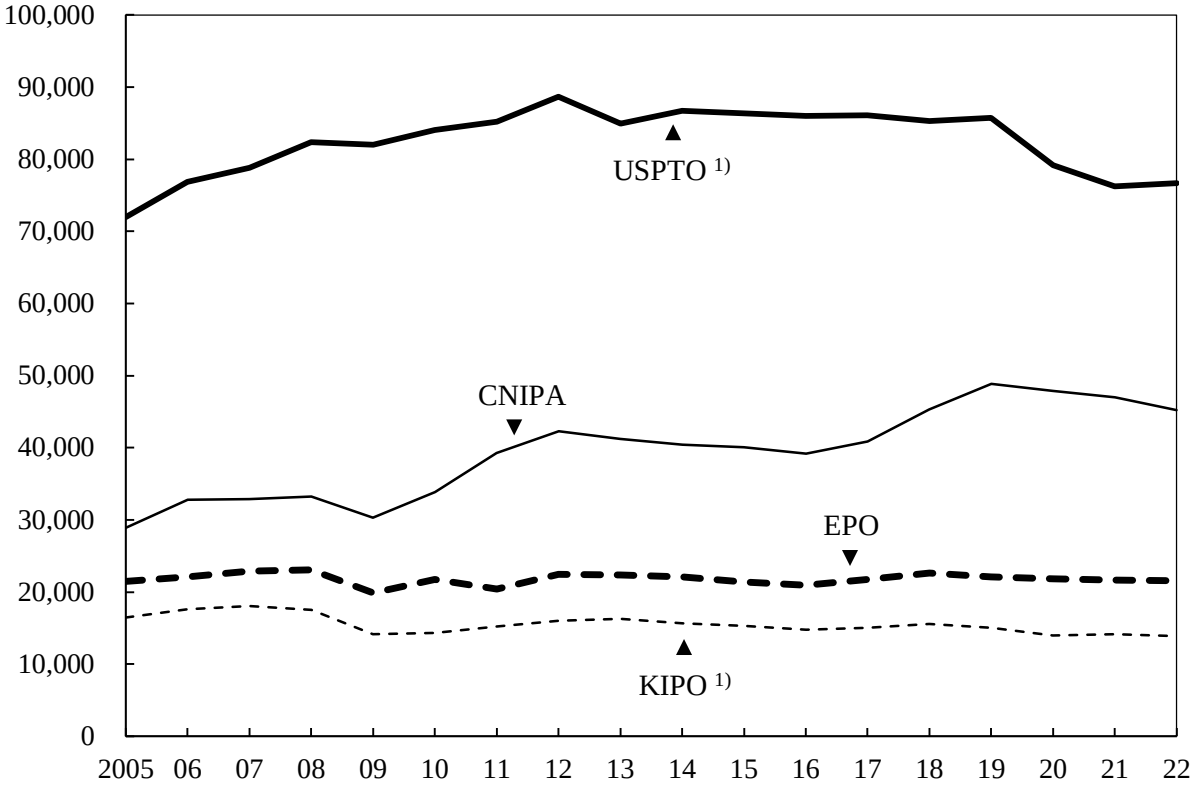
Country	2020	2021	2022*	Change from 2021 (%)
Total	274,889	277,182	278,100	0.3
China	68,935	69,604	70,015	0.6
U.S.A.	58,431	59,403	59,056	-0.6
Japan	50,582	50,275	50,345	0.1
Korea, Rep. of	20,050	20,723	22,012	6.2
Germany	18,491	17,266	17,530	1.5
France	7,788	7,334	7,764	5.9
U.K.	5,892	5,841	5,739	-1.7
Switzerland	5,135	5,461	5,367	-1.7
Sweden	4,356	4,441	4,471	0.7
Netherlands	4,004	4,119	4,092	-0.7

Source: World Intellectual Property Organization.

Over 150 countries, including Japan, have joined the international patent system of the World Intellectual Property Organization (WIPO) as of February 2023. In 2022, the number of international patent applications filed under the Patent Cooperation Treaty (PCT) was 278,100, of which 50,345 were from Japan, accounting for 18.1 percent.

The United States Patent and Trademark Office ranked first among major patent offices for applications filed by Japanese applicants in 2022, with 76,706 applications. The number of patent applications filed by Japanese applicants at the China National Intellectual Property Administration was 45,259.

Figure 8.3
Changes in Patent Applications with Major Offices by Japanese Applicants



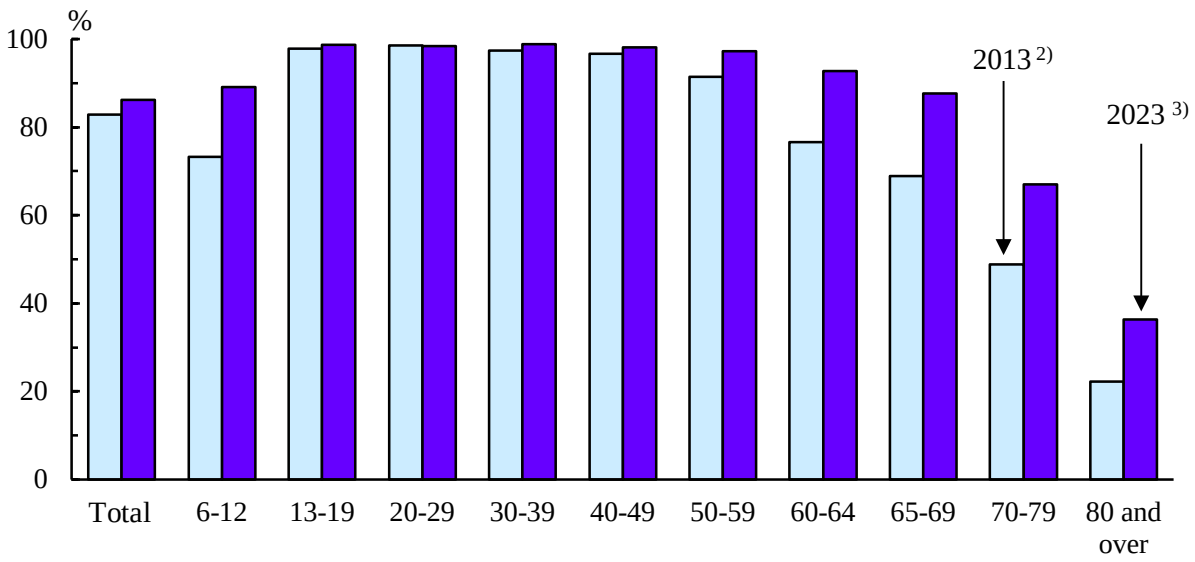
1) The USPTO and KIPO data for 2022 are provisional.
USPTO: United States Patent and Trademark Office; CNIPA: China National Intellectual Property Administration; EPO: European Patent Office; KIPO: Korean Intellectual Property Office.
Source: Japan Patent Office.

3. Information and Communication

(1) Diffusion of the Internet

The ratio of individuals using the Internet, of which commercial usage started in 1993, exceeded 80 percent in 2013. At the end of August 2023, the ratio of individuals who had used the Internet in the past year (individuals who are 6 years old and over) was 86.2 percent. According to the individual Internet usage rate by age group, the usage rate exceeded 90 percent in each age group between 13 and 64 years old.

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



1) Ages 6 years old and over. 2) End of 2013. 3) End of August 2023.
Source: Ministry of Internal Affairs and Communications.

According to the status of Internet use by device by age group as of the end of August 2023, the usage rate of smartphones was the highest (72.9 percent), followed by computers (47.4 percent). Figures for the rate of Internet use by device by age group show that more than 80 percent use smartphones in each age group between 13 and 59 years old.

Table 8.5
Status of Internet Use by Device by Age Group (2023)

(%)

Item	Usage rate	6-12 years	13-19	20-29	30-39	40-49	50-59	60-69	70-79	80 and over
Smartphones	72.9	48.1	85.5	90.5	92.0	89.6	88.3	78.3	49.4	17.8
Computers	47.4	28.4	45.7	60.3	62.8	60.4	58.5	51.0	30.4	12.0
Internet-enabled TV receivers	28.6	41.0	35.9	33.1	40.7	34.9	33.5	25.8	13.3	5.7
Mobile phones 1)	9.0	5.1	7.2	9.4	10.8	8.8	9.9	9.2	9.8	7.8

1) Excluding smartphones.
Source: Ministry of Internal Affairs and Communications.

As of the end of August 2023, 49.9 percent of enterprises had introduced telework. This marked a decrease of 1.8 percentage points compared with the previous year. The most frequent telework pattern was working from home, 90.0 percent, followed by mobile work, 32.0 percent and working from a satellite office, 15.5 percent.

(2) Progress of Communication Technologies

As of the end of March 2023, those with subscriptions for 3.9-4G mobile phones (LTE) made up the largest segment of broadband (connection) subscribers, amounting to 127 million subscriptions. Those with BWA (Broadband Wireless Access) service (access service connecting to networks via broadband wireless access systems using the 2.5GHz band [WiMAX, etc.]) was the second highest, with 84 million subscribers.

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 2023, the total number of IP phone subscribers was 46 million.

Table 8.6
Subscribers to Telecommunications Services [1)]

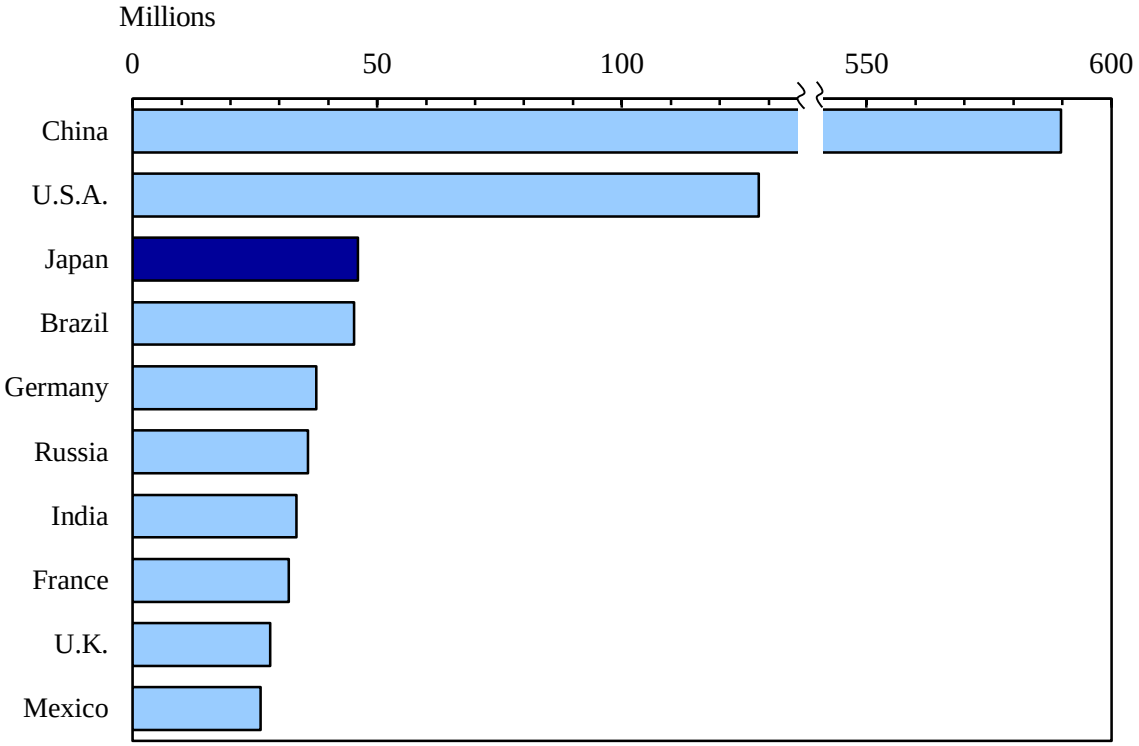
(Thousands)

Item	2019	2020	2021	2022	2023
Public phones (NTT [2)] only)	155	151	146	138	122
Fixed phone services	17,242	15,954	14,856	13,827	12,767
Mobile phones [3)]	179,873	186,514	195,055	203,335	210,750
IP phone	43,413	44,131	44,670	45,348	45,689
ISDN (Integrated Services Digital Network)	2,715	2,507	2,307	2,117	1,922
DSL (Digital Subscriber Line)	1,730	1,398	1,073	690	357
Cable Internet	6,837	6,675	6,532	6,401	6,272
FTTH (Fiber To The Home)	31,669	33,122	35,271	37,036	39,522
BWA (Broadband Wireless Access) ..	66,241	71,200	75,709	79,732	84,276
3.9-4G mobile phones (LTE)	136,642	152,623	154,366	139,055	127,380
5G mobile phones	-	24	14,186	45,018	69,809
International phone calls, sent and received	448,500	471,400	367,600	498,500	770,600

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 2022, the number of fixed-broadband subscribers in Japan was 46 million, the third-largest after China, 590 million and the U.S.A., 128 million.

Figure 8.5
International Comparison of Fixed-Broadband Subscribers (2022)

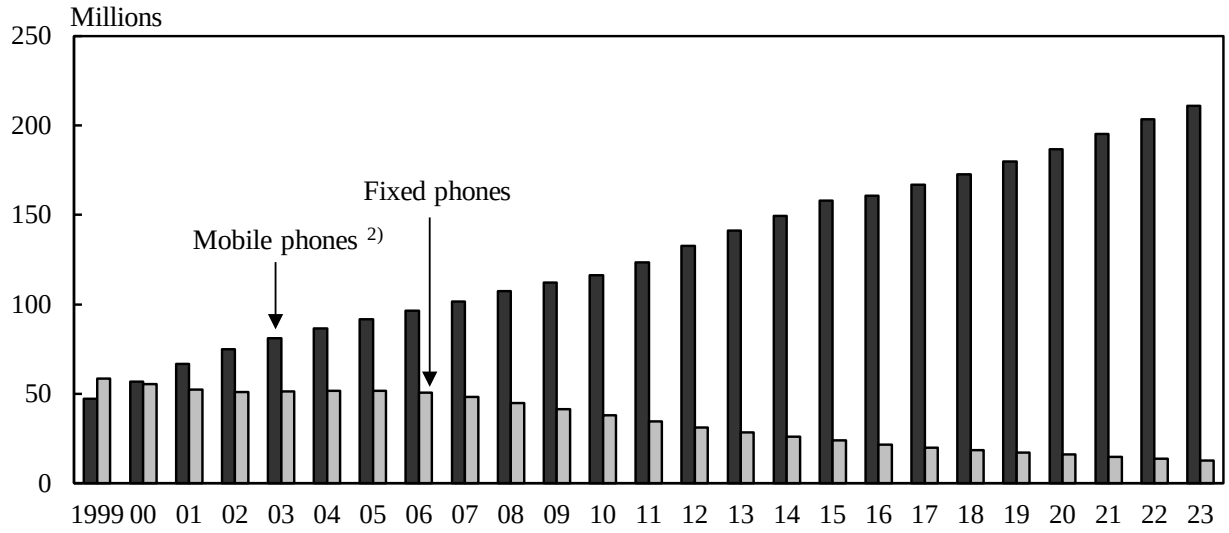


Source: International Telecommunication Union.

(3) Telephones

The number of fixed phone service subscription contracts has continued to decrease in recent years. As of the end of March 2023, the number of fixed phone subscribers was 13 million (down 7.7 percent from the previous year). Meanwhile, the number of mobile phone subscribers (cell phones and personal handyphone systems) totaled 203 million at the end of March 2022, marking a rise by 3.6 percent year-on-year to 211 million at the end of March 2023.

Figure 8.6
Telephone Service Subscribers [1)]



1) End of March. 2) 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 2024, Japan Post Co., Ltd. had 24,223 post offices nationwide. In fiscal 2023, post offices handled 17.4 billion items of domestic mail (including parcels), which was a 5.8 percent decrease from the previous fiscal year. Furthermore, the total quantity of international mail (letters, Express Mail Services [EMS], and parcels) sent in fiscal 2023 amounted to 23.0 million items, an increase of 5.0 percent from the previous fiscal year.

Table 8.7
Postal Services

(Millions)

Item	FY2005	FY2010	FY2015	FY2020	FY2022	FY2023
Domestic						
Letters	22,666.1	19,757.9	17,981.0	15,221.0	14,423.2	13,554.7
Parcels	2,075.0	2,968.4	4,052.4	4,390.1	4,093.2	3,883.1
International						
Sent	77.5	54.2	48.9	23.0	21.9	23.0
Letters [1)]	76.1	52.8	44.1	20.6	19.9	20.7
Parcels	1.5	1.4	4.8	2.5	2.1	2.3

1) Including Express Mail Services (EMS).
Source: Japan Post Co., Ltd.

Chapter 9

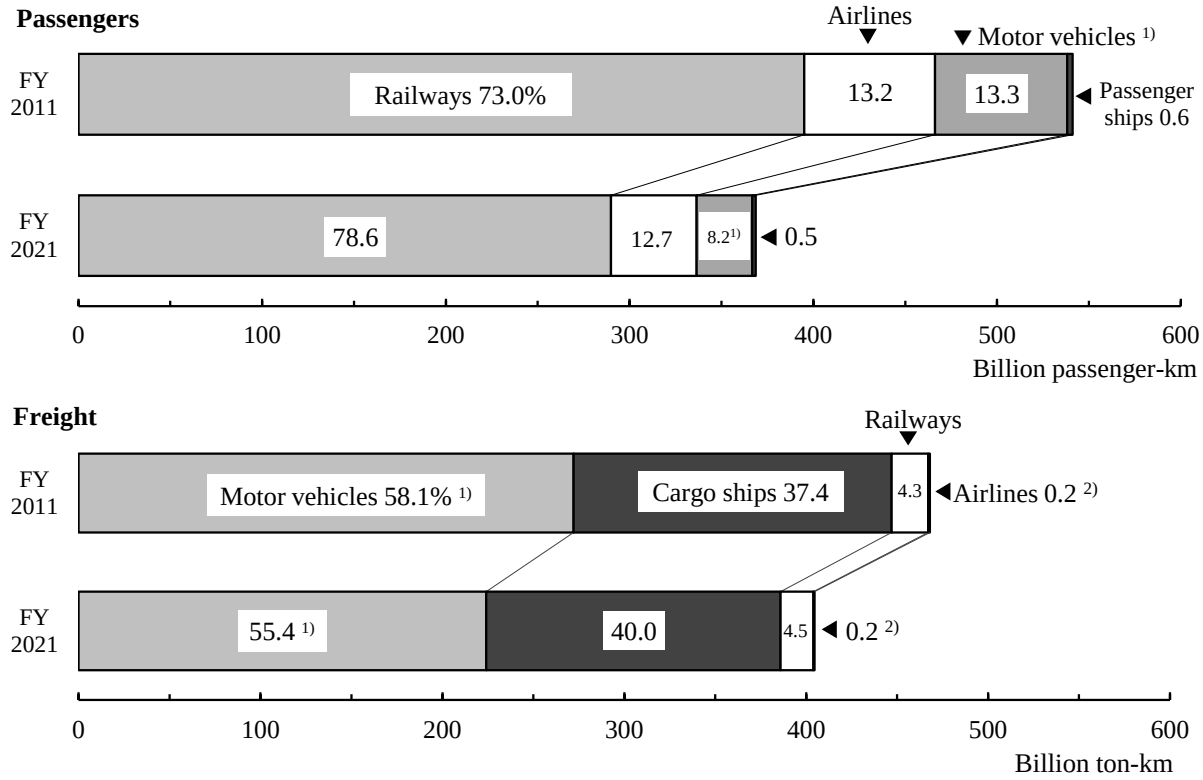
Transport and Tourism

A temple in Hyogo famous for its autumn leaves. The autumn leaves visible beyond the main hall of the temple captivate visitors, who say it looks like a framed painting. According to the "Overnight Travel Statistics Survey", the most common prefecture where foreign guests stayed in 2022 was Tokyo, followed by Osaka, Kyoto, Hokkaido, and Chiba.

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) Figures are estimates based on the survey method and aggregation method changed in FY2020.
2) Including overweight baggage and postal mail.
Source: Ministry of Land, Infrastructure, Transport and Tourism.

In fiscal 2011, railways accounted for 73.0 percent, motor vehicles for 13.3 percent, airlines for 13.2 percent, and passenger ships for 0.6 percent of domestic passenger transport volume (passenger-kilometers). In fiscal 2021, due to the effects of the COVID-19 pandemic, airlines accounted for 12.7 percent and motor vehicles for 8.2 percent, while railways accounted for 78.6 percent, an increase in share over fiscal 2011. In terms of domestic freight volume (ton-kilometers), on the other hand, motor vehicles accounted for 55.4 percent and cargo ships for 40.0 percent in fiscal 2021, together constituting about 95 percent of the total. Although ton kilometers decreased, the component ratio shows the same trend as 10 years before.

(1) Domestic Passenger Transport

In fiscal 2021, the number of domestic transport passengers was 23.17 billion (up 6.6 percent from the previous fiscal year). The total volume of passenger transport was 368.59 billion passenger-kilometers (up 14.5 percent); both figures increased for the first time in 2 years.

Table 9.1
Domestic Passenger Transport

Item	Passengers carried (millions)		Passenger kilometers (millions)	
	FY2020	FY2021	FY2020	FY2021
Total transport volume	21,749	23,174	321,870	368,585
Railways	17,670	18,805	263,211	289,891
JR (Japan Railways)	6,707	7,061	152,084	170,190
Other than JR	10,963	11,744	111,127	119,700
Motor vehicles	4,000	4,270	25,593	30,189
Buses (Commercial use)	3,262	3,467	22,546	26,963
Taxis and limousine hires	738	803	3,047	3,227
Airlines	34	50	31,543	46,658
Passenger ships	45	49	1,523	1,847

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

In fiscal 2021, the Japan Railways (JR) group reported 7.06 billion passengers (up 5.3 percent from the previous fiscal year) and 170.19 billion passenger-kilometers (up 11.9 percent). Railways other than JR reported 11.74 billion passengers (up 7.1 percent) and 119.70 billion passenger-kilometers (up 7.7 percent).

In fiscal 2021, commercial buses transported 3.47 billion passengers (up 6.3 percent from the previous fiscal year) and 26.96 billion passenger-kilometers (up 19.6 percent). However, buses continue to face difficult conditions, with a long-term decrease in demand due to factors such as declining population, low birth rate, and changing lifestyles, and a large decrease in passengers carried and transport revenue due to the effect of events like the COVID-19 pandemic. Many operators are considering improvements in the work environment for bus drivers, and Digital Transformation (DX) and Green Transformation (GX) initiatives for transportation are being pursued to help improve services and boost management efficiency.

Domestic airline passengers increased until around fiscal 2002, and after that the trend was roughly flat until fiscal 2007. However, a declining trend continued after the bankruptcy of the major American securities firm Lehman Brothers in 2008, and although there was a recovery after fiscal 2011, domestic air transport fell into a major slump due to the COVID-19 pandemic which occurred in 2020. Fiscal 2021 air transport records show that there were 50 million passengers (up 47.2 percent from the previous fiscal year), and passenger-kilometers amounted to 46.66 billion (up 47.9 percent).

In fiscal 2021, passenger ships reported 49 million passengers (up 8.4 percent from the previous fiscal year) and 1.85 billion passenger-kilometers (up 21.3 percent).

(2) Domestic Freight Transport

In the area of domestic freight, a total of 4.25 billion metric tons (up 2.9 percent from the previous fiscal year) of freight was transported for a total of 404.54 billion ton-kilometers (up 4.8 percent) in fiscal 2021. As for transport tonnage volume in fiscal 2021, 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)	
	FY2020	FY2021	FY2020	FY2021
Total transport volume	4,132,688	4,252,525	386,111	404,541
Railways	39,124	38,912	18,340	18,042
Motor vehicles	3,786,998	3,888,397	213,419	224,095
Commercial use	2,550,515	2,602,052	186,999	196,439
Non-commercial use	1,236,483	1,286,344	26,421	27,656
Cargo ships	306,076	324,659	153,824	161,795
Airlines [1)]	490	557	528	609

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 downturn after September 2008, the spread of a new influenza in early 2009, and the effects of the Great East Japan Earthquake in 2011 reduced international air passenger transport on Japanese airlines. In 2012, this trend reversed to an increase, and the increase continued for 8 consecutive years until 2019. However, due to the effects of the COVID-19 pandemic, there was a sharp drop in passengers to 4.36 million in 2020 (down 81.4 percent from the previous year), and to 1.39 million in 2021 (down 68.1 percent), declining for the second consecutive year. In 2022 the trend recovered to 6.79 million (up 387.3 percent from the previous year).

(2) International Freight Transport

For international freight transport departing from and arriving in Japan, seaborne transport accounted for approximately 99 percent while air transport accounted for a very small percentage. The volume of seaborne foreign transport in 2022 was 929 million tons, up 5.3 percent over the previous year. Of this figure, total exports decreased by 5.3 percent to 72 million tons, while total imports increased by 12.0 percent to 491 million tons.

Table 9.3
Seaborne Foreign Transport

(Thousand tons)

Year	Total	Exports	Imports	Cross Transport
2000	739,377	34,960	538,875	165,542
2005	777,869	45,404	529,239	203,225
2010	819,075	44,758	465,898	308,419
2015	1,056,144	60,802	544,702	450,639
2020	889,365	58,411	435,019	395,935
2022*	929,426	71,877	490,797	366,752

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

Air-shipped international freight in 2022 totaled 1.55 million tons in terms of volume (down 12.3 percent from the previous year) and 9.10 billion tons in terms of ton-kilometers (down 12.2 percent).

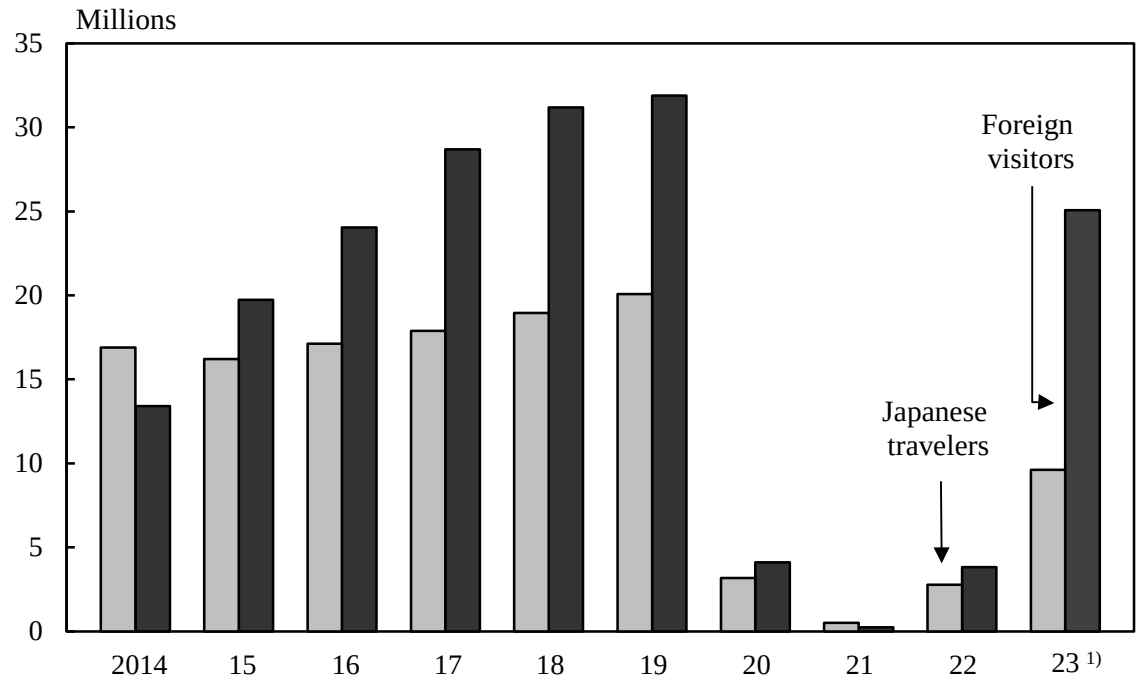
3. Tourism

(1) Trend of Travelers

The total number of Japanese domestic travelers in 2023 was 497.58 million, a 15.2 percent decline from 2019, prior to the effects of the COVID-19 pandemic, and within that total the number taking day trips was 216.23 million (down 21.5 percent from 2019). Viewed year-on-year, 2023 marked a 19.1 percent increase, indicating recovery, although travel has not reached the pre-COVID level.

On the other hand, the number of Japanese overseas travelers in 2023 was 9.62 million, an increase of 247.2 percent over the previous year. The number of foreign visitor arrivals was 25.07 million, indicating a sharp recovery since lifting of border control measures in April 2023 to 78.6 percent or roughly 80 percent of the 2019 figure.

Figure 9.2
Japanese Overseas Travelers and Foreign Visitor Arrivals



1) The Foreign visitors data for 2023 is provisional.
Source: Immigration Services Agency of Japan; Japan National Tourism Organization.

The U.S.A. had many Japanese visitors in 2021.

Table 9.4
Japanese Overseas Travelers by Destination

Country or area of destination	2019		2020		2021	
	Number of arrivals	Annual change (%)	Number of arrivals	Annual change (%)	Number of arrivals	Annual change (%)
U.S.A. [1) 2)]	3,752,980	7.4	696,727	-81.4	121,519	-82.6
Korea, Rep. of [3)]	3,271,706	11.0	430,742	-86.8	15,265	-96.5
China [3)]	2,676,334	-0.5	…	…	…	…
Philippines [2)]	682,788	8.1	136,664	-80.0	15,024	-89.0
Taiwan [4)]	2,167,952	10.1	269,659	-87.6	10,056	-96.3
Thailand [5)]	1,806,438	9.1	320,331	-82.3	9,461	-97.0
Viet Nam [4)]	951,962	15.2	205,274	-78.4	9,300	-95.5
Singapore [4)]	884,308	6.6	125,879	-85.8	5,920	-95.3

1) Including territories and dependencies (Northern Mariana Islands, Guam, American Samoa, Puerto Rico and United States Virgin Islands, etc.). 2) Arrivals of non-resident tourists at national borders, by country of residence. 3) Arrivals of non-resident visitors at national borders, by nationality. 4) Arrivals of non-resident visitors at national borders, by country of residence. 5) Arrivals of non-resident tourists at national borders, by nationality.
Source: Japan National Tourism Organization.

Among foreign visitors to Japan in 2023 by country/region, visitors from Asian countries were the highest, totaling 19.98 million. Among Asian countries, the number of visitors from the Republic of Korea was highest, amounting to 6.96 million, and the figure accounted for 27.8 percent of the total number of foreign visitors to Japan.

Based on the Tourism Nation Promotion Basic Plan decided by the Cabinet in March 2023, three strategies are being pursued: "Create sustainable tourism destinations", "Recover inbound tourism", and "Expand domestic exchanges". This is based on three key phrases, "sustainable tourism", "increase in tourism consumption", and "promote regional attraction" which symbolize improving the quality of tourism to help achieve recovery of the tourism nation in a sustainable form.

Table 9.5
Foreign Visitors

Region, country or area of origin	2021		2022		2023*	
	Number of arrivals	Percentage distribution	Number of arrivals	Percentage distribution	Number of arrivals	Percentage distribution
Total arrivals [1)]	245,862	100.0	3,832,110	100.0	25,066,350	100.0
Asia	150,427	61.2	3,001,292	78.3	19,984,902	79.7
Korea, Rep. of	18,947	7.7	1,012,751	26.4	6,958,494	27.8
Taiwan	5,016	2.0	331,097	8.6	4,202,434	16.8
China	42,239	17.2	189,125	4.9	2,425,157	9.7
Hong Kong SAR ..	1,252	0.5	269,285	7.0	2,114,402	8.4
Thailand	2,758	1.1	198,037	5.2	995,558	4.0
Philippines	5,625	2.3	126,842	3.3	622,293	2.5
Europe	52,238	21.2	304,505	7.9	1,663,432	6.6
U.K.	7,294	3.0	57,496	1.5	321,482	1.3
Africa	6,769	2.8	14,613	0.4	38,266	0.2
North America	26,238	10.7	392,009	10.2	2,583,678	10.3
U.S.A.	20,026	8.1	323,513	8.4	2,045,854	8.2
Canada	3,536	1.4	55,877	1.5	425,874	1.7
South America	5,204	2.1	17,652	0.5	99,350	0.4
Oceania	4,953	2.0	101,921	2.7	696,251	2.8
Australia	3,265	1.3	88,648	2.3	613,062	2.4

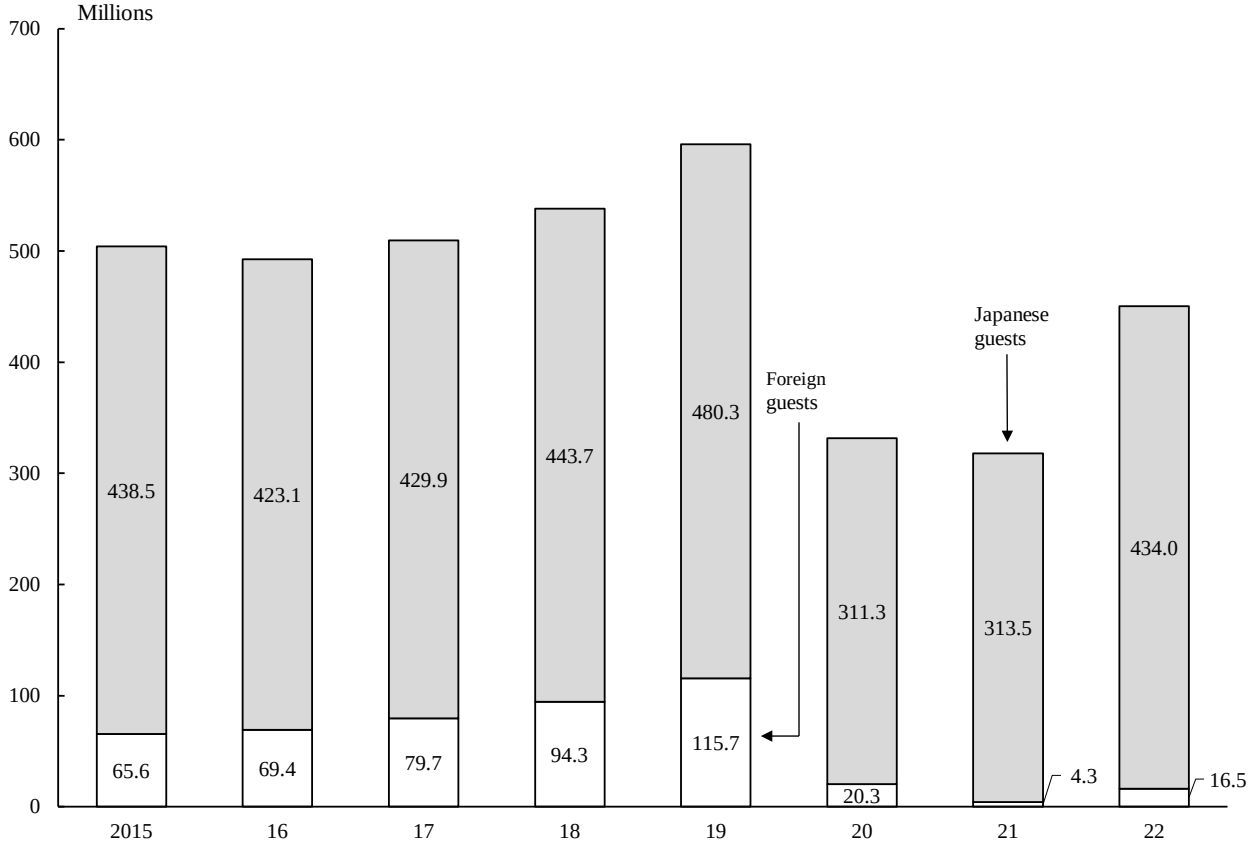
1) Including stateless people, etc.
Source: Japan National Tourism Organization.

In 2023, of the total number of foreign visitors to Japan, tourists numbered 22.38 million people, or 89.3 percent of total foreign visitors. The highest number of tourists came from the Republic of Korea, with 6.64 million travelers, followed by Taiwan, with 4.06 million travelers.

(2) Accommodation status in Japan

In 2022, the total number of overnight guests at hotels, inns, etc. in Japan was 450.5 million, an increase of 41.8 percent from the previous year. Looking at the breakdown, the total number of Japanese overnight guests was 434.0 million, an increase of 38.4 percent, and the total number of foreign overnight guests was 16.5 million, an increase of 282.3 percent, both large increases compared to the previous year. Although foreign guest figures are still greatly affected by the COVID-19 pandemic, the number of Japanese guests has significantly exceeded the figures from 2016 and 2017.

Figure 9.3
Trends of Total Guest Nights



Source: Japan Tourism Agency.

The most common prefecture where Japanese guests stayed in 2022 was Tokyo, followed by Osaka, Hokkaido, Chiba, and Kanagawa. Foreign guests, on the other hand, stayed most frequently in Tokyo, followed by Osaka, Kyoto, Hokkaido, and Chiba.

Chapter 10

Commerce

Glass eel fishing on the Yoshino River. Small boats with fishing lights float on the river, in a scene that looks like fireflies dancing on the surface. Glass eels are raised in eel farms until they grow large, and then shipped to restaurants and processing plants.

1. Wholesale and Retail

The "2021 Economic Census for Business Activity" showed that 1.23 million wholesale and retail establishments were in operation in Japan. The number of persons engaged at such establishments became 11.61 million. Sales in the wholesale and retail industries amounted to 480.17 trillion yen, accounting for 28.4 percent of the total of all industries.

(1) Wholesale Trade

The number of wholesale establishments in operation was 348,889 in 2021. Regarding size in terms of persons engaged, establishments with less than 20 persons accounted for 88.0 percent of the total. By type of corporate form, 91.5 percent of them were corporations, while 8.4 percent were individual proprietorships.

Table 10.1
Establishments and Persons Engaged in the Wholesale and Retail Sector (2021)

Item	Total	Wholesale	Retail
Number of Establishments	1,228,920	348,889	880,031
Size of operation (persons engaged)			
1-4 persons	662,206	171,120	491,086
5-9	265,776	85,100	180,676
10-19	173,105	50,733	122,372
20-29	56,551	16,437	40,114
30-49	33,078	12,023	21,055
50-99	19,287	6,651	12,636
100 and over	10,167	3,765	6,402
Loaned or dispatched employees only	8,750	3,060	5,690
Persons engaged	11,611,924	3,900,979	7,710,945
Regular employees	10,174,880	3,453,375	6,721,505
Indefinite duration employees	6,790,299	2,951,492	3,838,807
Limited duration employees	3,384,581	501,883	2,882,698
Temporary employees	214,794	44,194	170,600
Loaned or dispatched employees from the separately operated establishments	279,040	146,446	132,594
Loaned or dispatched employees to the separately operated establishments	97,377	75,678	21,699

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

The number of persons engaged in the wholesale sector was 3.9 million in 2021, 546,077 of whom were limited duration employees and temporary employees, making up 14.0 percent of the total.

(2) Retail Trade

The number of retail establishments in operation totaled 880,031 in 2021. Regarding size in terms of persons engaged, establishments with less than 10 persons accounted for 76.3 percent of the total. By type of corporate form, 65.7 percent of them were corporations, while 34.2 percent were individual proprietorships. The proportion of individual proprietorships was higher than that in the wholesale sector.

The number of persons engaged in retail was 7.71 million in 2021, 3.05 million of whom were limited duration employees and temporary employees, comprising 39.6 percent of the total.

Looking at the number of retail establishments operating in 2021 by 3-digit industrial classification, miscellaneous food and beverage stores, which include convenience stores and delicatessen stores, were the largest segment with 119,428 establishments (13.6 percent of all retail).

Within the category of miscellaneous food and beverage stores, in 2021 the number of convenience stores, primarily for sale of food and beverages (corporations only) was 22,714 establishments, and the number of persons engaged (corporations only, not including temporary employees) was 368,072. Also, annual sales of goods were 4.64 trillion yen, and sales floor space was 3.01 million square meters.

Table 10.2
Convenience Stores (2021)

Item	Retail trade (food and beverage)	Miscellaneous food and beverage stores	Convenience stores, primarily for sale of food and beverages
Number of Establishments	258,910	119,428	22,714
Corporations	142,050	67,645	22,714
Individual proprietorships [1]	116,860	51,783	-
Persons engaged [2]	3,127,884	1,366,941	368,072
Annual sales of goods (million yen)	39,974,189	12,470,463	4,644,441
Sales floor space (m^2)	41,323,565	12,500,992	3,011,581

1) Including organizations other than corporations.
2) Excluding the number of temporary employees.
Source: Statistics Bureau, MIC; Ministry of Economy, Trade and Industry.

2. Accommodations

There were 45,072 accommodations establishments in operation and 625,912 persons engaged at them in 2021. Regarding size in terms of persons engaged, establishments with 1-4 persons accounted for 48.9 percent of the total.

Table 10.3
Accommodations (2021)

Size of operation (persons engaged)	Establishments		Persons engaged	
	Number	Ratio (%)	Number	Ratio (%)
Total	45,072	100.0	625,912	100.0
1-4 persons	22,021	48.9	49,473	7.9
5-9	8,131	18.0	54,261	8.7
10-19	6,898	15.3	93,961	15.0
20-29	2,687	6.0	64,049	10.2
30 and over	4,567	10.1	364,168	58.2
Loaned or dispatched employees only	768	1.7	-	-

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

3. Eating and Drinking Places

There were 499,176 eating and drinking places establishments in operation and 3.49 million persons engaged at them in 2021. Regarding size in terms of persons engaged, establishments with 1-4 persons accounted for 61.7 percent of the total.

Table 10.4
Eating and Drinking Places (2021)

Size of operation (persons engaged)	Establishments		Persons engaged	
	Number	Ratio (%)	Number	Ratio (%)
Total	499,176	100.0	3,489,039	100.0
1-4 persons	308,208	61.7	649,085	18.6
5-9	92,798	18.6	608,955	17.5
10-19	55,144	11.0	746,796	21.4
20-29	25,036	5.0	596,470	17.1
30 and over	17,094	3.4	887,733	25.4
Loaned or dispatched employees only	896	0.2	-	-

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

Chapter 11

Trade, International Balance of Payments, and International Cooperation

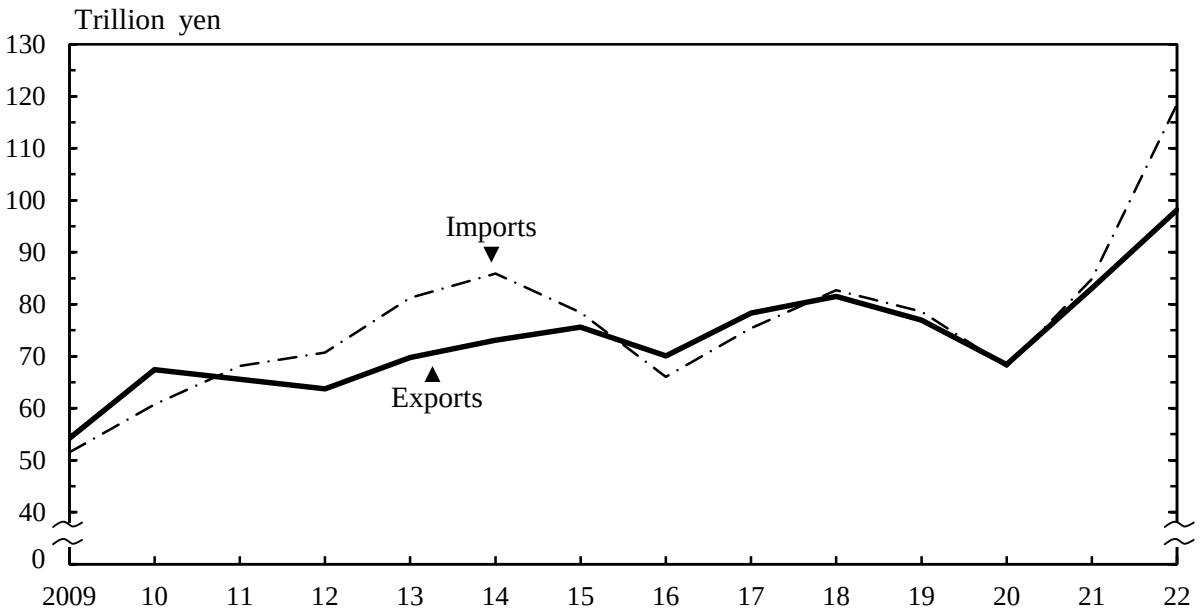
On October 6, 1954, the Japanese government decided to join the Colombo Plan and began providing official development assistance (ODA) to developing countries.
The year 2024 marks the 70th anniversary of Japan's launch of ODA.

1. Trade

(1) Overview of Trade

In 2022, Japan's international trade on a customs clearance basis increased, both exports and imports. Exports (in FOB value) amounted to 98.2 trillion yen, which was a 18.2 percent increase as compared to the previous year, and an increase for the second consecutive year. Imports (in CIF value) amounted to 118.5 trillion yen, which was a 39.6 percent increase as compared to the previous year, and an increase for the second consecutive year. Trade balance totaled -20.3 trillion yen. This was the red figure for the second consecutive year.

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 (2020=100)					
				Exports			Imports		
	Exports (FOB)	Imports (CIF)	Balance	Value index	Quantum index 1)	Unit value index	Value index	Quantum index 1)	Unit value index
2018	81,479	82,703	-1,225	119.1	118.3	100.7	121.6	108.1	112.5
2019	76,932	78,600	-1,668	112.5	113.2	99.3	115.6	106.9	108.2
2020	68,399	68,011	388	100.0	100.0	100.0	100.0	100.0	100.0
2021	83,091	84,875	-1,784	121.5	110.7	109.7	124.8	104.8	119.1
2022	98,174	118,503	-20,330	143.5	110.0	130.4	174.2	104.4	166.9

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

With regard to unit value index, Japan's 2022 exports increased by 18.9 percent from the previous year (an increase for the third consecutive year), and quantum index decreased by 0.6 percent from the previous year (the first decrease in 2 years).

With regard to Japan's imports in 2022, the unit value index increased by 40.1 percent from the previous year (an increase for the second consecutive year), and the quantum index decreased by 0.4 percent from the previous year (the first decrease in 2 years).

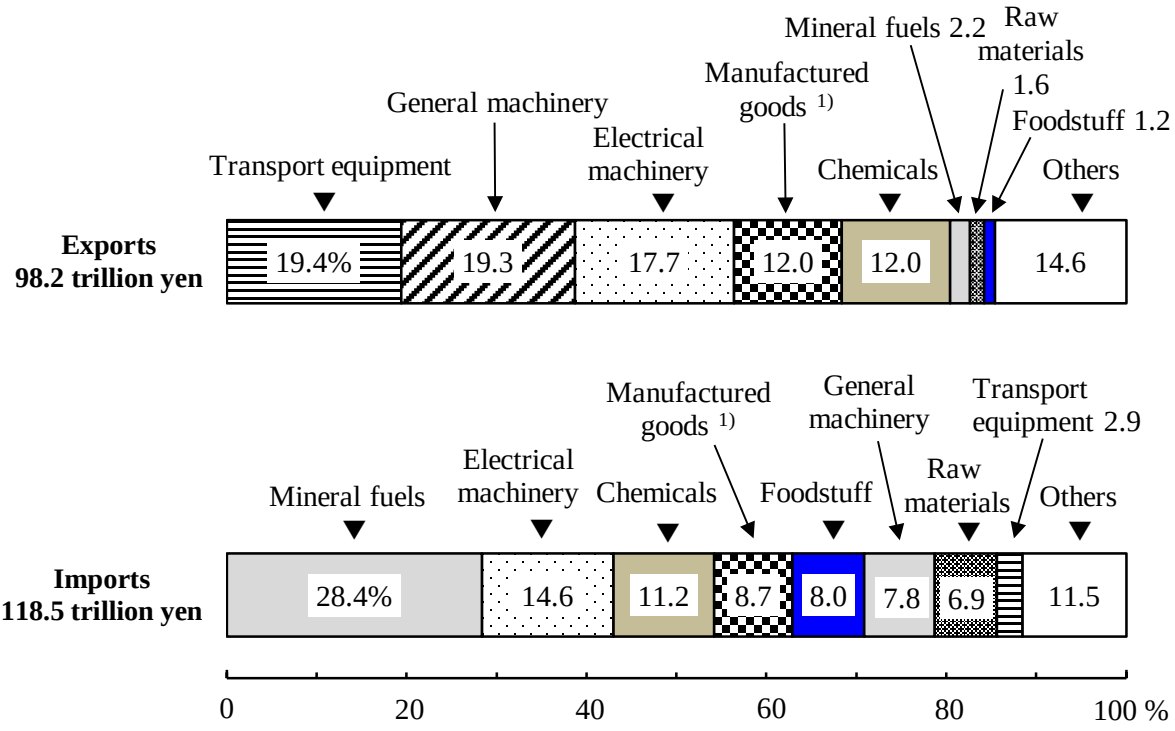
(2) Trade by Commodity

As for Japan's exports in 2022 by commodity, transport equipment accounted for the largest portion of the total export value, 19.4 percent, followed by general machinery and electrical machinery, making up 19.3 percent and 17.7 percent, respectively. Motor vehicles, which are in the transport equipment category, constituted 13.3 percent of the total export value, down 0.0 percent in quantity and up 21.4 percent in value from the previous year. One characteristic of Japan's exports is the large proportion of high value-added products manufactured with advanced technology, such as motor vehicles, iron and steel products, and semiconductors, etc.

The leading import item category was mineral fuels, which represented 28.4 percent of the total value imported, followed by electrical machinery

and chemicals, at 14.6 percent and 11.2 percent, respectively. Due to factors such as high crude oil prices, petroleum (in the mineral fuels category) constituted 11.4 percent of the total import value, up 10.1 percent in quantity and up 94.1 percent in value from the previous year.

Figure 11.2
Component Ratios of Foreign Trade by Commodity (2022)



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

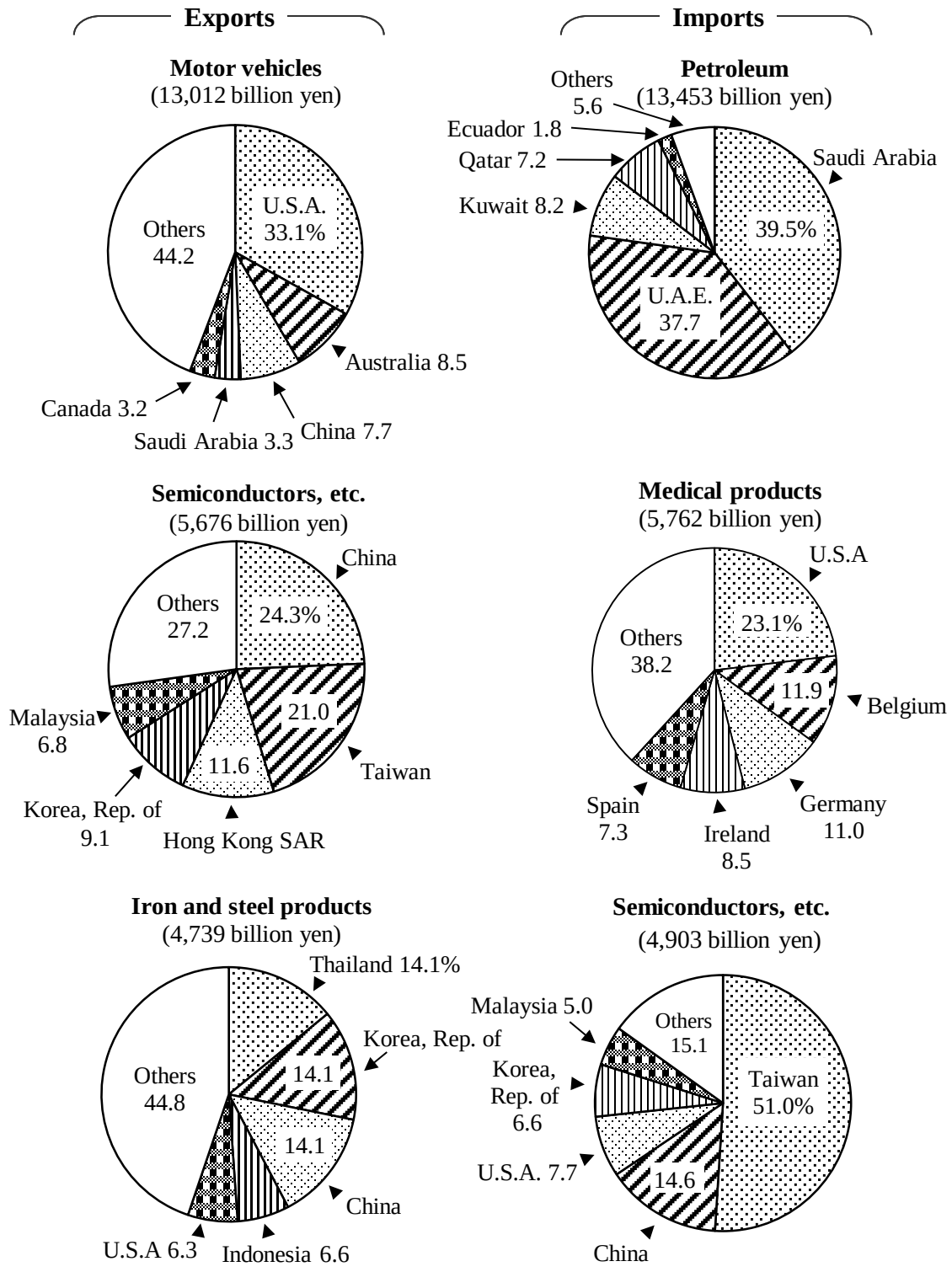
Table 11.2
Value of Exports and Imports by Principal Commodity

(Billion yen)

Item	2020	2021	2022	Annual growth (%)
Exports, total	68,399	83,091	98,174	18.2
Foodstuff	790	992	1,137	14.5
Raw materials	1,020	1,439	1,583	10.0
Mineral fuels	723	993	2,197	121.3
Chemicals	8,534	10,552	11,794	11.8
Plastic materials	2,420	2,976	3,155	6.0
Manufactured goods [1)]	7,504	9,928	11,818	19.0
Iron and steel products	2,574	3,814	4,739	24.2
General machinery	13,140	16,382	18,909	15.4
Semicon machinery, etc.	2,517	3,353	4,065	21.2
Electrical machinery	12,898	15,309	17,337	13.2
Semiconductors, etc.	4,155	4,900	5,676	15.8
Transport equipment	14,456	16,192	19,057	17.7
Motor vehicles	9,580	10,722	13,012	21.4
Others	9,334	11,302	14,342	26.9
Scientific, optical instruments	1,968	2,322	2,511	8.1
Imports, total	68,011	84,875	118,503	39.6
Foodstuff	6,679	7,383	9,494	28.6
Fish and fish preparation	1,369	1,516	1,945	28.3
Raw materials	4,682	6,936	8,150	17.5
Ore of nonferrous	1,505	2,007	2,537	26.4
Mineral fuels	11,254	17,007	33,699	98.1
Petroleum	4,646	6,929	13,453	94.1
Chemicals	7,859	9,769	13,331	36.5
Medical products	3,197	4,208	5,762	36.9
Manufactured goods [1)]	6,564	8,277	10,277	24.2
Nonferrous metals	1,723	2,836	3,341	17.8
General machinery	7,043	7,682	9,287	20.9
Computers and units	2,406	2,392	2,709	13.3
Electrical machinery	11,354	13,648	17,286	26.7
Semiconductors, etc.	2,506	3,355	4,903	46.2
Transport equipment	2,600	3,244	3,389	4.5
Motor vehicles	1,165	1,372	1,512	10.2
Others	9,977	10,930	13,590	24.3
Clothing and accessories	2,724	2,835	3,501	23.5

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

Figure 11.3
Component Ratios of the Value of Major Export and Import Commodities by Country/Region (2022)



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 EU (27 countries), Middle East and Oceania.

Table 11.3
Trends in Value of Exports and Imports by Country/Region

(Billion yen)

Year	Total	Asia	China	Korea, Rep. of	Taiwan	U.S.A.	EU [1)]	Middle East	Oceania
Exports from Japan									
2018	81,479	44,736	15,898	5,793	4,679	15,470	9,209	2,434	2,402
2019	76,932	41,327	14,682	5,044	4,689	15,255	8,955	2,356	2,053
2020	68,399	39,220	15,082	4,767	4,739	12,611	6,460	1,809	1,688
2021	83,091	48,158	17,984	5,770	5,988	14,832	7,668	2,052	2,194
2022	98,174	55,406	19,004	7,106	6,857	18,255	9,358	2,782	2,816
Imports to Japan									
2018	82,703	39,218	19,194	3,550	2,998	9,015	9,718	10,375	5,659
2019	78,600	37,413	18,454	3,227	2,928	8,640	9,722	8,852	5,587
2020	68,011	34,678	17,508	2,842	2,863	7,454	7,832	5,558	4,359
2021	84,875	41,094	20,382	3,521	3,678	8,916	9,453	8,471	6,434
2022	118,503	53,401	24,850	4,417	5,109	11,759	11,446	15,608	12,693

1) 28 countries: from July 2013 to Jan. 2020, 27 countries: from Feb. 2020 onward.
Source: Ministry of Finance.

(A) Trade with Asia

Japan's 2022 trade balance with Asia resulted in a 2.0 trillion yen in surplus, a decrease for the first time in 3 years (down 71.6 percent from the previous year). Exports (in FOB value) totaled 55.4 trillion yen (up 15.1 percent), an increase for the second consecutive year; this was mainly due to the contributions for the increase in electrical machinery and manufactured goods. Imports (in CIF value) amounted to 53.4 trillion yen (up 29.9 percent), an increase for the second consecutive year; this was mainly contributed to the increase in electrical machinery and mineral fuels.

In 2022, Japan's trade with China amounted to 19.0 trillion yen in exports and 24.8 trillion yen in imports. The percentage of the total amount of Japan's imports and exports that is accounted for by imports and exports between Japan and China is approximately 20 percent, signifying that China is Japan's largest trading counterpart.

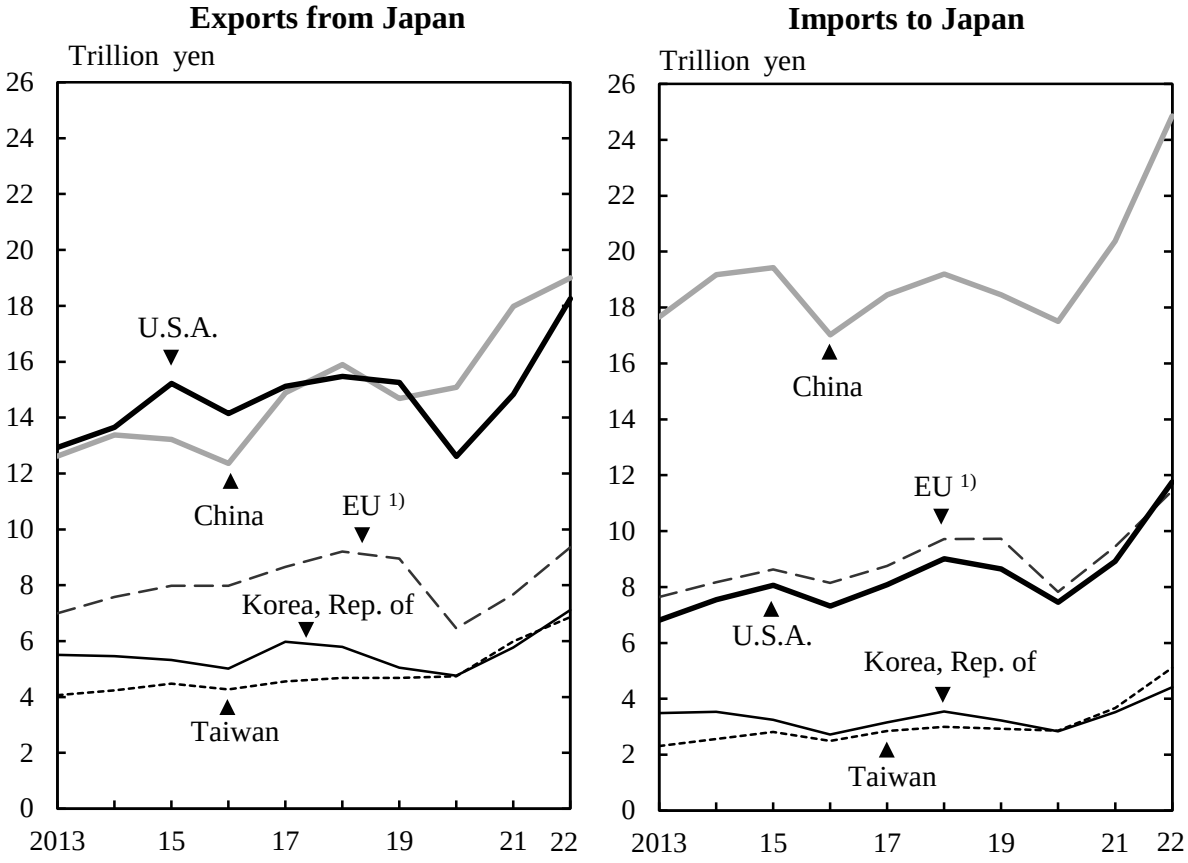
(B) Trade with U.S.A.

Japan's 2022 trade balance with the U.S.A. showed a surplus of 6.5 trillion yen (up 9.8 percent from the previous year), an increase for the second consecutive year. Exports (in FOB value) totaled 18.3 trillion yen (up 23.1 percent), an increase for the second consecutive year. The growth was due mainly to the contributions of general machinery and transport equipment. Imports (in CIF value) totaled 11.8 trillion yen (up 31.9 percent), an increase for the second consecutive year. The growth was due mainly to the contributions of chemicals and mineral fuels.

(C) Trade with EU

Japan's 2022 trade balance with the EU (27 countries) showed a deficit of 2.1 trillion yen (up 16.9 percent from the previous year), an increase for the fifth consecutive year. Exports (in FOB value) totaled 9.4 trillion yen (up 22.0 percent), an increase for the second consecutive year. The growth was due mainly to the contributions of general machinery and transport equipment. Imports (in CIF value) totaled 11.4 trillion yen (up 21.1 percent), an increase for the second consecutive year. The growth was due mainly to the contributions of chemicals and foodstuff.

Figure 11.4
Trends in Value of Exports and Imports by Country/Region



1) 27 countries: from Jan. 2007 to June 2013, 28 countries: from July 2013 to Jan. 2020, 27 countries: from Feb. 2020 onward.
Source: Ministry of Finance.

2. International Balance of Payments

The current account in 2023 totaled 21.4 trillion yen, and its surplus increased for the first time in 2 years, due to shrinking of the trade balance deficit, etc. Breaking down the current account, goods and services rose by 11.6 trillion yen from the previous year to -9.4 trillion yen, recording a deficit for the fifth consecutive year. Primary income amounted to 34.9 trillion yen, which was a 0.4 percent decrease in its surplus from the previous year.

The financial account amounted to 23.3 trillion yen in 2023, due to factors such as an increase in net assets for portfolio investment, etc.

Table 11.4
International Balance of Payments

(Billion yen)

Item	2020	2021	2022	2023
Current account	15,991.7	21,466.7	11,448.6	21,381.0
Goods and services	-877.3	-2,483.4	-21,066.5	-9,416.7
Goods	2,777.9	1,762.3	-15,510.7	-6,500.9
Exports	67,262.9	82,352.6	98,858.2	100,354.6
Imports	64,485.1	80,590.3	114,368.8	106,855.5
Services	-3,655.2	-4,245.7	-5,555.8	-2,915.8
Primary income	19,438.7	26,309.2	35,047.7	34,924.0
Secondary income	-2,569.7	-2,359.1	-2,532.6	-4,126.3
Capital account	-207.2	-423.2	-114.4	-400.1
Financial account [1)]	14,125.1	16,768.0	6,425.3	23,303.7
Direct investment	9,389.8	19,173.1	16,822.8	22,842.3
Portfolio investment	4,391.6	-21,917.5	-19,199.3	27,826.2
Financial derivatives (other than reserves)	799.9	2,168.5	5,085.0	6,502.6
Other investment	-1,654.1	10,453.9	10,773.9	-38,111.7
Reserve assets	1,198.0	6,889.9	-7,057.1	4,244.4
Net errors and omissions	-1,659.4	-4,275.5	-4,908.9	2,322.8

1) Positive figures (+) show increase in net assets, negative figures (-) show decrease in net assets.
Source: Ministry of Finance.

Japan's external assets (overseas assets held by residents in Japan) as of the end of 2023 amounted to 1,488.3 trillion yen, while its external liabilities (assets held in Japan by nonresidents) were 1,017.0 trillion yen. As a result, Japan's net international investment position (external assets minus external liabilities) were 471.3 trillion yen.

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

(Billion yen)

Item	2019	2020	2021	2022	2023
Assets	1,090,549	1,149,589	1,257,141	1,339,666	1,488,342
Liabilities	733,534	789,597	839,232	919,666	1,017,036
Net assets	357,015	359,992	417,908	420,000	471,306

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

Japan's reserve assets remained at around 220 billion U.S. dollars during the period from 1996 to 1998. Beginning in 1999, reserve assets increased continuously. A downward trend started at the end of 2012, but at the end of 2017, assets began to increase again, and increased to the end of 2021. They subsequently declined at the end of 2022, and in 2023 increased for the first time in 2 years to 1,294.6 billion U.S. dollars (up 5.5 percent from the previous year).

Table 11.6
Reserve Assets

(Million U.S. dollars)

End of year	Total	Foreign currency reserves [1)]	IMF reserve position	SDRs	Gold [2)]	Other reserve assets [3)]
2019	1,323,750	1,255,322	11,202	19,176	37,469	581
2020	1,394,680	1,312,160	15,147	20,215	46,526	632
2021	1,405,750	1,278,925	10,643	62,330	49,505	4,347
2022	1,227,576	1,103,907	10,817	59,275	49,295	4,282
2023	1,294,637	1,159,849	10,597	57,508	56,095	10,588

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

The yen began appreciating sharply in late 2008. From 2011 into 2012, the exchange rate of yen to the U.S. dollar 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 (QQME) to put an end to deflation. Based on this, the exchange rate shifted towards yen depreciation. Subsequently, the yen strengthened from early to mid 2016, followed by a leveling off phase from 2017. However, from 2022, factors such as trends in the interest rate difference between the U.S.A. and Japan have led, with some fluctuations, to a weakening yen-dollar exchange rate. As of the end of April 2024, the exchange rate was 156.9 yen per U.S. dollar.

Figure 11.5
Yen Exchange Rate against the U.S. Dollar (End of month)

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 non-profit organizations, assistance activities by NGOs and volunteer citizen groups, etc. With regard to ODA, there are various forms, including bilateral assistance, which assists developing countries and regions directly, and multilateral assistance, which contributes to international organizations, etc.

Table 11.7

Financial Flows to Developing Countries

(Million U.S. dollars)

Item	Net disbursements [1]		Grant equivalent [2]	
	2021	2022	2021	2022
Total value	38,496	54,238	…	…
Official flows	16,358	16,065	…	…
Official Development Assistance (ODA)	15,767	16,747	17,636	17,500
Bilateral official development assistance [3]	11,622	14,125	13,718	14,878
Grants [3]	5,682	5,620	5,682	5,620
Grant assistance [3]	3,259	3,258	3,259	3,258
Technical assistance	2,423	2,362	2,423	2,362
Loans	5,940	8,505	8,036	9,257
Contributions to multilateral institutions	4,145	2,622	3,918	2,622
Other Official Flows (OOF)	591	-682	…	…
Export credits (over 1 year)	-286	-783	…	…
Direct investment and others	876	101	…	…
Contributions to multilateral institutions	-	-	-	-
Private Flows (PF)	21,502	37,423	…	…
Export credits (over 1 year)	-570	-2,005	…	…
Direct investment	26,702	33,401	…	…
Other bilateral securities and claims	-5,911	10,098	…	…
Contributions to multilateral institutions	1,280	-4,071	…	…
Grants by private non-profit organizations	636	750	…	…
ODA as percentage of GNI (%)	0.30	0.37	0.34	0.39
ODA as percentage of GNI (DAC average) (%)	…	…	0.33	0.37

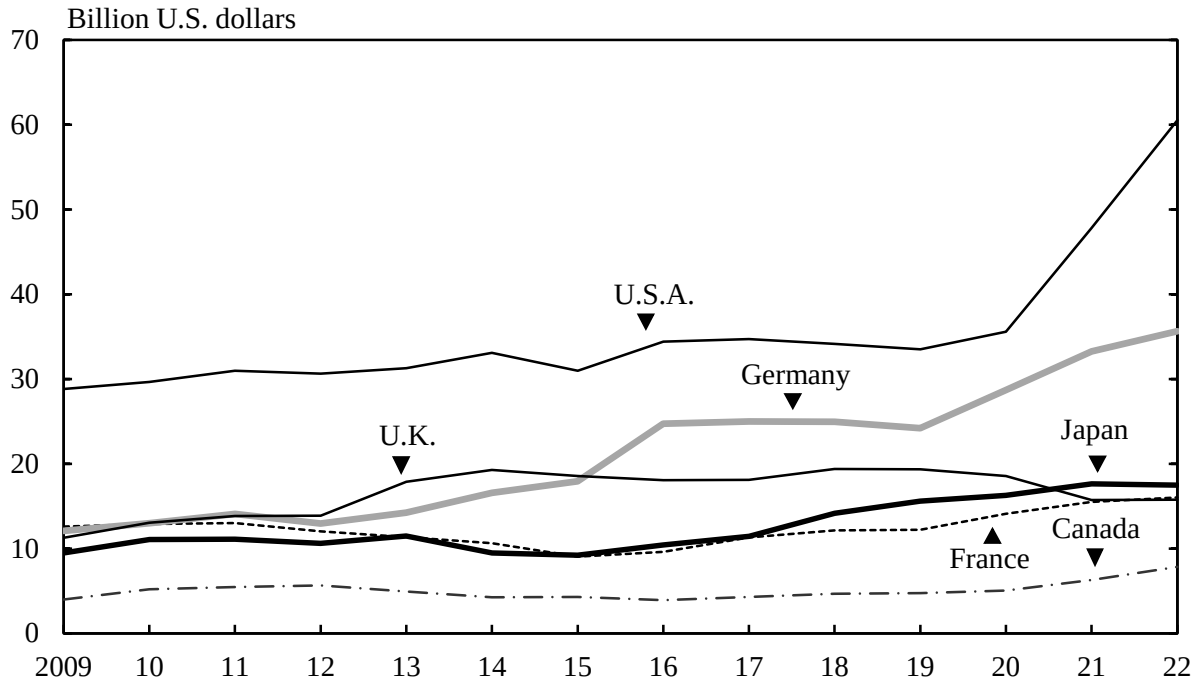
1) Net disbursements at current prices and exchange rate designated by DAC. Negative figures (-) indicate that loan repayments, etc., exceeded the disbursed amount. 2) Grant equivalent at current prices and exchange rate designated by DAC. 3) Including bilateral grants through multilateral institutions.

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

In the ODA framework, Japan's spending (on a grant equivalent basis at current prices) in 2022 was decreased by 0.8 percent over the previous year to 17.5 billion U.S. dollars. Japan contributed to the growth of developing countries as the world's number-one ODA donor for 10 consecutive years up until 2000, but recently Japan's ODA budget has declined to about half its peak level.

With regard to the comparison of the ODA grant equivalents in 2022 of the member countries of the Development Assistance Committee (DAC) of the OECD, Japan was the third-largest contributor behind the U.S.A. and Germany. The ratio of Japan's ODA grant equivalent to Gross National Income (GNI) was 0.39 percent, or an increase of 0.05 percentage points compared with that of the previous year.

Figure 11.6
Trends in ODA by Country [1)]



1) 2009-2017 data: Net disbursement at current prices and exchange rate designated by DAC.
2018-2022 data: Grant equivalent at current prices and exchange rate designated by DAC.
Source: OECD.

Of the 17.5 billion U.S. dollars in ODA grant equivalent provided by Japan in 2022, 14.9 billion was bilateral ODA (up 8.5 percent year-on-year), and 2.6 billion was ODA contributed through multilateral institutions (down 33.1 percent).

Bilateral ODA (grant equivalent at current prices) provided in 2022 consisted of 3.3 billion U.S. dollars of grant assistance, 2.4 billion of technical assistance, and 9.3 billion of loans.

By region, bilateral ODA (net disbursement at current prices, including assistance for the graduated countries designated as "developing areas") was distributed as follows: Asia, 6,526 million U.S. dollars; Middle East and North Africa, 1,713 million U.S. dollars; Sub-Saharan Africa, 1,566 million U.S. dollars; Europe, 765 million U.S. dollars; Latin America and the Caribbean, 695 million U.S. dollars; and Oceania, 235 million U.S. dollars.

Table 11.8

Regional Distribution of Bilateral ODA [1] (2022)

(Million U.S. dollars)

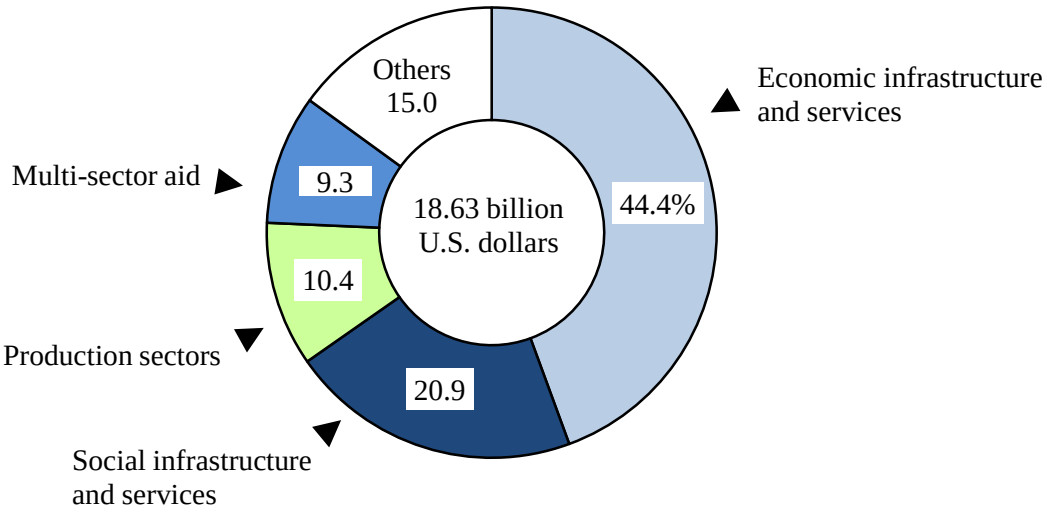
Region	Net disbursements
Total	14,132
Asia	6,526
ASEAN	1,612
Middle East and North Africa	1,713
Sub-Saharan Africa	1,566
Latin America and the Caribbean	695
Oceania	235
Europe	765
Multiple regions, etc.	2,632

1) Net disbursement at current prices and exchange rate designated by DAC. Including assistance for the graduated countries designated as "developing areas".

Source: Ministry of Foreign Affairs.

Bilateral ODA in 2022 (including assistance for the graduated countries designated as "developing areas") was broken down by purpose (on a commitments basis) as follows: 44.4 percent for improving "economic infrastructure and services" (including transport, storage and energy), followed in descending order by "social infrastructure and services", at 20.9 percent.

Figure 11.7
Distribution of Bilateral ODA by Sector [1] (2022)



1) Commitments basis. Including assistance for the graduated countries designated as "developing areas".

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 through its ODA activities, both of which are vital to the growth of developing countries.

Table 11.9
Number of Persons Involved in Technical Cooperation by Type [1] (FY2022)

Type of cooperation	Number of persons
Total	22,651
Trainees received	10,937
Dispatched	
Experts	7,713
Research team	3,371
Japan Overseas Cooperation Volunteers ...	542
Other volunteers	88

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

Chapter 12

Labour

© HOTTA Susumu

"Doctor Yellow" is the "Shinkansen doctor", measuring the condition of the various pieces of equipment that support high-speed operation of the Shinkansen as it travels. A young child runs up to the driver of Doctor Yellow to shake hands.

1. Labour Force

The population in Japan aged 15 years old and over peaked at 111.18 million people in 2017, and has been in a declining trend in recent years. In 2023, the population reached 110.17 million people.

In the 2000s, the labour force (among the population aged 15 years old and over, the total of employed persons and unemployed persons) had been on a downward trend due to the aging of the population, but began to increase in 2013 and continued to increase until 2019. From 2020, the figure was roughly flat. In 2023, it was 69.25 million, an increase of 0.23 million (0.3 percent) from the previous year and the first increase in 2 years.

The labour force participation rate (the rate of the labour force to the population aged 15 years old and over) was 62.9 percent in 2023 (up 0.4 percentage points from the previous year). Observed by gender, the rate was 71.4 percent for males (unchanged) and 54.8 percent for females (up 0.6 percentage points).

Table 12.1
Population by Labour Force Status

(Thousands)

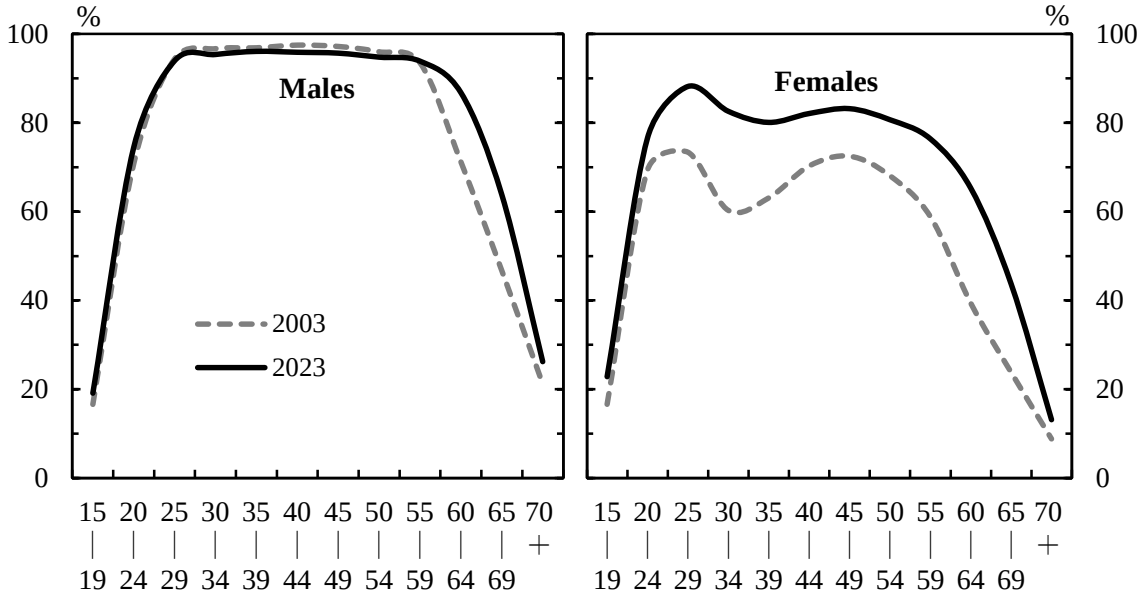
Year	Population aged 15 years old and over	Labour force			Not in labour force	Unemployment rate (%)
		Total	Employed	Unemployed		
Total						
2005	110,080	66,510	63,560	2,940	43,460	4.4
2010	111,110	66,320	62,980	3,340	44,730	5.1
2015	111,100	66,250	64,020	2,220	44,790	3.4
2020	111,080	69,020	67,100	1,920	41,970	2.8
2021	110,870	69,070	67,130	1,950	41,710	2.8
2022	110,380	69,020	67,230	1,790	41,280	2.6
2023	110,170	69,250	67,470	1,780	40,840	2.6
Males						
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
2015	53,650	37,730	36,390	1,350	15,880	3.6
2020	53,640	38,400	37,240	1,150	15,200	3.0
2021	53,510	38,270	37,110	1,170	15,200	3.1
2022	53,280	38,050	36,990	1,070	15,180	2.8
2023	53,210	38,010	36,960	1,050	15,160	2.8
Females						
2005	56,850	27,500	26,330	1,160	29,300	4.2
2010	57,460	27,830	26,560	1,280	29,600	4.6
2015	57,460	28,520	27,640	890	28,910	3.1
2020	57,440	30,630	29,860	760	26,770	2.5
2021	57,350	30,800	30,020	780	26,510	2.5
2022	57,110	30,960	30,240	730	26,100	2.4
2023	56,960	31,240	30,510	730	25,680	2.3

Source: Statistics Bureau, MIC.

The female labour force participation rate by age group is in an M-shaped curve, which implies that females leave the labour force when they get married or give birth and then rejoin the labour force after their child has grown. However, the shape of the M-shaped curve has been changing in recent years. A comparison with the data from 20 years ago (2003) shows that, in 2023, 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 22.3

percentage points in the 30-34 age group and by 17.0 percentage points in the 35-39 age group, making the bottom of the M-shaped curve flatter and more gradual. While this is thought to be greatly affected by the progression of enhancement of the legal system to balance work and childcare, and the improvement of work environment of companies, there are also effects from the trend of getting married and having children later in life.

Figure 12.1
Labour Force Participation Rate by Gender and Age Group



Source: Statistics Bureau, MIC.

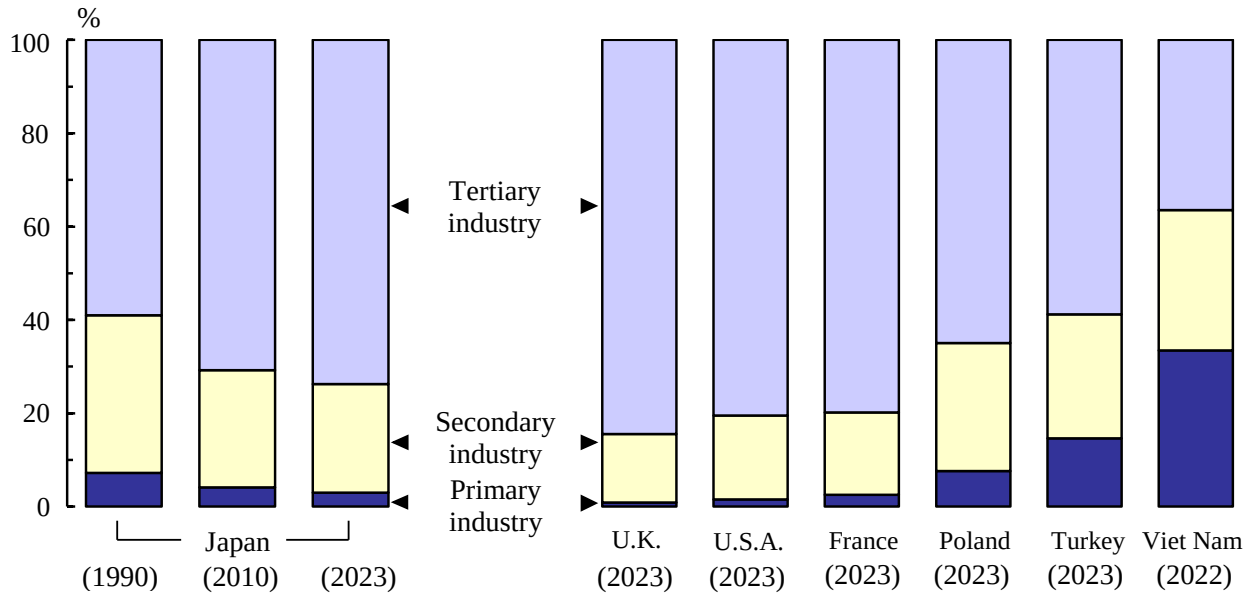
2. Employment

The number of employed persons declined between 2008 and 2012, before increasing between 2013 and 2019. Although there was a decrease for the first time in 8 years in 2020, the number began increasing in 2021, and the increase amounted to 0.24 million in 2023, from 67.23 million (60.9 percent of the population aged 15 years old and over) in the previous year to 67.47 million (61.2 percent).

(1) Employment by Industry

In 2023, the primary industry accounted for 3.0 percent of the total of employed persons; the secondary industry, 23.3 percent; and the tertiary industry, 73.7 percent.

Figure 12.2
Structure of Employment by Country 1)



1) The industrial classification for Japan is the Japan Standard Industrial Classification (JSIC). As to the countries other than Japan, the industrial classification is the International Standard Industrial Classification of All Economic Activities, Revision 4 (ISIC Rev.4).
Source: Statistics Bureau, MIC; International Labour Organization.

Over the long term, the percentage of persons employed in the primary industry and in the secondary industry have been continually falling, while the percentage of persons employed in the tertiary industry has been continually rising. Within the tertiary industry, the number of those in "medical, health care and welfare" has been increasing.

Depending on the industrial sector, a difference was seen in the employment tendency between males and females. In 2023, the percentage of male employment was highest in "mining and quarrying of stone and gravel", followed by "fisheries" and "electricity, gas, heat supply and water". The percentage of female employment was highest in "medical, health care and welfare", followed by "accommodations, eating and drinking services" and "living-related and personal services and amusement services".

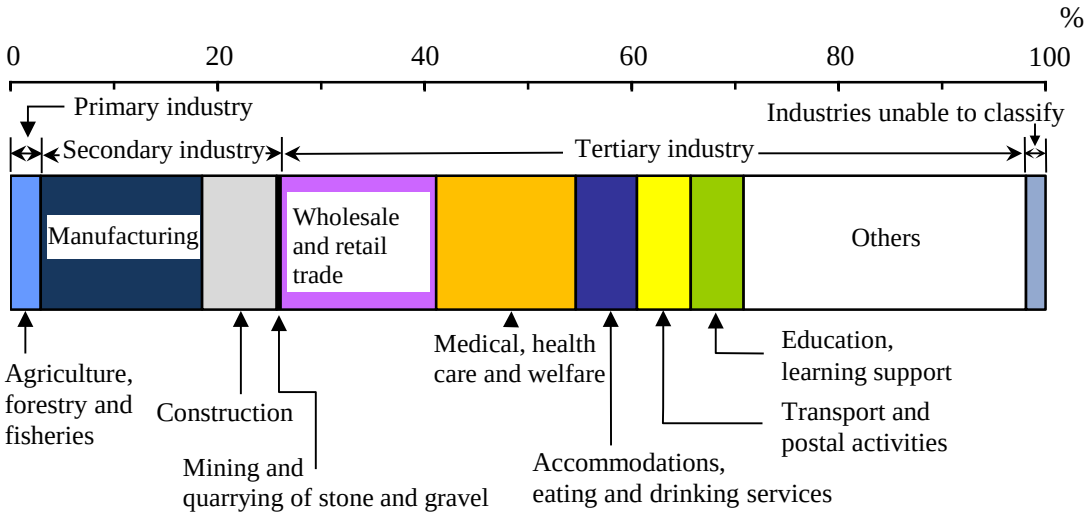
Table 12.2
Employment by Industry

(Thousands)

Industries	2020	2021	2022	2023	Percentage [1]	
					Males	Females
Total [2]	67,100	67,130	67,230	67,470	54.8	45.2
Primary industry	**2,130**	**2,080**	**2,050**	**1,990**	**63.3**	**36.7**
Agriculture and forestry	2,000	1,950	1,920	1,870	62.0	38.0
Fisheries	130	130	130	120	83.3	16.7
Secondary industry	**15,470**	**15,330**	**15,250**	**15,400**	**73.7**	**26.3**
Mining and quarrying of stone and gravel	20	30	20	20	100.0	0.0
Construction	4,940	4,850	4,790	4,830	81.8	18.2
Manufacturing	10,510	10,450	10,440	10,550	70.0	30.0
Tertiary industry	**48,260**	**48,660**	**48,810**	**48,830**	**48.6**	**51.4**
Electricity, gas, heat supply and water	320	340	320	300	83.3	16.7
Information and communications	2,410	2,580	2,720	2,780	70.5	29.5
Transport and postal activities	3,490	3,520	3,510	3,490	77.9	22.1
Wholesale and retail trade	10,620	10,690	10,440	10,410	47.4	52.6
Finance and insurance	1,670	1,680	1,600	1,550	45.2	54.8
Real estate and goods rental and leasing	1,400	1,420	1,410	1,390	58.3	41.7
Scientific research, professional and technical services	2,450	2,540	2,540	2,560	61.3	38.7
Accommodations, eating and drinking services	3,920	3,710	3,810	3,980	37.9	62.1
Living-related and personal services and amusement services	2,360	2,270	2,250	2,250	38.9	61.1
Education, learning support	3,410	3,480	3,490	3,440	41.0	59.0
Medical, health care and welfare	8,670	8,910	9,080	9,100	25.2	74.8
Compound services	510	500	500	470	59.6	40.4
Services, N.E.C.	4,540	4,520	4,630	4,580	58.7	41.3
Government [3]	2,490	2,500	2,510	2,530	67.6	32.4

1) Calculated from figures rounded to thousands.
2) Including "Industries unable to classify". 3) Excluding elsewhere classified.
Source: Statistics Bureau, MIC.

Figure 12.3
Distribution of Employment by Industry (2023)



Source: Statistics Bureau, MIC.

(2) Employment by Occupation

In terms of occupation, "sales workers", "agricultural, forestry and fishery workers" and the like have been declining since 2010. The number of "sales workers" was 8.11 million in 2023, down 1.8 percent from the previous year's 8.26 million. In contrast, "professional and engineering workers", "clerical workers" and the like have been on a rising trend since 2010. The number of "professional and engineering workers" was 12.86 million in 2023, which accounted for approximately 19.1 percent of total employed persons.

Table 12.3
Employment by Occupation

(Thousands)

Occupation	2020	2021	2022	2023	Percentage	
					Males	Females
Total [1]	67,100	67,130	67,230	67,470	54.8	45.2
Administrative and managerial workers	1,290	1,290	1,240	1,230	85.4	14.6
Professional and engineering workers	12,210	12,650	12,770	12,860	51.9	48.1
Clerical workers	13,600	13,890	14,010	14,060	39.6	60.4
Sales workers	8,520	8,480	8,260	8,110	54.5	45.5
Service workers	8,310	8,060	8,170	8,350	31.7	68.3
Security workers	1,330	1,300	1,290	1,250	92.8	7.2
Agricultural, forestry and fishery workers	2,090	2,030	1,990	1,940	65.6	34.4
Manufacturing process workers	8,730	8,650	8,700	8,780	70.0	30.0
Transport and machine operation workers	2,180	2,140	2,160	2,180	95.9	4.1
Construction and mining workers	2,930	2,840	2,760	2,770	97.1	2.9
Carrying, cleaning, packaging, and related workers	4,820	4,880	4,890	4,870	54.4	45.6

1) Including figures unclassifiable or not reported.
Source: Statistics Bureau, MIC.

In 2023, the percentages of male and female employed persons by occupation show that males were particularly prominent among "construction and mining workers" (97.1 percent) and "transport and machine operation workers" (95.9 percent). Females were prominent among "service workers" (68.3 percent) and "clerical workers" (60.4 percent).

(3) Employment by Employment Pattern

With regard to the trends in the number of employed persons by employment pattern, the number of non-regular staff members (such as part-time workers and agency-dispatched workers) has been increasing continuously for 10 consecutive years since 2010. However, in 2020, it decreased for the first time in 11 years, and in 2021 it decreased again for the second consecutive year. The number subsequently began increasing in 2022, and in 2023 it rose for the second consecutive year. The number of regular staff members was on a slight declining trend in the 2000s and the early 2010s, but began to rise in 2015 and has continued to rise for 9 years in a row.

In 2023, there were 57.30 million employees (excluding company executives), 21.24 million of whom, or 37.1 percent, were non-regular staff members. The ratio of non-regular staff members among all male employees was 22.6 percent, while the corresponding ratio for females was 53.2 percent, revealing a large difference between the genders.

With regard to the percentage of non-regular staff members to the total of regular and non-regular staff members by gender and age group, for males, the percentages of young people aged 15 to 24 years old, and the elderly aged 65 years old and over were high. Among females, non-regular staff members accounted for more than 50 percent across all age groups, with the exception of females aged 25 to 34 and 35 to 44 years old.

Table 12.4
Employment by Employment Pattern (2023)

(Thousands)

	Employees [1)]	Regular staff members	Percentage	Non-regular staff members	Percentage
Total	57,300	36,060	62.9	21,240	37.1
Males	30,210	23,380	77.4	6,830	22.6
Females	27,080	12,670	46.8	14,410	53.2

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

Figure 12.4
Employment Pattern by Gender and Age Group (2023)

Source: Statistics Bureau, MIC.

With regard to the main reasons for the current employment patterns of males and females who are non-regular staff members, for males, the reason "For working at convenient times" was the most popular, on average in 2023, with 2.09 million males (32.3 percent) choosing this reason, up 0.10 million people as compared to the previous year. The most popular reason among females was also "For working at convenient times", with 5.02 million females (35.8 percent) choosing this reason, up 0.22 million people.

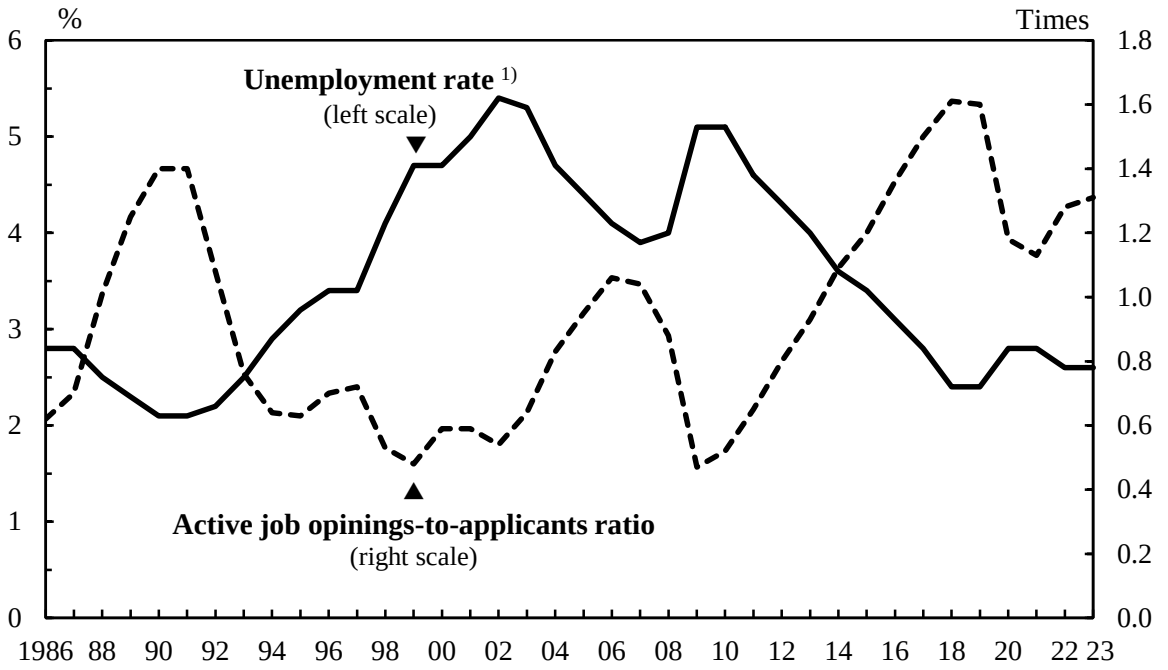
The employment rate of new graduates of high schools, universities, and other educational institutions declined at the time of the 2007-2008 Global Financial Crisis, and after that a generally increasing trend continued against a backdrop of issues like labour shortages and economic expansion. However, due to the effects of the COVID-19 pandemic, there was a decline in the employment rate of new graduates graduating in March 2021. The employment rate of new graduates graduating in March 2024 of high schools fell to 99.2 percent from 99.3 percent the previous year, while the employment rate of new graduates graduating in March 2024 of universities rose to 98.1 percent from 97.3 percent the previous year.

3. Unemployment

In 2023, the number of unemployed persons stood at 1.78 million people, down 0.6 percent from the previous year, a decrease for the second consecutive year. The unemployment rate was 2.6 percent, the same as the previous year.

The active job openings-to-applicants ratio had been on an upward trend from 2009 to 2019. However, as a result of the impact of COVID-19, the ratio declined in 2020 and 2021, but in 2022 began increasing, and in 2023 it reached 1.31 times, up 0.03 points from the previous year.

Figure 12.5
Unemployment Rate and Active Job Openings-to-Applicants Ratio



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

The breakdown by gender shows that the unemployment rate in 2023 was 2.8 percent among males, and 2.3 percent among females. The unemployment rate among males has been higher since 1998.

The unemployment rate was higher in younger age groups than in other age groups, in males and females alike.

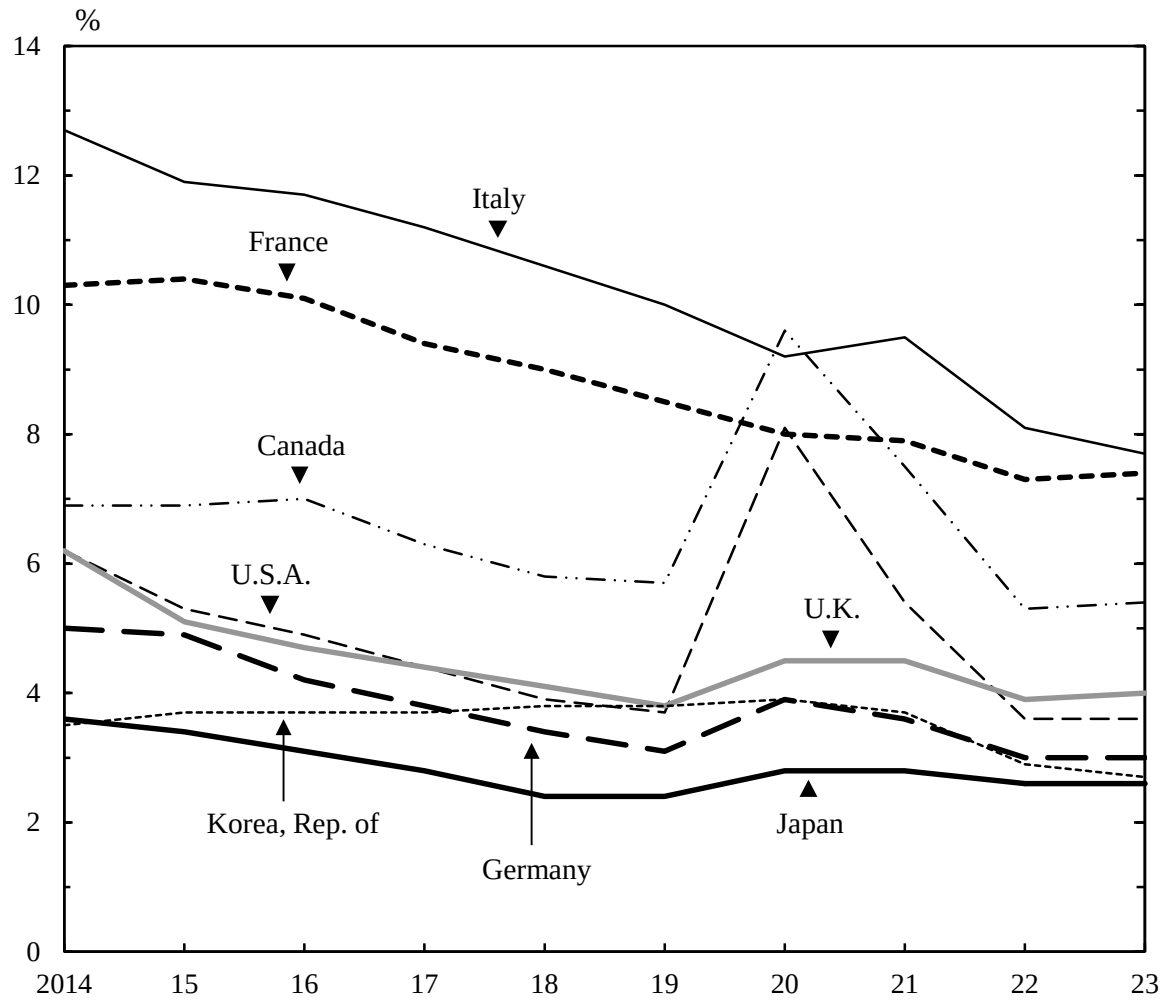
Figure 12.6
Unemployment Rates by Gender and Age Group (2023)

Source: Statistics Bureau, MIC.

With regard to the total number of unemployed persons in 2023, by reason for job-seeking, the major reasons were: (i) involuntary separation due to corporate or business circumstances, or reaching retirement age limit, 0.43 million persons; (ii) voluntary separation for personal or family reasons, 0.75 million persons; (iii) new job seekers due to the necessity to earn income, 0.25 million; and (iv) new job seekers just graduated from school, 0.07 million.

In terms of the duration of unemployment, the largest was unemployed for "less than 3 months" (0.67 million persons), followed by "1 year or more" (0.57 million persons).

Figure 12.7
Unemployment Rates by Country



Source: Statistics Bureau, MIC; Cabinet Office.

4. Hours Worked and Cash Earnings

In 2023, the monthly average of total hours worked was 136.3 per regular employee (in establishments with 5 or more regular employees), up 0.1 percent from the previous year, and an annual average was 1,636 hours.

Of the total monthly hours worked per regular employee, 126.3 were scheduled hours worked, representing an increase of 0.2 percent from the previous year. Non-scheduled hours worked such as overtime work were 10.0 hours, representing a decrease of 0.9 percent from the previous year. Monthly days worked per regular employee were 17.6 days in 2023.

In 2023, the monthly average of total cash earnings per regular employee (in establishments with 5 or more regular employees) was 329,778 yen. This total amount consists of 270,229 yen in "contractual cash earnings" (total for "scheduled cash earnings" and "non-scheduled cash earnings" for working overtime, on holidays and late at night, as well as other allowances), and 59,549 yen in "special cash earnings" (which include summer and year-end bonuses, payments to celebrate employees' marriages, etc.).

Table 12.5

Hours Worked and Cash Earnings [1] (Monthly average)

Year	Days worked	Hours Worked			Cash Earnings (1,000 yen)				
		Total	Scheduled	Non-scheduled	Total	Contractual	Scheduled	Non-scheduled	Special [2]
2019	18.0	139.1	128.5	10.6	323	264	244	20	58
2020	17.7	135.1	125.9	9.2	318	262	245	17	56
2021	17.7	136.1	126.4	9.7	319	264	246	18	56
2022	17.6	136.1	126.0	10.1	326	267	249	19	58
2023	17.6	136.3	126.3	10.0	330	270	251	19	60
Indices (2020 average = 100)									
2019	-	102.9	102.0	115.1	101.2	100.7	99.8	-	-
2020	-	100.0	100.0	100.0	100.0	100.0	100.0	-	-
2021	-	100.7	100.4	105.2	100.3	100.5	100.3	-	-
2022	-	100.8	100.1	110.0	102.3	101.9	101.4	-	-
2023	-	100.9	100.3	109.0	103.5	103.0	102.6	-	-

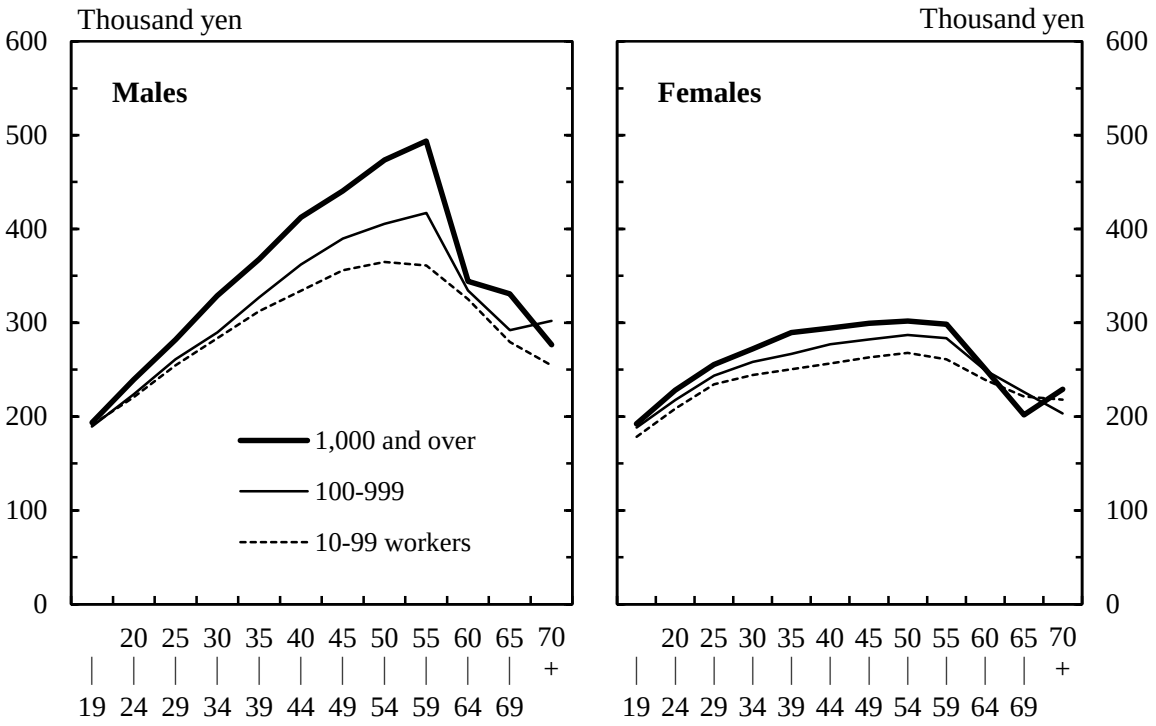
1) Establishments with 5 or more regular employees.

2) Bonuses and other special allowances.

Source: Ministry of Health, Labour and Welfare.

The average earnings (scheduled cash earnings) in Japan increase with age until roughly the 50s and then decline from the 60s. In revising salaries, about 40 percent of all companies emphasize "corporate performance", but in the context of worsening labour shortages, a rising percentage of companies in recent years have been placing the greatest emphasis on "securing and retaining their labour force".

Figure 12.8
Monthly Scheduled Cash Earnings by Size of Enterprise, Gender, and Age Group (2023)



Source: Ministry of Health, Labour and Welfare.

Chapter 13

Family Budgets and Prices

Irori-bata.
The hearth is a rectangular area in a traditional Japanese house where the floor is cut out and covered with ashes to burn wood or charcoal. It was used for cooking with pots and kettles hung from the ceiling and beams, and also served as heating and lighting. The area near the hearth was called *irori-bata* (hearth edge) and served as a place for family gathering.

1. Family Budgets

In 2020, there were approximately 56 million private households in Japan, of which about 62 percent are two-or-more-person households and about 38 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 2023 results of the "Family Income and Expenditure Survey".

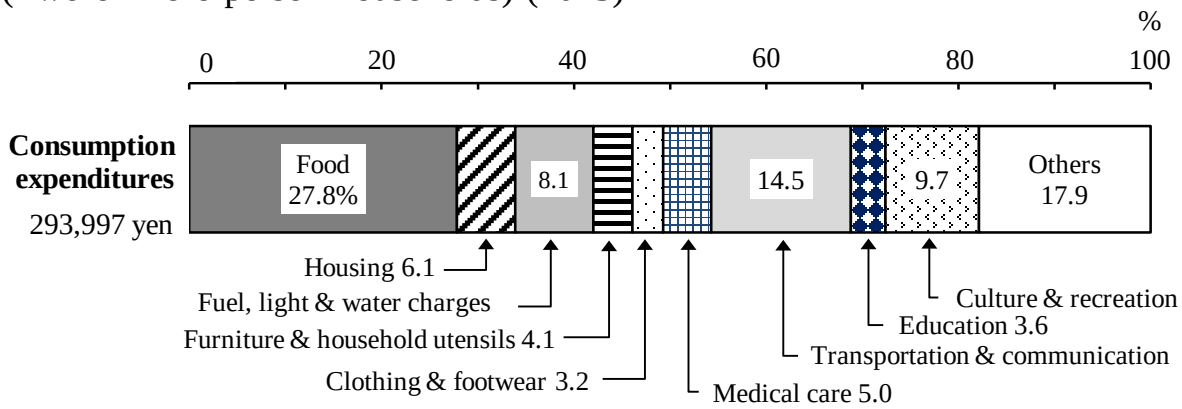
(1) Income and Expenditure

(A) Two-or-more-person Households

The 2023 average monthly consumption expenditures per two-or-more-person household (the average number of household members being 2.90 and the average age of the household head being 60.2 years) were 293,997 yen. Compared to the previous year, it increased by 1.1 percent in nominal terms and decreased by 2.6 percent in real terms. The share of food expenses to total consumption expenditures (Engel's coefficient) was 27.8 percent.

Results for 2023 marked the first decrease, in the 3 years since 2020, in the real annual change rate in consumption expenditures.

Figure 13.1
Average Monthly Consumption Expenditures per Household 1)
(Two-or-more-person households) (2023)



1) Use Classification.
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 3.23 and the average age of the household head being 50.4 years) was 608,182 yen in 2023. With regard to the breakdown of income, regular income by the household head makes up the majority. The ratio of income by spouses has been increasing little by little, however.

Table 13.1

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

(Yen)

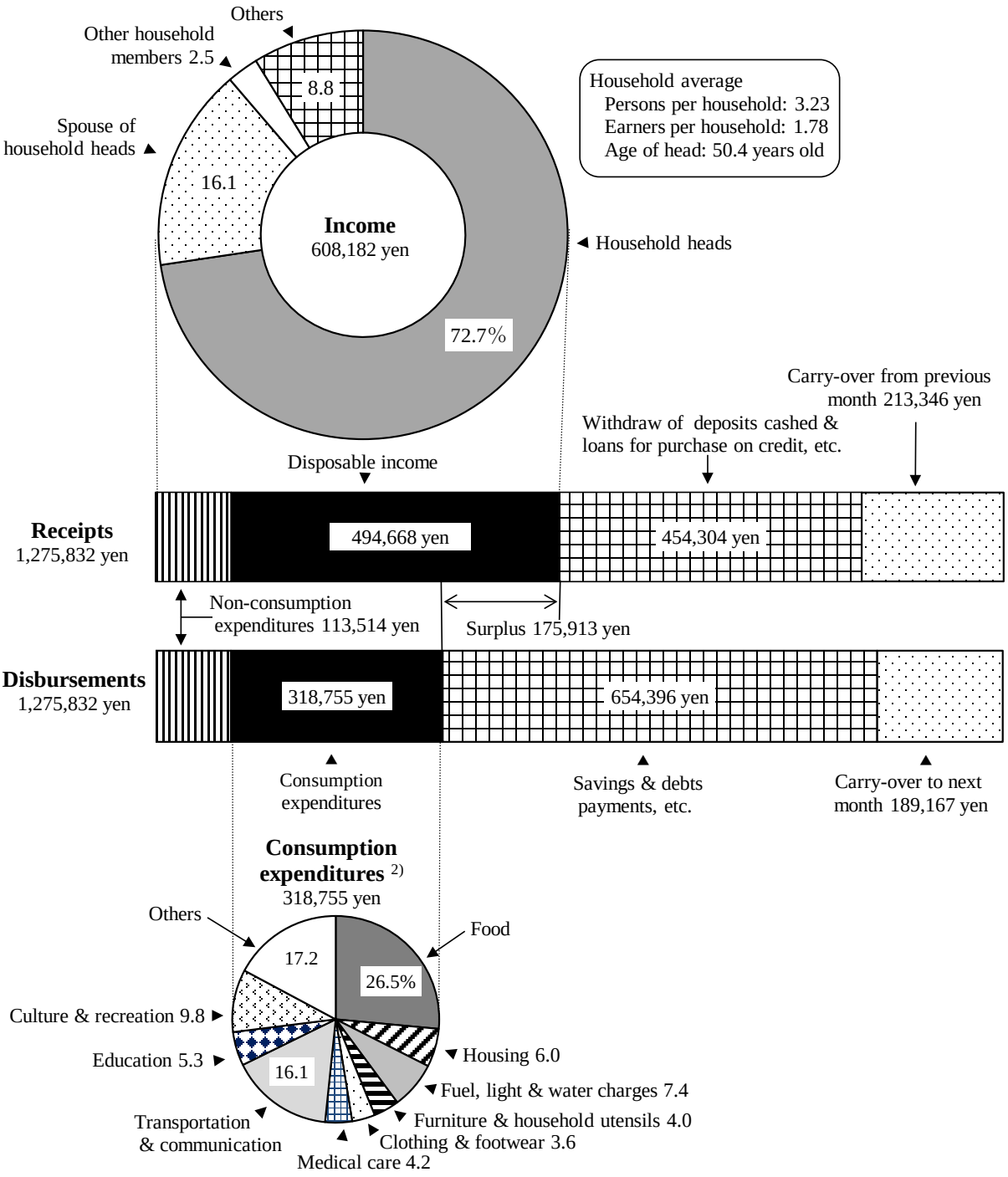
Item	2019	2020	2021	2022	2023
Income (A)	586,149	609,535	605,316	617,654	608,182
Wages and salaries	536,305	536,881	550,973	564,011	554,801
Others	49,844	72,654	54,343	53,643	53,381
Disposable income (A-C)	476,645	498,639	492,681	500,914	494,668
Expenditures	433,357	416,707	422,103	437,368	432,269
Consumption expenditures (B)	323,853	305,811	309,469	320,627	318,755
Non-consumption expenditures (C) [2]	109,504	110,896	112,634	116,740	113,514
Surplus ((A-C)-B)	152,792	192,828	183,213	180,286	175,913
Net increase in deposits and insurance	149,704	175,525	168,706	168,218	171,990
Average propensity to consume (%) [3]	67.9	61.3	62.8	64.0	64.4
Ratio of net increase in deposits and insurance (%) [4]	31.4	35.2	34.2	33.6	34.8
Engel's coefficient (%)	23.9	26.0	25.4	25.1	26.5
Annual change (%) (real terms)					
Disposable income	4.1	4.6	-0.9	-1.3	-4.8
Consumption expenditures	2.1	-5.6	1.5	0.6	-4.2

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 494,668 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 175,913 yen, was applied to savings, life insurance premiums and repaying debts such as housing loans.

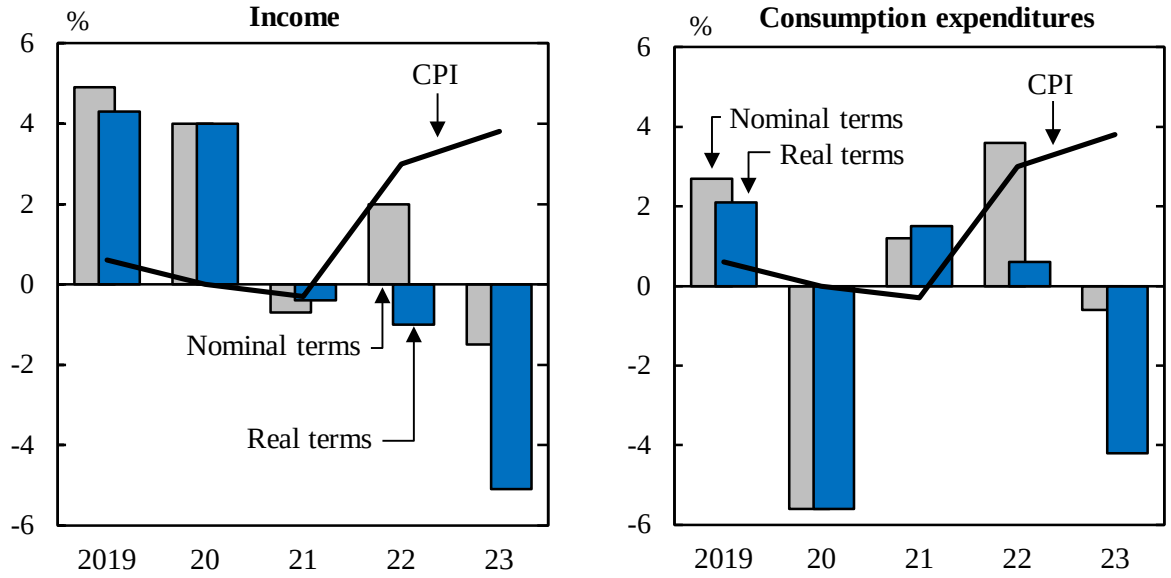
Figure 13.2
Balance of Income and Expenditures
(Monthly average per household, workers' households [1]) (2023)



1) Two-or-more-person households. 2) Use Classification.
Source: Statistics Bureau, MIC.

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

Figure 13.3
Year-on-Year Change in Average Monthly Income and Consumption Expenditures per Household (Workers' households [1])

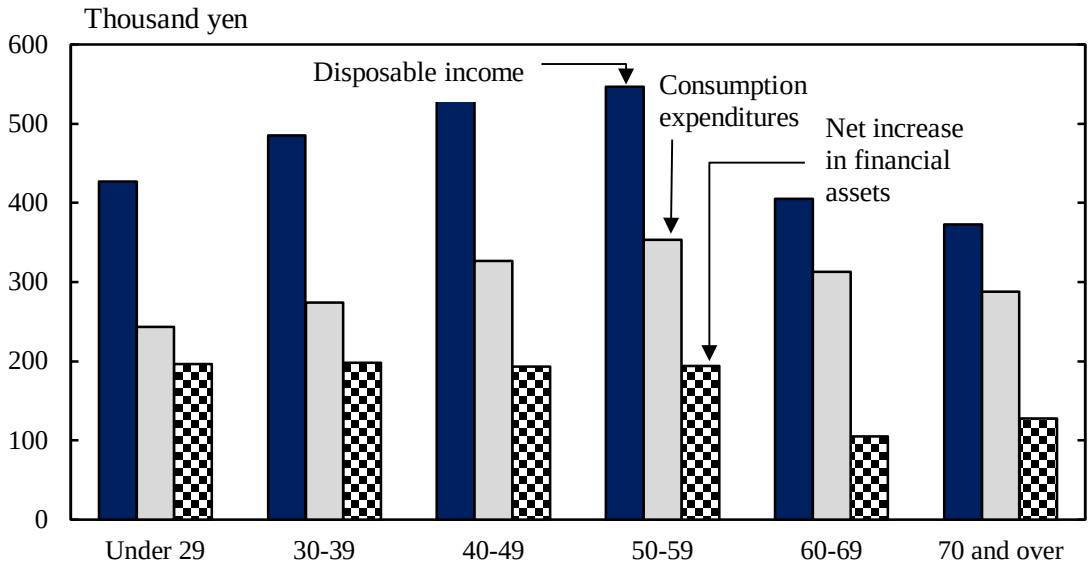


1) Two-or-more-person households.
Source: Statistics Bureau, MIC.

Family budgets differ among households according to their stages in life. Observed by age group of the household head, the 2023 average monthly disposable income of workers' households was the highest in households in the 50s group (546,951 yen), followed by those in the 40s group (532,453 yen) and the 30s group (485,166 yen).

The 2023 average propensity to consume (the ratio of consumption expenditures to disposable income) was 57.1 percent in the under 29 group, 56.4 percent in the 30s group, 61.3 percent in the 40s group, 64.6 percent in the 50s group, 77.2 percent in the 60s group, and 77.1 percent in the 70 and over group. The percentage tends to be higher as the age goes up. Meanwhile, a net increase in financial assets (an amount added to savings) was the highest in households in the 30s group, followed by those in the under 29 group.

Figure 13.4
Average Monthly Family Income and Consumption Expenditures per Household by Age Group of Household Head
(Workers' households [1]) (2023)



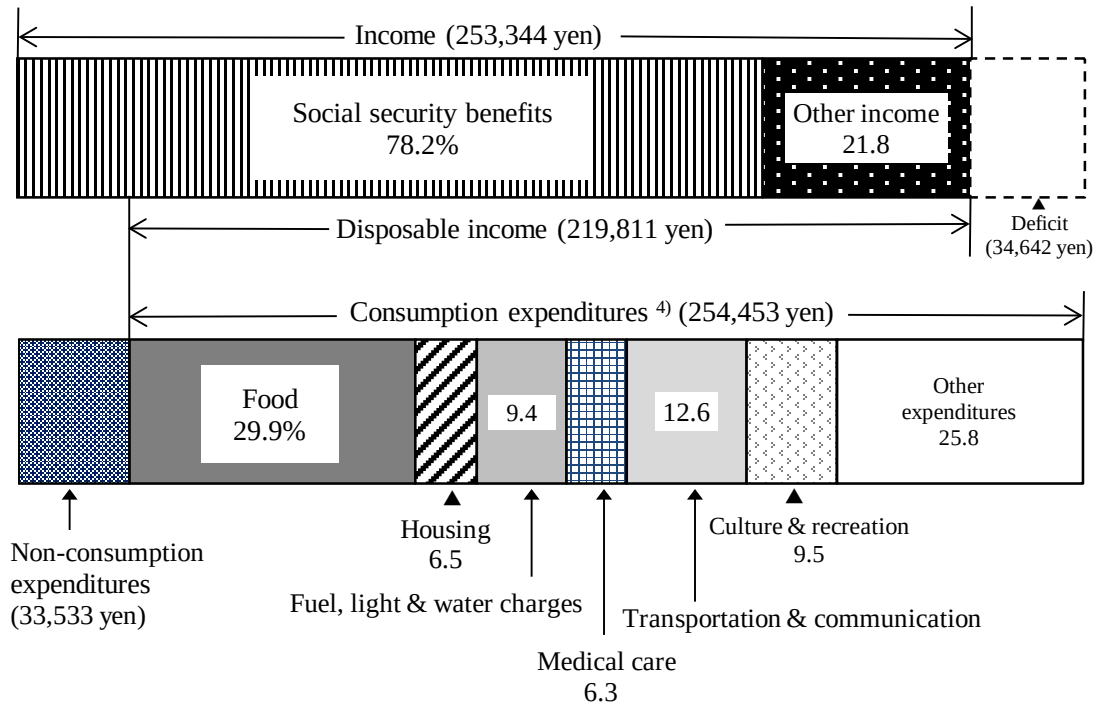
1) Two-or-more-person households.
Source: Statistics Bureau, MIC.

(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 253,344 yen in 2023. Social security benefits amounted to 198,170 yen, thus accounting for 78.2 percent of income.

Disposable income averaged 219,811 yen, while consumption expenditures averaged 254,453 yen. The average propensity to consume in non-working elderly households was 115.8 percent, which means consumption expenditures exceeded disposable income. The deficit of disposable income to consumption expenditures (34,642 yen) increased from that of the previous year (26,233 yen). This deficit was financed by withdrawing financial assets such as deposits, etc.

Figure 13.5
Average Monthly Income and Expenditures per Household [1) 2)]
(Non-working elderly households [3)]) (2023)



1) The percentage of "Social security benefits" and "Other income" in the graph is in proportion to the income. 2) The percentage from "Food" to "Other expenditures" in the graph is in proportion to the consumption expenditures. 3) Two-or-more-person households.
4) Use Classification.
Source: Statistics Bureau, MIC.

(B) One-person Households

The average monthly consumption expenditures of one-person households in 2023 were 167,620 yen, up 3.6 percent in nominal terms and down 0.2 percent in real terms from the previous year. By age group, the average monthly consumption expenditures were 170,281 yen for the under 34 group, 194,438 yen for the 35-59 group, and 152,743 yen for the 60 and over group. Spending on categories such as "food", "fuel, light and water charges", "furniture and household utensils" and "medical care" tended to be larger in older age groups. On the other hand, expenditures on "housing" and "clothing and footwear" decreased in each successively older age groups.

Table 13.2
Average Monthly Consumption Expenditures per Household by Age Group
(One-person households) (2023)

(Yen)

Item	Average		Under 34		35-59		60 and over	
	Actual figures	ratio (%)	Actual figures	ratio (%)	Actual figures	ratio (%)	Actual figures	ratio (%)
Consumption expenditures [1] ...	167,620	100.0	170,281	100.0	194,438	100.0	152,743	100.0
Food	42,049	25.1	38,666	22.7	46,498	23.9	41,078	26.9
Housing	23,799	14.2	36,954	21.7	34,261	17.6	13,240	8.7
Fuel, light and water charges	13,045	7.8	10,119	5.9	12,471	6.4	14,488	9.5
Furniture and household utensils	5,760	3.4	4,482	2.6	5,377	2.8	6,457	4.2
Clothing and footwear	4,447	2.7	6,561	3.9	4,583	2.4	3,550	2.3
Medical care	7,367	4.4	5,019	2.9	7,252	3.7	8,347	5.5
Transportation and communication	21,654	12.9	21,403	12.6	29,865	15.4	17,517	11.5
Education	2	0.0	9	0.0	0	0.0	0	0.0
Culture and recreation	18,794	11.2	22,342	13.1	20,447	10.5	16,550	10.8
Others	30,704	18.3	24,725	14.5	33,683	17.3	31,517	20.6
Annual change (%) (real terms)								
Consumption expenditures	-0.2		…		…		…	

1) Use Classification.
Source: Statistics Bureau, MIC.

(2) Savings and Debts

Two-or-more-person households in 2023 showed that the average amount of savings per workers' household was 14.74 million yen, resulting in a ratio to yearly income (7.69 million yen) of 191.7 percent. The median value of household savings (the current household savings of the household exactly in the middle when all households, excluding those with 0 savings, are listed in order from lowest to highest amount of savings) was 8.95 million yen. On the other hand, the average amount of debts per household was 10.09 million yen, which was 131.2 percent relative to yearly income. The median value of households holding debts (the current household debts of the household exactly in the middle when all households, excluding those with 0 debts, are listed in order from lowest to highest amount of debts) was 16.46 million yen. The portion of household debts accounted for by "housing and/or land" averaged 9.41 million yen. A total of 46.9 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 (%)
2019	7,360	13,760	187.0	8,550	7,980	116.2	55.3
2020	7,400	13,780	186.2	8,510	7,910	115.0	54.3
2021	7,490	14,540	194.1	8,560	7,910	114.3	53.4
2022	7,680	15,080	196.4	8,790	8,130	114.5	53.2
2023	7,690	14,740	191.7	10,090	9,410	131.2	55.7

1) Two-or-more-person households.

Source: Statistics Bureau, MIC.

By age group of household head, the average amount of savings was found to be the highest in the 60s group, while debts were the highest in the 30s group.

Table 13.4

Amount of Savings and Debts by Age Group of Household Head

(Workers' households [1]) (2023)

(Million yen)

Item	Average	Under 29	30-39	40-49	50-59	60-69	70 and over
Yearly income	7.69	6.30	6.99	8.01	8.82	6.66	5.99
Savings	14.74	4.69	8.41	11.97	16.45	22.19	21.06
Financial institutions	14.30	4.40	8.20	11.56	15.74	21.80	21.02
Demand deposits	5.72	2.67	4.26	5.27	5.85	7.67	7.16
Time deposits	3.36	0.62	1.24	2.11	3.85	6.31	5.83
Life insurance and non-life insurance	3.02	0.52	1.41	2.43	3.60	4.36	5.08
Securities	2.20	0.59	1.29	1.75	2.44	3.46	2.96
Non-financial institutions	0.44	0.30	0.21	0.41	0.71	0.38	0.04
Debts	10.09	10.78	18.76	14.07	7.11	2.07	1.21
Housing and/or land	9.41	10.52	17.62	13.30	6.50	1.77	0.74
Other than housing and/or land	0.49	0.14	0.91	0.59	0.38	0.17	0.39
Monthly and yearly installments	0.19	0.12	0.23	0.18	0.23	0.13	0.08

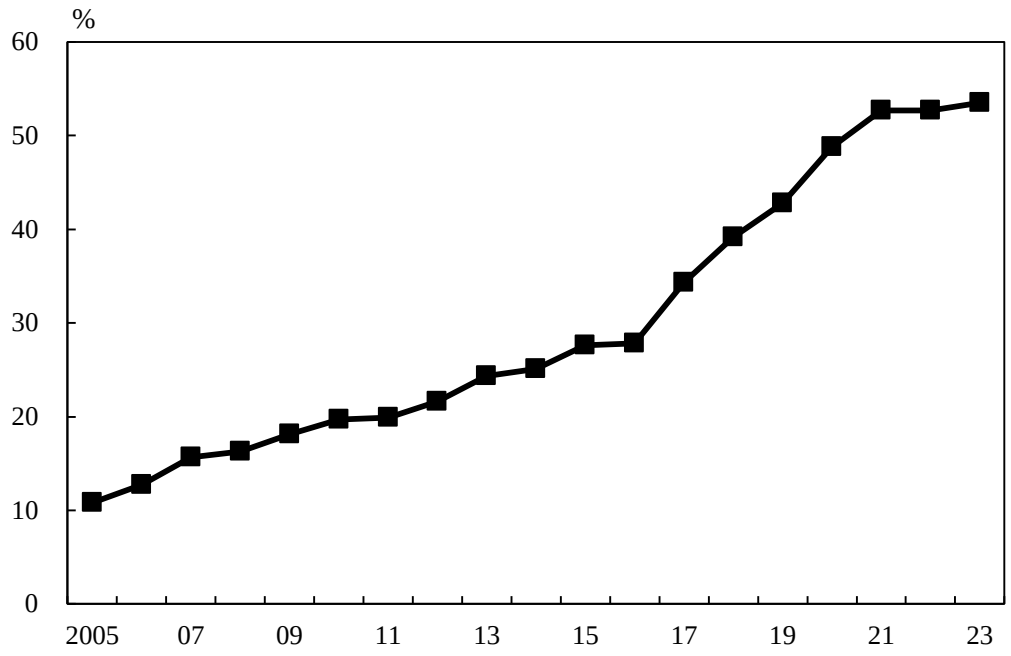
1) Two-or-more-person households.

Source: Statistics Bureau, MIC.

(3) Internet Shopping by Households

Users of Internet shopping have been in an increasing trend due to the popularization of computers, smartphones, etc., and the COVID-19 pandemic. According to the "Survey of Household Economy", the percentage of two-or-more-person households that utilize Internet shopping has continued to increase since 2002, reaching 53.5 percent in 2023. Total monthly expenditures used on Internet shopping amounted to an average of 23,021 yen per household.

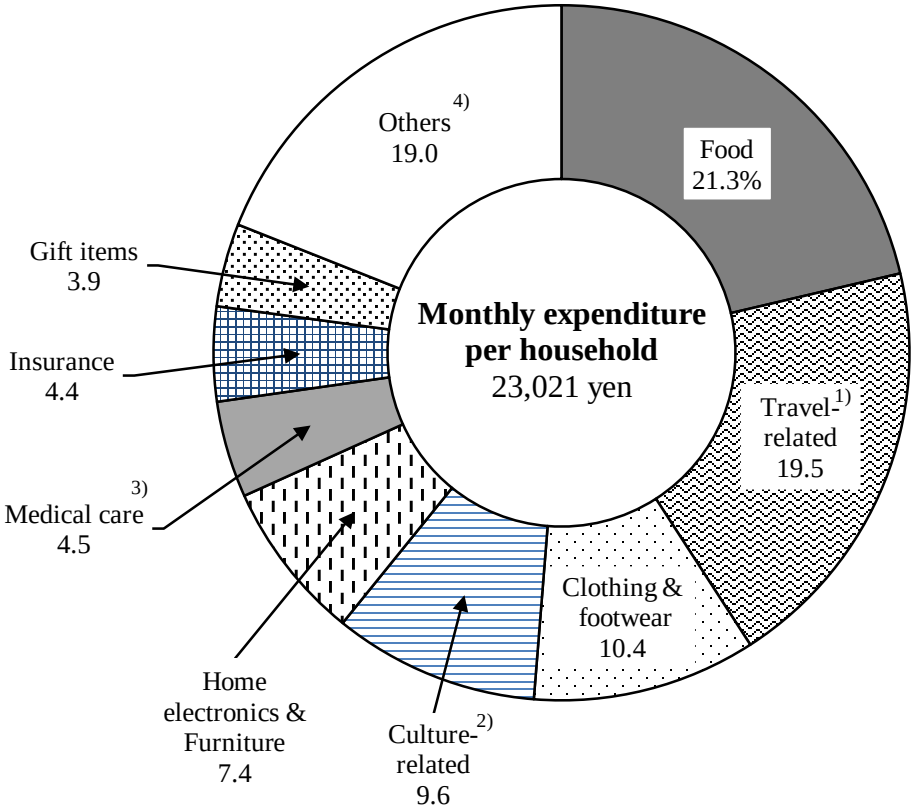
Figure 13.6
Proportion of Households Ordered over the Internet
(Two-or-more-person households)



Source: Statistics Bureau, MIC.

Looking at the breakdown of total expenditures per two-or-more-person households spent on Internet shopping, "food" was the highest at 21.3 percent, followed by "travel-related" at 19.5 percent, "clothing and footwear" at 10.4 percent, "culture-related" (such as books and music software) at 9.6 percent, and "home electronics and furniture" at 7.4 percent, etc.

Figure 13.7
Ratio of Expenditure on Goods and Services Ordered over the Internet
(Two-or-more-person households) (2023)

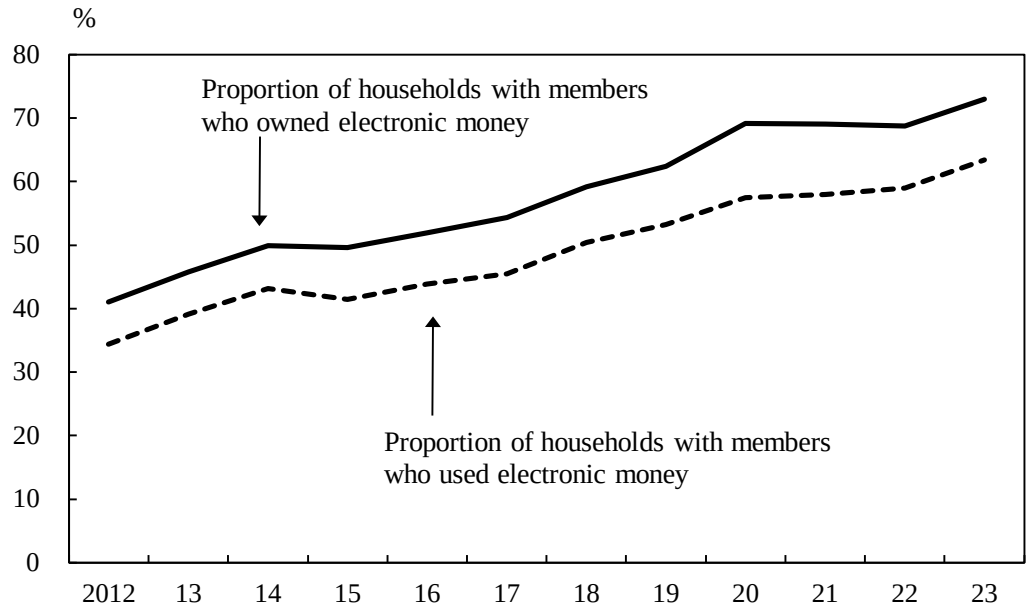


1) Total of accommodation services, fares and package tours. 2) Total of books and other reading materials, software (music, video, personal computer, TV game), digital books, download music, video, applications and tickets. 3) Total of medicines and health foods. 4) Total of cosmetics, private transportation, other goods and services.
Source: Statistics Bureau, MIC.

(4) Electronic Money

Use of electronic money has been increasing, as a means for settling accounts that can be easily used at transportation facilities, convenience stores, supermarkets, etc. Based on two-or-more-person households in the "Survey of Household Economy", the percentage of households with members who owned electronic money and the percentage of households with members who used electronic money have been on an increasing trend starting in 2008. In 2023, the percentage of households with members who owned electronic money was 73.0 percent, and the percentage of households with members who used electronic money was 63.4 percent.

Figure 13.8
Trends in Ownership and Utilization of Electronic Money
(Two-or-more-person households)



Source: Statistics Bureau, MIC.

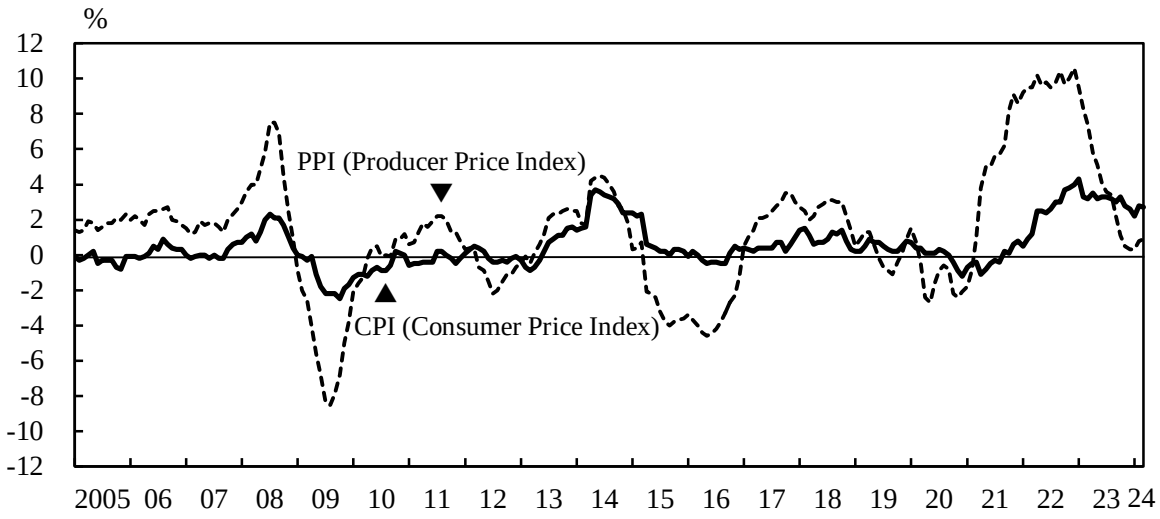
2. Prices

Producer prices fell in 2009 due to the fall in global resource prices triggered by the 2007-2008 Global Financial Crisis. Prices rose in 2014 due to depreciation of the yen, and fell from 2015 to 2016 due to the decline in global resource prices and a stronger yen. From 2018 to 2019, there was a drop in global resource prices due to a worldwide economic slowdown brought on by trade friction between the U.S.A. and China, and the size of the increase in producer prices contracted. In 2020, producer prices declined with global resource prices due to the COVID-19 pandemic. In 2021, global resource prices increased due to worldwide economic recovery, sparking an increase in producer prices. From 2022 to 2023, the size of the increase in producer prices grew due to a weaker yen, and a rise in crude oil and natural gas prices brought on by Russia's invasion of Ukraine.

Consumer prices began a rising trend in 2008 due to sharp increases in imported raw material prices, but after imported raw material prices fell due to the 2007-2008 Global Financial Crisis, and the trend was generally downwards from 2009 until 2013. Consumer prices rose due to the increase in the consumption tax to 8 percent in April 2014, but from the fourth quarter of 2016, there was an upward trend, due the increase in imported raw material prices brought on by the rise in global resource prices and weaker yen. Due to trade friction between the U.S.A. and China in 2018, the impact of the increase in resource prices decreased while the impact of the increase in food prices increased. The consumption tax rate was raised to 10 percent in October 2019, but the size of the increase in consumer prices was less than 1 percent, due to factors such as elimination of fees for preschool education and daycare, lower global resource prices, and lower communications charges. From 2020 to 2021, domestic demand fell due to constraints on consumer behavior caused by the COVID-19 pandemic, resulting in a declining trend in consumer prices. From 2022 to 2023, these prices rose due to loosening of behavioral constraints, and higher energy and food prices.

Figure 13.9

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 2020 = 100) was 105.6 in 2023, up 3.2 percent from the previous year.

Table 13.5

CPI for Major Categories of Goods and Services

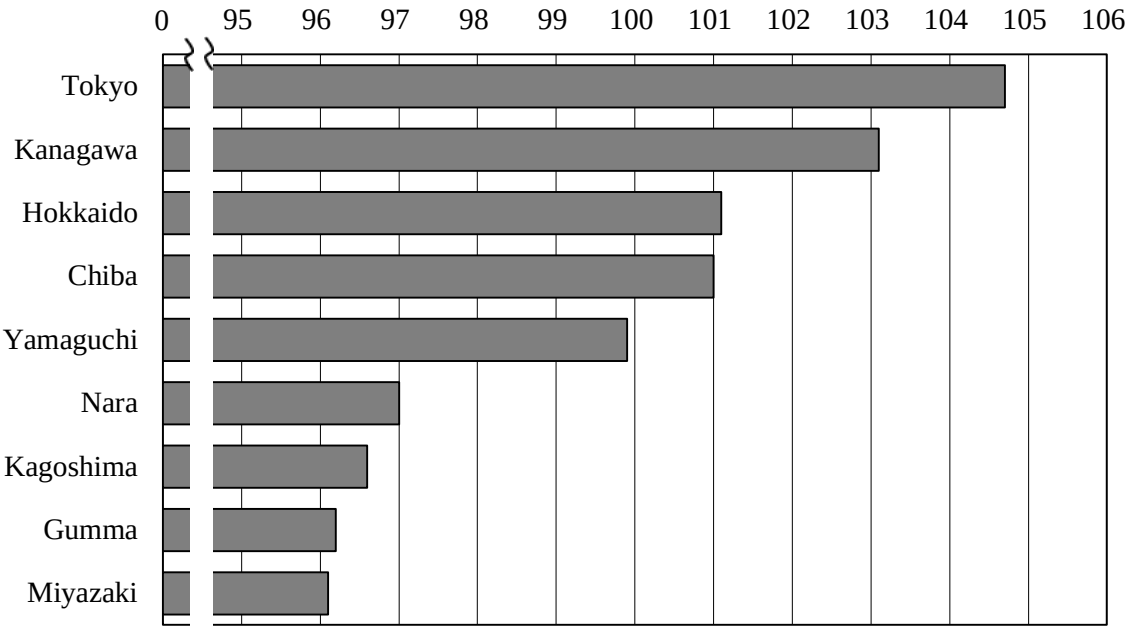
(CY2020=100)

Item	Weight	2010	2015	2021	2022	2023
All items	10000	94.8	98.2	99.8	102.3	105.6
All items, less imputed rent	8420	93.5	97.8	99.7	102.7	106.6
Food	2626	88.7	94.6	100.0	104.5	112.9
Housing	2149	100.5	99.6	100.6	101.3	102.4
Fuel, light and water charges	693	87.1	101.2	101.3	116.3	108.5
Furniture and household utensils	387	103.2	97.6	101.7	105.5	113.8
Clothing and footwear	353	92.3	96.4	100.4	102.0	105.7
Medical care	477	96.0	95.8	99.6	99.3	101.2
Transportation and communication	1493	97.7	101.2	95.0	93.5	95.8
Education	304	104.9	107.3	100.0	100.9	102.1
Culture and recreation	911	98.1	97.0	101.6	102.7	107.1
Miscellaneous	607	91.8	100.7	101.1	102.2	103.7
Goods	5046	92.4	96.8	100.8	106.3	111.1
Services	4954	97.3	99.6	98.7	98.2	100.0

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 had the highest score in 2022, with a figure of 104.7 against the national average set at 100, followed by Kanagawa, with 103.1. On the other hand, Miyazaki registered the lowest score, with 96.1, followed by Gumma with 96.2.

Figure 13.10
Regional Difference Index of Consumer Prices by Selected Prefectures (2022)



Source: Statistics Bureau, MIC.

(2) Corporate Goods and Services Producer 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 2023, the Producer Price Index (CY2020 as the base year = 100) was 119.7, up 4.2 percent from the previous year.

In 2023, the Export Price Index decreased to 110.4 on a contract currency basis (down 0.3 percent from the previous year), and to 130.9 on a yen basis (up 4.0 percent from the previous year). Furthermore, the Import

Price Index fell to 131.4 on a contract currency basis (down 8.8 percent from the previous year) and to 161.2 on a yen basis (down 4.7 percent from the previous year).

The Services Producer Price Index measures price movements of services traded between companies. In 2023, the Services Producer Price Index (CY2015 as the base year = 100) was 109.1, up 2.0 percent from the previous year.

Table 13.6
Corporate Goods and Services Producer Price Indices

Item	Weight	2019	2020	2021	2022	2023
Corporate Goods Price Index (CY2020=100)						
Producer Price Index	1000.0	101.2	100.0	104.6	114.9	119.7
Manufacturing industry products	892.3	100.8	100.0	104.7	113.7	118.7
Export Price Index (yen basis)	1000.0	103.3	100.0	108.3	125.9	130.9
Import Price Index (yen basis)	1000.0	111.5	100.0	121.6	169.1	161.2
Services Producer Price Index (CY2015=100)						
All items	1000.0	103.3	104.2	105.1	107.0	109.1
Information and communications	228.3	101.3	102.5	102.7	102.4	104.1
Transportation and postal activities	158.0	104.4	105.6	107.0	110.9	111.8
Real estate services	94.5	104.9	105.6	107.3	109.0	110.6
Leasing and rental	79.2	99.5	100.4	100.2	103.9	107.7

Source: Bank of Japan.

Chapter 14

Environment and Life

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The first *dezome-shiki* in 4 years.
Dezome-shiki is an event held by Japanese fire departments in early January to mark the beginning of the firefighting season. In Kumamoto City, it was the first time in 4 years that the event was held outdoors where citizens could watch, after a series of cancellations and indoor events due to the COVID-19 pandemic.

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.

The Japanese government has formulated an overall plan, the "Plan for Global Warming Countermeasures", based on the Act on Promotion of Global Warming Countermeasures. The aim is to achieve carbon neutrality by 2050. In fiscal 2022, Japan's total emission of greenhouse gases, which are a major cause of global warming, amounted to 1.1 billion tons (calculated after their conversion into carbon dioxide), representing a decrease of 2.5 percent from the previous fiscal year. Carbon dioxide accounted for 91.3 percent of these greenhouse gases, with an emission volume of 1.0 billion tons. A breakdown of carbon dioxide emissions by sector revealed that emissions from the industrial sector accounted for 34.0 percent of the total, followed in order by emissions from the transport sector, the commercial industry sector (office buildings, etc.), the residential sector, and the energy transformation sector (electric power plants, etc.).

Table 14.1

Breakdown of Carbon Dioxide Emissions [1) 2)]

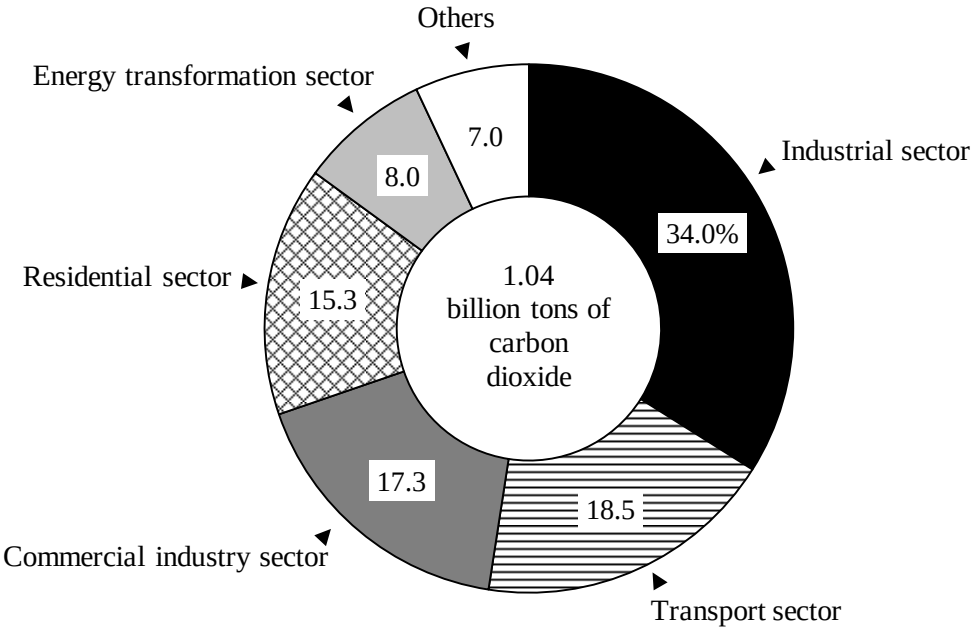
(Million tons)

Category	FY1990	FY2000	FY2010	FY2020	FY2021	FY2022
Total	1,163	1,268	1,217	1,042	1,064	1,037
Industrial sector	505	479	432	355	372	352
Transport sector	208	259	229	183	185	192
Commercial industry sector	131	190	200	181	187	179
Residential sector	126	152	176	168	160	158
Energy transformation sector	97	90	100	80	83	82
Industrial processes and product use	65	60	48	42	44	41
Waste (incineration, etc.)	24	33	29	30	31	30
Others	6	5	3	2	2	2

1) Volume of carbon dioxide after reallocation to the end-use sector. 2) Due to the revision of the Electricity Business Act (liberalization of electricity retail sales), the emission intensity of electricity used in each sector has changed since FY2016.

Source: Ministry of the Environment.

Figure 14.1
Sources of Carbon Dioxide Emissions [1)] (FY2022)



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 serious 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 Act has established a legal framework to address issues such as waste disposal and recycling of automobile and electrical appliance. Furthermore, in Japan, the "3Rs" (reduce, reuse and recycle) in waste management including R&D on waste recycling technology and appropriate management of materials of hazards have been promoted, but recently, socio-economic systems have been developed to especially implement the "2Rs" (reduce and reuse) from among the "3Rs".

Of various types of waste generated as a result of business activities, 20 of them, including sludge, waste oil, soot and dust, and imported waste, are designated as "industrial waste". The fiscal 2021 nationwide industrial waste generation totaled 376 million tons. Sludge, animal excreta, and debris, which account for approximately 80 percent of the total industrial waste, are now increasingly recycled into construction materials, fertilizers, and other materials. Thanks to this development, the volume of final disposal (to be put into landfills) fell from 45 million tons in fiscal 2000 to 9 million tons in fiscal 2021.

Meanwhile, a total of 41 million tons of "nonindustrial waste" (household waste and also shop, office, and restaurant waste) was generated in fiscal 2021. This translates to 890 grams per person per day. The total volume of processed nonindustrial waste was 39 million tons in fiscal 2021. The total volume of recycled waste was 8 million tons, with the recycling rate at 19.9 percent.

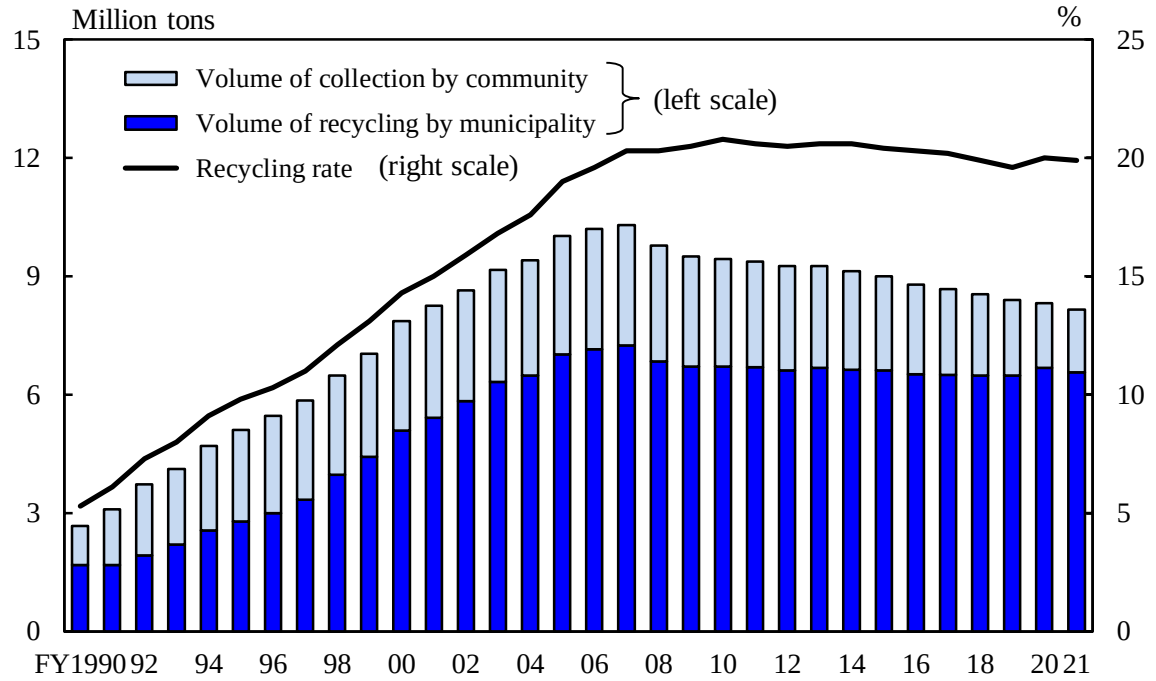
Table 14.2
Waste Generation and Disposal

(Thousand tons)

Item	FY2000	FY2010	FY2020	FY2021
Industrial waste				
Total volume of waste generation	406,037	385,988	373,818	375,917
Recycling	184,237	204,733	199,022	203,722
Treatment for waste reduction	176,933	167,000	165,708	163,370
Final disposal	44,868	14,255	9,089	8,825
Nonindustrial waste [1)]				
Total volume of waste generation	54,834	45,359	41,669	40,953
Municipally scheduled and collected	46,695	38,827	36,160	35,658
Directly brought to waste treatment facilities	5,373	3,803	3,866	3,702
Recyclable waste collected by community	2,765	2,729	1,643	1,593
Waste generated daily per person (in grams)	1,185	976	901	890
Total volume of processed waste	52,090	42,791	40,085	39,421
Direct incineration	40,304	33,799	31,872	31,491
Intermediate treatment for recycling, etc.	6,479	6,161	5,923	5,700
Direct recycling	2,224	2,170	1,923	1,891
Direct final disposal	3,084	662	367	340

1) Due to the Great East Japan Earthquake, figures for FY2010 exclude those for Minamisanriku Town, Miyagi Prefecture. Figures after FY2011 exclude disaster waste.
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 Town, Miyagi Prefecture. Figures after FY2011 exclude disaster waste.

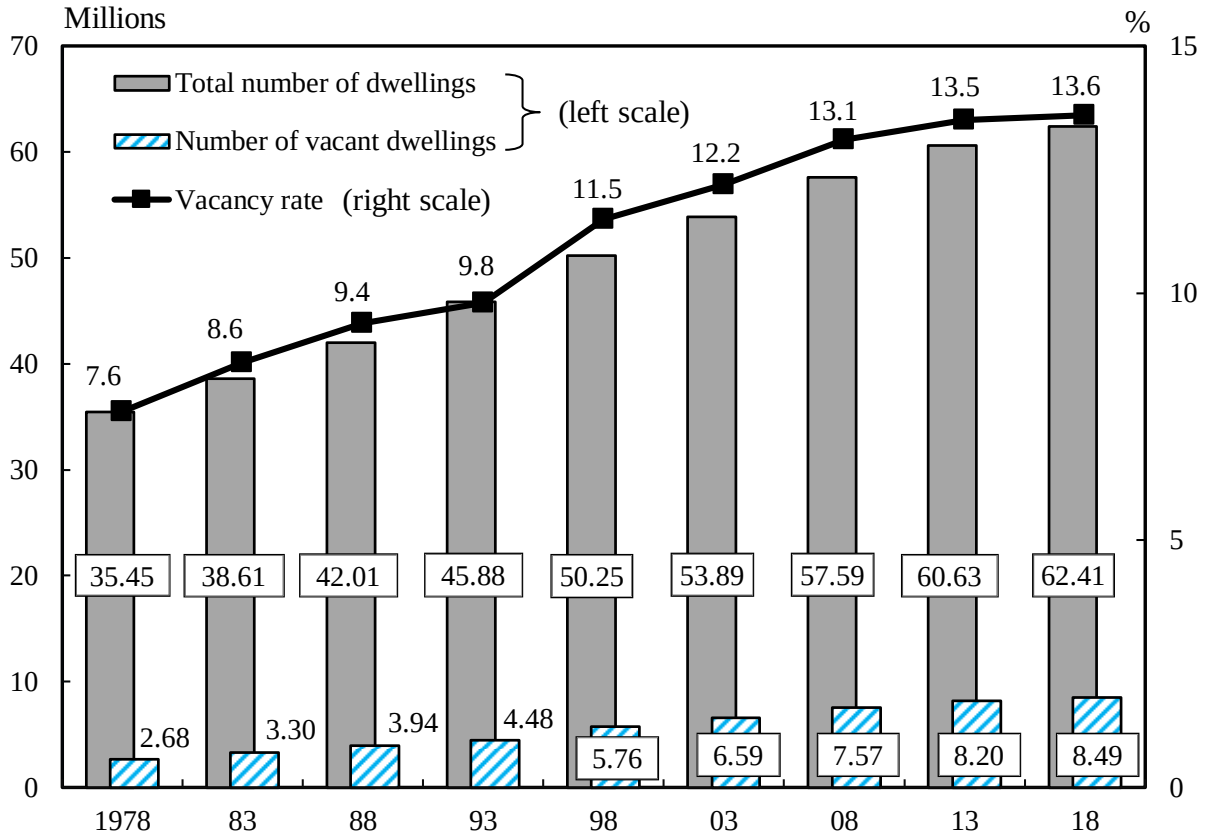
Source: Ministry of the Environment.

2. Housing

The total number of dwellings (the number of individual units in the case of apartment buildings) in Japan was 62 million in 2018, up by 2 million, 2.9 percent from 2013. The number of households was 54 million, representing the excess in number of dwellings over households by 8 million.

In 2018, the number of occupied dwellings (where people usually live) amounted to 54 million, accounting for 85.9 percent of the total number of dwellings. Of these, the number of dwellings used exclusively for living totaled 53 million, accounting for 98.2 percent of the occupied dwellings. Meanwhile, the number of vacant dwellings increased by 0.3 million, 3.6 percent from 2013, to 8 million. That vacancy rate represented 13.6 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 category of ownership showed that owned houses totaled 33 million, accounting for 61.2 percent of the total, which represented a decrease of 0.5 percentage points from the figure of 61.7 percent in 2013. Rented houses, on the other hand, numbered 19 million, accounting for 35.6 percent of the total.

Table 14.3
Housing Conditions

(Thousands)

Year	Total households	Total number of dwellings [1]	Occupied dwellings [2]	Ownership		Dwellings used exclusively for living	Floor space per dwelling (m^2) [2]
				Owned	Rented		
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
2018	54,001	62,407	53,616	32,802	19,065	52,642	92.1

1) Including dwellings without occupying households.
2) Including ownership 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
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
2018	53,616	28,759	1,369	23,353	136

Source: Statistics Bureau, MIC.

Occupied dwellings by building type showed that 29 million or 53.6 percent were detached houses, and 23 million or 43.6 percent were apartments. The proportion of apartments has consistently increased in recent years.

In terms of construction materials, 27 million or 92.6 percent of the detached houses were wood-frame houses (including fire-resistant ones). On the other hand, 17 million or 72.3 percent of the apartments were steel-framed concrete structures.

The number of principal households with household members aged 65 years old and over was 22.53 million. Of these households, there were 9.56 million households living in houses that are handrail-equipped at 2 or more locations or have a step-free interior (constant barrier-free houses), accounting for 42.4 percent of households with elderly members. This marked an increase of 1.2 percentage points compared to 2013.

Table 14.5
Ratio of Barrier-Free Houses with Elderly Members

Year	Principal households [1] with household members aged 65 years old and over					
	Number (1,000)			Ratio (%)		
	Total	Constant barrier-free houses [2]	High barrier-free houses [3]	Total	Constant barrier-free houses [2]	High barrier-free houses [3]
2013	20,844	8,584	1,775	100.0	41.2	8.5
2018	22,534	9,556	1,988	100.0	42.4	8.8

1) When a single household lives in 1 house, it is called a "principal household", and if 2 or more households live in 1 house, then the main household from among the multiple households is regarded as the "principal household". 2) Houses that are handrail-equipped at 2 or more locations, or have step-free interiors, as equipment for the elderly etc.
3) Houses that are handrail-equipped at 2 or more locations, and have step-free interiors and wheelchair-accessible hallways, as equipment for the elderly etc.
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 Basic Act on Traffic Safety Measures in the same year. Based on this, the government has promoted traffic safety measures in a comprehensive and systematic manner. As a result, the number of traffic accident fatalities was 2,610 in 2022, which is the lowest number since 1948 when the current traffic accident statistics were adopted, and this represented approximately one-sixth of the number in 1970.

In 2022, the number of traffic accident fatalities per 100,000 population was 2.1 persons, while that per 10,000 motor vehicles owned was 0.3 persons.

Table 14.6
Traffic Accidents and Casualties

Year	Traffic accidents	Injuries	Fatalities [1)]	per 10,000 motor vehicles owned	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	725,924	896,297	4,948	0.6	3.9
2020	309,178	369,476	2,839	0.3	2.3
2022	300,839	356,601	2,610	0.3	2.1

1) Death within 24 hours of the traffic accident.
Source: Cabinet Office.

4. Crime

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, 2023, the prefectural police operated police headquarters, police academies, 1,149 police stations, 6,239 police boxes and 6,026 police substations in 47 prefectures.

Community 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 crime and catch criminals.

In 2023, the reported number of penal code offenses was 703,351, an increase of 102,020, or 17.0 percent compared to the previous year. The proportion of thefts was the highest, accounting for 68.8 percent, or 483,695 cases (up 18.6 percent from the previous year).

The number of persons arrested for penal code offenses was 183,269 in 2023, an increase of 13,860, or 8.2 percent compared to the previous year. This was the first increase in 19 years.

The ratio of arrests to reported number of offenses marked 19.8 percent in 2001, the lowest since World War II. From 2002 to 2007, this ratio increased, and levelled off afterwards. It exhibited a rising trend from 2014,

and began to decline from 2022. It was 38.3 percent in 2023, a decrease of 3.3 percentage points from the previous year.

Table 14.7
Trends in Crime (Penal code offenses)

Year	Reported offenses	Resultant arrests	Persons arrested	Arrest rate [1)] (%)	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	1,419.5
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	1,604,019	497,356	322,620	31.0	1,252.6
2015	1,098,969	357,484	239,355	32.5	864.7
2020	614,231	279,185	182,582	45.5	486.9
2022	601,331	250,350	169,409	41.6	481.3
2023	703,351	269,550	183,269	38.3	565.6

1) The ratio of arrests to reported number of offenses.
Source: National Police Agency; Ministry of Justice.

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 (violation of the Unauthorized Computer Access Act, offenses involving computers or electromagnetic records, offenses related to creation of unauthorized commands for electromagnetic records, etc.) in 2023 was 12,479, up 0.9 percent from the previous year. This represented about a fourteenfold increase from the 913 cases registered in 2000.

Chapter 15

Social Security, Health Care, and Public Hygiene

Soba (buckwheat noodles) tasting at a buckwheat farm. Rutin, contained in buckwheat, is said to be effective in preventing lifestyle diseases because it prevents arteriosclerosis and lowers blood pressure. As of 2019, healthy life expectancy, the average period without being restricted in daily life, ranks among the highest in the world at 75.4 years for women, and 72.7 years for men.

1. Social Security

In Japan, the birth rate has been falling, while the number of elderly people has been growing. Meanwhile, its social security system is required to address various changes in the socioeconomic environment.

The long-term care insurance system, established in April 2000 to ensure that society as a whole supports care for the elderly, marked its 24th year in 2023. The long-term care insurance system has become steadily anchored in society, and the number of people certified as needing care or needing support has grown by approximately 3.2-fold, from 2.18 million at the end of April 2000 to 6.96 million at the end of April 2023. Societal aging continues to progress, with all members of the baby boom generation turning 75 years old or older in 2025, and in that year roughly 1 in every 5.6 people will be elderly, aged 75 or older. To cope with these changes in social structure and the needs of the elderly, the aim is to build a "Community-based Integrated Care System (system where medical care, nursing care, preventive care, and livelihood support are provided integrally in regions where one is used to living)" by 2025.

The amount of nursing care costs in fiscal 2021 (including 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 11.3 trillion yen.

Table 15.1

Trends in Social Security Benefit Expenditures by Functional Category 1) 2) 3) 4) 5)

(Billion yen)

Item	FY2000	FY2005	FY2010	FY2015	FY2020	FY2021
Total	78,408	88,854	105,366	116,814	132,215	138,743
Old age	36,688	# 44,102	51,335	# 55,339	58,915	58,720
Survivors	5,958	# 6,459	6,795	# 6,670	6,410	6,324
Invalidity benefits	2,151	# 2,397	3,398	# 4,283	5,225	5,283
Employment injury	1,058	984	943	# 919	905	890
Sickness and health	25,578	# 27,491	32,214	# 36,891	41,144	45,895
Family benefits	2,365	# 3,232	5,009	# 7,142	10,267	13,051
Unemployment	2,647	1,453	2,250	1,442	5,024	4,260
Housing	201	# 429	513	617	648	657
Other social policy areas	1,761	# 2,307	2,910	# 3,510	3,677	3,663

1) This table is calculated in accordance with the standards of the ILO's "The Cost of Social Security 19th International Inquiry".

2) Because of retrospective tabulation up to FY2005 of expenditure items data that were added in FY2011, a gap has occurred with FY2004 data.

3) Since FY2011, Employees' Accident Compensation has been added for special national public servants in the House of Representatives, House of Councillors, National Diet Library, courts, Ministry of Foreign Affairs, and Ministry of Defense.

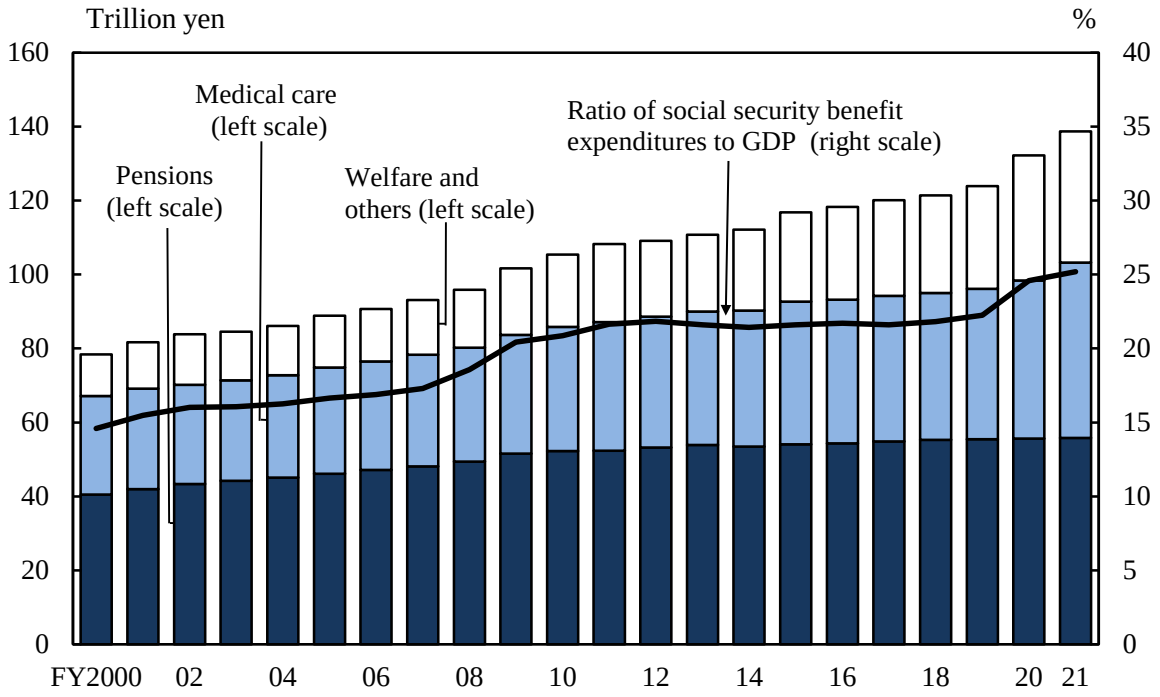
4) In addition to expenses for early childhood care services, expenses for early childhood education are included in total social security benefit expenditures from FY2015.

5) There is a gap between FY2014 and FY2015 because of the change in the scope of the services operated independently by local public entities that were targeted for tabulation in FY2015.

Source: National Institute of Population and Social Security Research.

In fiscal 2021, social security benefit expenditures totaled 138.7 trillion yen (up 4.9 percent from the previous fiscal year), a figure which amounted to 1.11 million yen per person. The ratio of Japan's social security benefit expenditures to GDP registered 25.2 percent. Benefits for the aged accounted for 60.1 percent of total social security benefit expenditures.

Figure 15.1
Trends in Social Security Benefit Expenditures by Sector 1) 2) 3) 4)



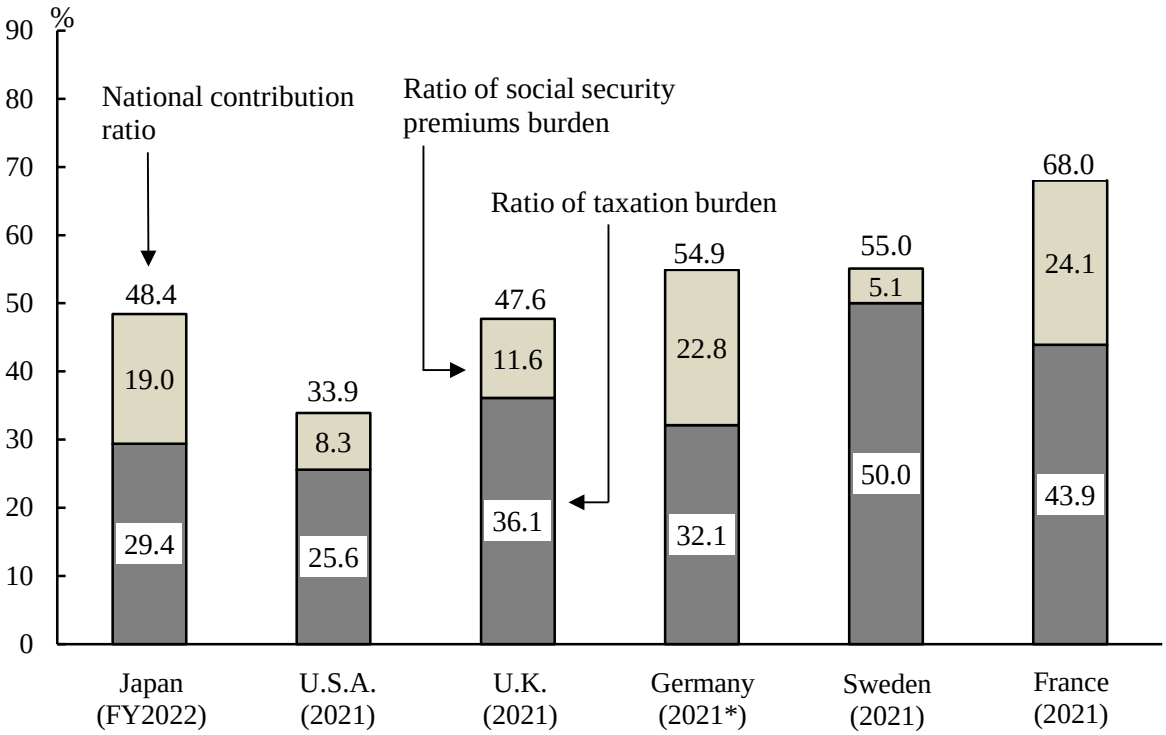
1) Because of retrospective tabulation up to FY2005 of expenditure items data that were added in FY2011, a gap has occurred with FY2004 data.
2) Since FY2011, Employees' Accident Compensation has been added for special national public servants in the House of Representatives, House of Councillors, National Diet Library, courts, Ministry of Foreign Affairs, and Ministry of Defense.
3) In addition to expenses for early childhood care services, expenses for early childhood education are included in total social security benefit expenditures from FY2015.
4) There is a gap between FY2014 and FY2015 because of the change in the scope of the services operated independently by local public entities that were targeted for tabulation in FY2015.
Source: National Institute of Population and Social Security Research.

In fiscal 2021, pensions accounted for 40.2 percent of total social security benefit expenditures, while medical care accounted for 34.2 percent, and social welfare and others for 25.6 percent. Social security benefit expenditures are forecasted to continue growing.

The government has established "Social Security for All Generations", in which all generations support each other fairly, and is examining sustainable reforms. Total funding for social security in fiscal 2021 was 163.4 trillion yen, a decrease of 11.5 percent compared to the previous fiscal year. This can be broken down into 75.5 trillion yen in social insurance contributions (46.2 percent of the total), 66.1 trillion yen in public contributions (40.4 percent of the total), and 21.8 trillion yen in other revenue (13.3 percent of the total).

The national contribution ratio (the combined ratios of taxes and social security costs to national income) was 48.4 percent in fiscal 2022 (taxation burden: 29.4 percent; social security premiums: 19.0 percent), up 0.3 percentage points from 48.1 percent in fiscal 2021 (taxation burden: 28.9 percent; social security premiums: 19.2 percent). The national contribution ratio in 2021 was 33.9 percent in the U.S.A., 47.6 percent in the U.K., 55.0 percent in Sweden, and 68.0 percent in France. While the ratio in Japan was higher than that of the U.S.A., it is trending lower than European countries.

Figure 15.2
National Contribution Ratio by Country



Source: Ministry of Finance.

2. Health Care and Public Hygiene

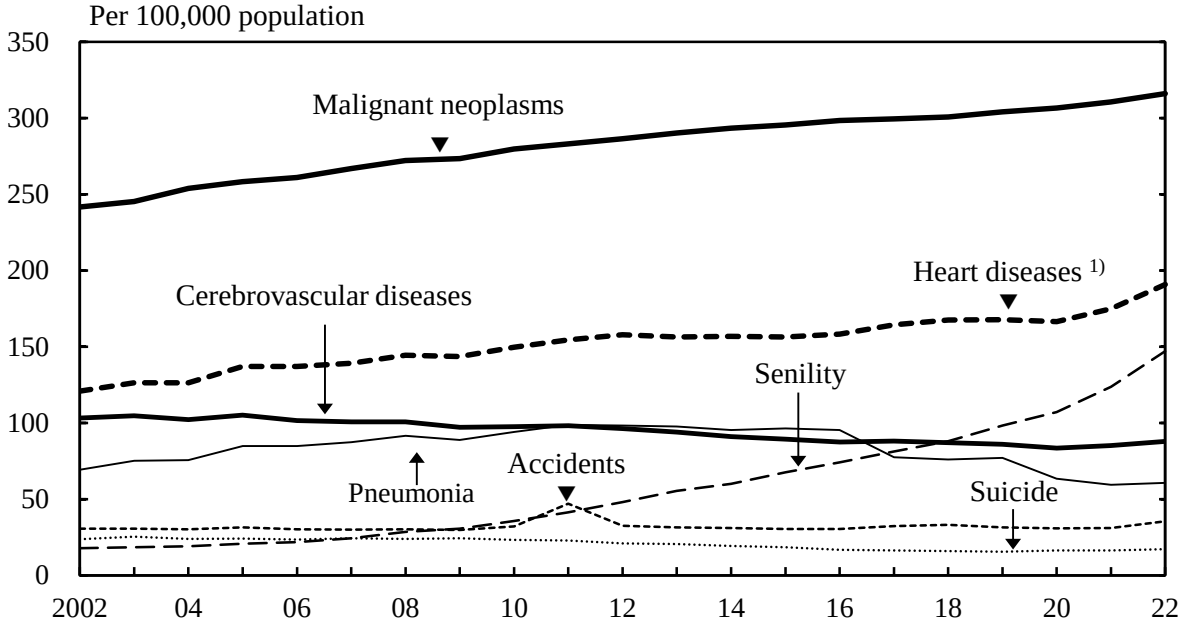
Japan has a universal health insurance regime to ensure that anyone can receive necessary medical treatment. Under this regime, every citizen enters a publicly regulated medical insurance system, such as employees' health insurance, national health insurance or the latter-stage elderly's medical insurance.

Under the universal health insurance regime, Japan's life expectancy at birth and healthcare standards are at the highest level in the world. On the

other hand, all members of the baby boom generation will turn 75 years old or older by 2025, and as Japan faces an era of full-fledged decreasing birth rate and aging and declining population, reforms are underway to build a sustainable social security system where all generations support each other fairly.

Life expectancy at birth was 87.1 years for women and 81.1 years for men in 2022. Japan's life expectancy at birth remains at a high level in the world. Even with regard to healthy life expectancy, which is the "average period without being restricted in daily life", Japan was among the world's highest as of 2019, with 75.4 years for women and 72.7 years for men. Japan's infant mortality rate was 1.8 per 1,000 births in 2022.

Figure 15.3
Death Rates by Major Cause



1) Excluding hypertensive diseases.
Source: Ministry of Health, Labour and Welfare.

The death rate was 1,285.8 per 100,000 population in 2022. The leading cause of death was malignant neoplasms (316.1 per 100,000 population), followed by lifestyle diseases such as heart diseases (190.9; excluding hypertensive diseases), in which people's daily diet and behavior are significant factors, and senility (147.1). Malignant neoplasms became the leading cause of death in 1981. The death rate by malignant neoplasms has continued to increase since, reaching 24.6 percent of all deaths in 2022.

The number of deaths caused by suicide in Japan hovered at around 30,000 annually in 1998 and onwards. In recent years, the number has remained steady at around 20,000. The number of suicides in 2022 was 21,252. In 2022, suicide was the leading cause of deaths for people aged between 10 and 39.

In the past, human beings have faced the threat of various epidemic diseases, including new strains of influenza. In 2014, cases of infection from Dengue fever in Japan were confirmed for the first time in approximately 70 years. In 2018, the number of patients with rubella increased. In 2020, the outbreak of COVID-19 developed into a pandemic, resulting in increasing numbers of infections and verified deaths. In Japan, measures have been taken to counter infectious diseases, such as vaccination to prevent the outbreak and spread of infectious diseases, and on May 8, 2023 COVID-19 was designated as Class 5 under the Act on the Prevention of Infectious Diseases and Medical Care for Patients with Infectious Diseases, on a par with seasonal influenza.

In terms of healthcare provision, Japan had 340,273 physicians engaged in medical care, or 272.3 physicians per 100,000 population, in 2022. 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
Medical Personnel at Work

Personnel	2014	2016	2018	2020	2022
Number					
Physicians	308,651	317,162	324,737	336,822	340,273
Dentists	102,534	103,127	103,418	105,798	103,518
Pharmacists	271,364	284,069	294,430	302,504	303,204
Nurses and Assistant nurses	1,426,932	1,472,508	1,523,085	1,565,500	1,566,016
Rates per 100,000 population					
Physicians	242.6	249.7	256.2	267.0	272.3
Dentists	80.6	81.2	81.6	83.9	82.8
Pharmacists	213.3	223.6	232.3	239.8	242.7
Nurses and Assistant nurses	1,121.5	1,159.1	1,201.7	1,241.0	1,253.3

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

As of October 1, 2022, the number of hospitals in Japan (excluding medical clinics and dental clinics) totaled 8,156. The number of hospital beds amounted to 1,492,957 (1,194.9 per 100,000 population).

Table 15.3
Medical Care Institutions and Beds

Type of Institution	2014	2017	2020	2021	2022
Institutions					
Total	177,546	178,492	178,724	180,396	181,093
Hospitals	8,493	8,412	8,238	8,205	8,156
Medical clinics	100,461	101,471	102,612	104,292	105,182
Dental clinics	68,592	68,609	67,874	67,899	67,755
Rates per 100,000 population					
Total	139.7	140.9	141.7	143.7	144.9
Hospitals	6.7	6.6	6.5	6.5	6.5
Medical clinics	79.1	80.1	81.3	83.1	84.2
Dental clinics	54.0	54.1	53.8	54.1	54.2
Beds					
Total	1,680,712	1,653,303	1,593,633	1,583,783	1,573,451
Hospitals	1,568,261	1,554,879	1,507,526	1,500,057	1,492,957
Medical clinics	112,364	98,355	86,046	83,668	80,436
Dental clinics	87	69	61	58	58
Rates per 100,000 population					
Total	1,322.5	1,304.8	1,263.3	1,262.0	1,259.3
Hospitals	1,234.0	1,227.2	1,195.1	1,195.2	1,194.9
Medical clinics	88.4	77.6	68.2	66.7	64.4
Dental clinics	0.1	0.1	0.0	0.0	0.0

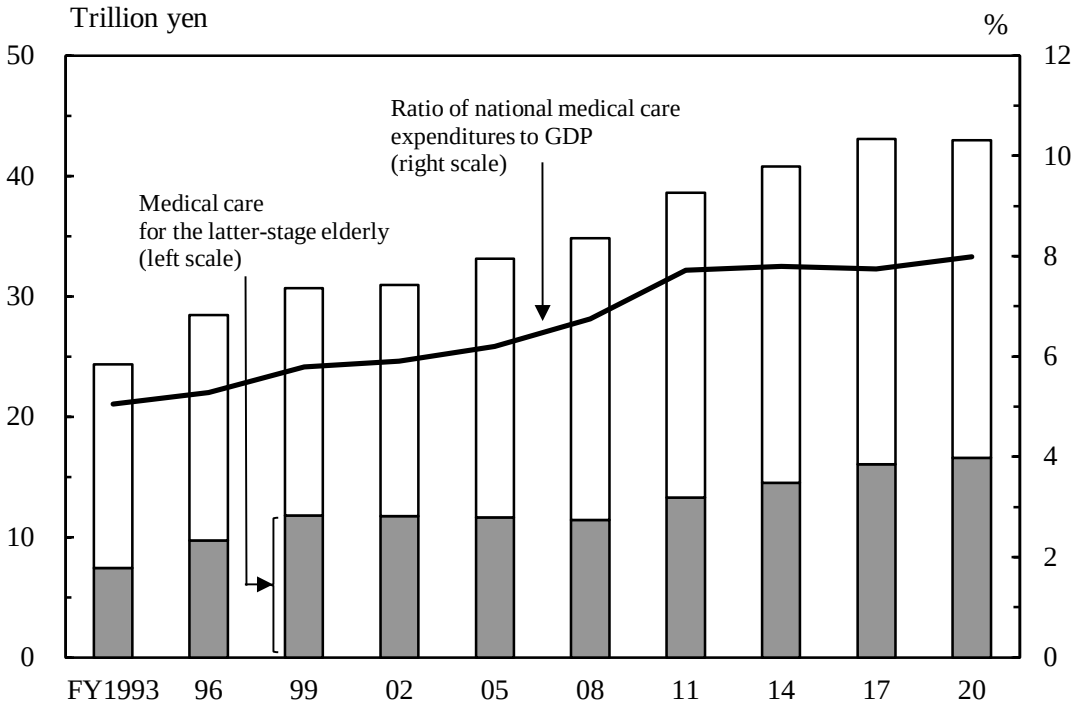
Source: Ministry of Health, Labour and Welfare.

In fiscal 2021, national medical care expenditures totaled 45.0 trillion yen or 8.18 percent of Japan's GDP. The cost of medical care per person averaged 358,800 yen in fiscal 2021.

To ensure that society as a whole supports medical care for the elderly, Japan has established a medical insurance system which divides the elderly into two categories: 65 to 74 years old (early-stage elderly) and 75 years old and older (latter-stage elderly). Medical costs for treating the latter-stage elderly in fiscal 2020 were 16.6 trillion yen, or 38.6 percent of national medical care expenditure, and accounted for 3.08 percent of GDP.

The per-capita cost of medical care for the latter-stage elderly averaged 917,124 yen for the year. The percentage of national medical care expenditures accounted for by medical care costs for the late-stage elderly decreased when the age of persons eligible to receive later-stage elderly medical care was raised in a phased manner over 5 years from 70 years to 75 years old in October 2002, but in recent years, there has been a slight uptrend.

Figure 15.4
Trends in Medical Care Expenditures



Source: Ministry of Health, Labour and Welfare.

Chapter 16

Education and Culture

New first-grader feels a mixture of hope and anxiety.
The school year in Japan starts in April, and ends in March. Many schools divide the school year into two or three terms.

1. School-Based Education

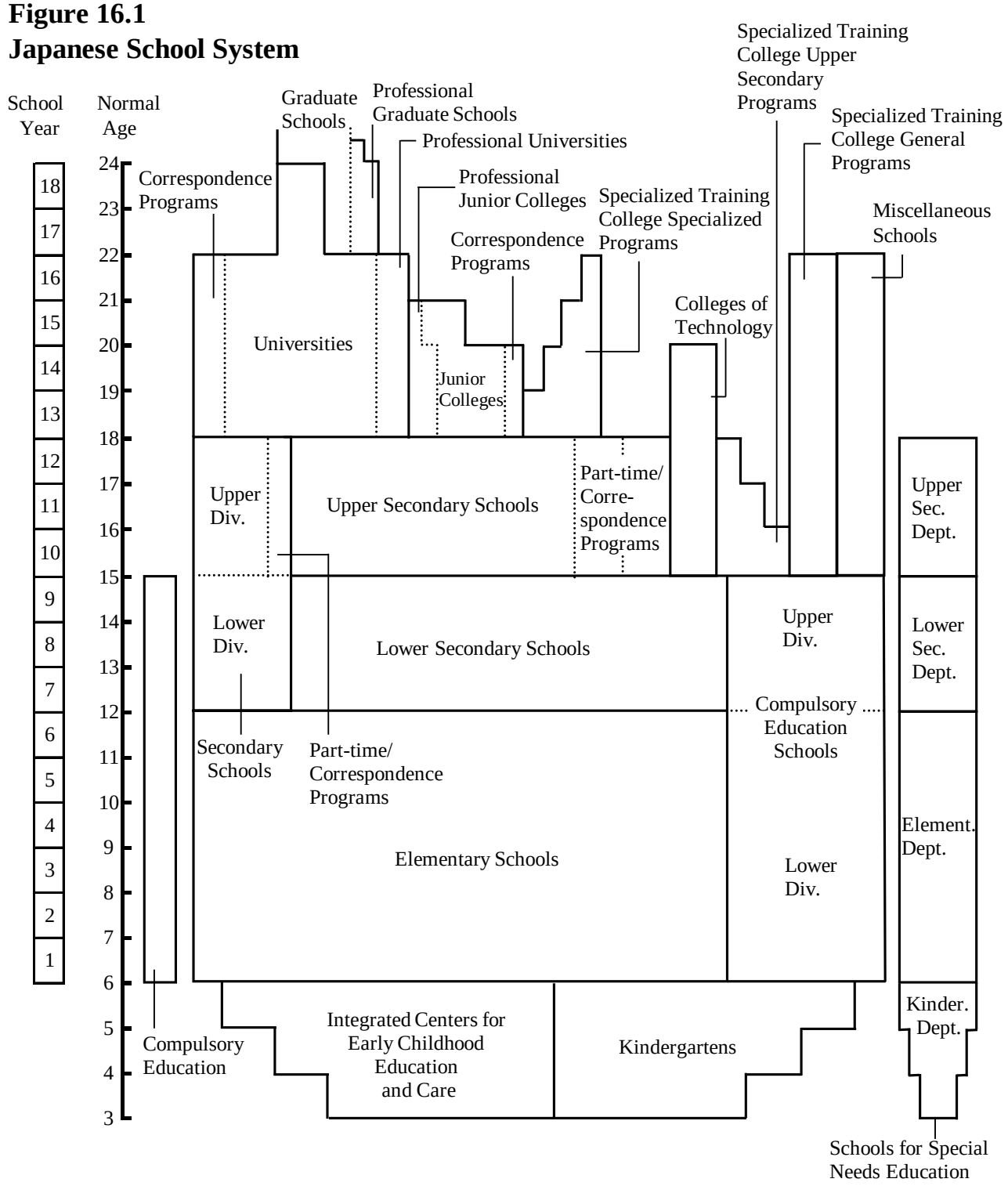
Japan's primary and secondary education is based on a 6-3-3 system: 6 years in elementary school, 3 years in lower secondary school, and 3 years in upper secondary school. The period of compulsory schooling is the 9 years at elementary and lower secondary schools. Higher education institutions are universities, junior colleges, and colleges of technology. Other education establishments include kindergartens and integrated centers for early childhood education and care, 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. In order to promote diversity of the school education system, unified lower-upper secondary schooling began at some schools in 1999. Furthermore, in 2016, compulsory education schools, where compulsory education for elementary schools to lower secondary schools is carried out consistently, were established. On an additional note, the school year in Japan starts in April and ends in March of the following year.

Table 16.1
Educational Institutions in Japan (as of May 1, 2023)

Type of institution	Schools				Full-time teachers (1,000)	Students (1,000)	
	Total	National	Public	Private		Males	Females
Kindergartens	8,837	49	2,744	6,044	85	424	418
Integrated centers for early childhood education and care	6,982	-	948	6,034	142	431	412
Elementary schools	18,980	67	18,669	244	424	3,092	2,957
Lower secondary schools	9,944	68	9,095	781	247	1,625	1,552
Compulsory education schools	207	5	201	1	7	39	37
Upper secondary schools	4,791	15	3,455	1,321	223	1,486	1,433
Secondary schools	57	4	35	18	3	16	17
Schools for special needs education [1)]	1,178	45	1,118	15	88	101	51
Colleges of technology	58	51	3	4	4	44	13
Junior colleges	303	-	15	288	7	11	75
Universities	810	86	102	622	192	1,631	1,314
Graduate schools	661	86	90	485	107	179	87
Specialized training colleges	3,020	8	181	2,831	39	262	346
Miscellaneous schools	1,015	-	5	1,010	8	58	51

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.

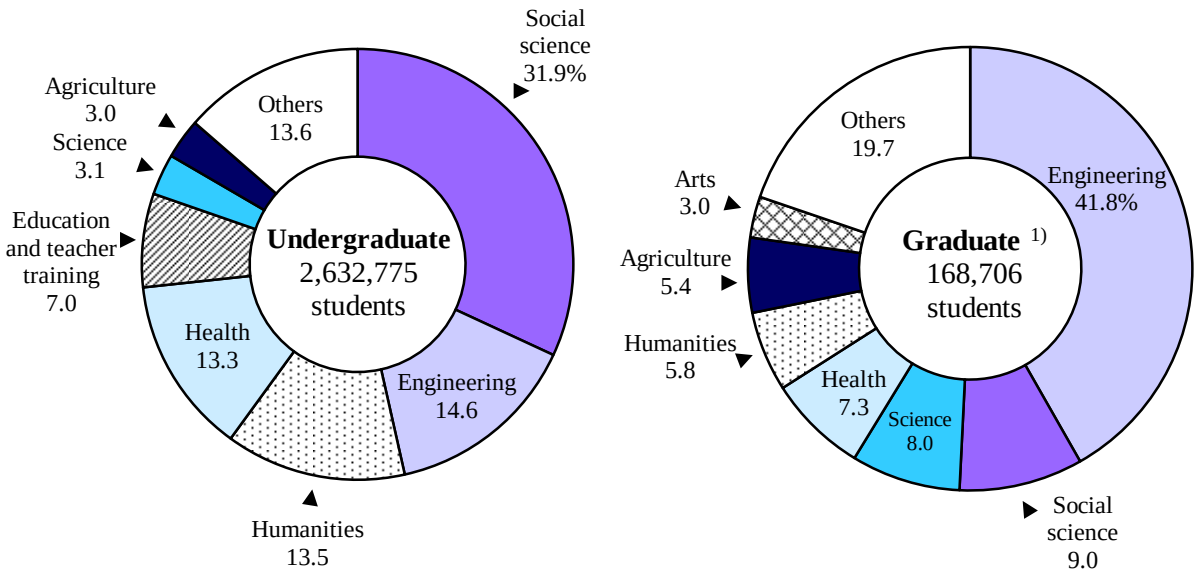
Of the March 2023 upper secondary school and upper division of secondary school graduates, 60.9 percent went straight on to enter a university, junior college, etc. The ratio of graduates of upper secondary school, etc. who entered a university or junior college in 2023 was 61.1 percent (61.6 percent of male and 60.6 percent of female graduates), including graduates from previous years.

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

	2015	2020	2021	2022	2023
Total	2,860,210	2,915,605	2,917,998	2,930,780	2,945,599
Undergraduate	2,556,062	2,623,572	2,625,688	2,632,216	2,632,775
Graduate schools	249,474	254,529	257,128	261,782	265,977
Others [1]	54,674	37,504	35,182	36,782	46,847
Females	1,231,868	1,294,320	1,297,056	1,303,975	1,314,354
Undergraduate	1,127,372	1,193,465	1,196,555	1,200,992	1,204,306
Graduate schools	77,831	82,982	84,017	85,580	87,222
Others [1]	26,665	17,873	16,484	17,403	22,826
National	610,802	598,881	597,450	596,195	600,177
Public	148,766	158,579	160,438	163,103	165,915
Private	2,100,642	2,158,145	2,160,110	2,171,482	2,179,507

1) Including advanced students, short-term students, non-degree students, auditing students and research students.
Source: Ministry of Education, Culture, Sports, Science and Technology.

Figure 16.2
University Students by Field of Study (as of May 1, 2023)

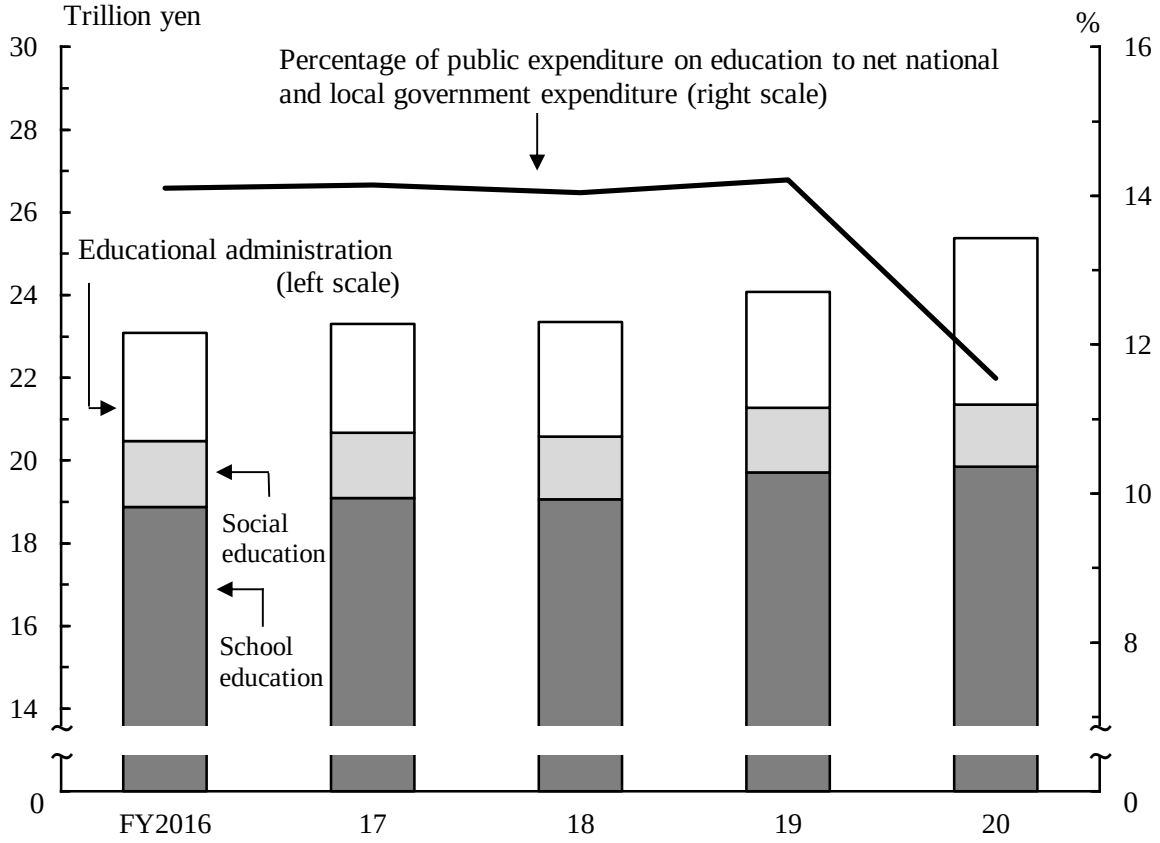


1) Master's course.
Source: Ministry of Education, Culture, Sports, Science and Technology.

As of May 1, 2022, a total of 127,032 foreign students were enrolled in Japanese junior colleges, universities, and graduate schools. Of the total foreign students, 91.6 percent were from Asia, including 73,660 from China, 11,550 from the Republic of Korea and 9,716 from Vietnam.

Fiscal 2020 public expenditure on education in Japan was 25 trillion yen, which is equivalent to 11.6 percent of the net expenditure of national and local governments.

Figure 16.3
Public Expenditures on Education



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

Fiscal 2021 school expenditure by households with children attending public school averaged 65,974 yen per elementary school pupil, 132,349 yen per lower-secondary school student and 309,261 yen per upper-secondary school student.

2. Lifelong Learning

As society approaches a major turning point in heading towards a "100-year-life", there is increasing importance in realizing a "Lifelong Learning Society" in which people are able to select learning opportunities whenever they want during their life, and their learning outcomes are evaluated appropriately.

Today, in order to develop a society where people can engage in learning any time they like throughout their lives, efforts are being made to provide 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 and social education facilities (citizens' public halls, libraries, museums, and sports facilities, etc.) play a vital role.

Table 16.3
Social Education Facilities and Users

Facilities	Number [1]		Users (1,000) [2]	
	2018	2021	2017	2020
Citizens' public halls [3]	14,281	13,798	183,513	110,203
Libraries [4]	3,360	3,394	177,899	142,490
Museums	1,286	1,305	142,456	65,047
General museums	154	157	9,349	3,736
Science museums	104	100	16,830	6,087
Historical museums	470	476	28,611	9,572
Art museums	453	457	39,811	17,038
Outdoor museums	16	18	2,157	560
Zoological gardens	34	36	19,396	11,191
Botanical gardens	11	11	1,117	1,162
Zoological and botanical gardens	6	7	4,538	3,147
Aquariums	38	43	20,646	12,553
Facilities similar to museums	4,452	4,466	160,613	74,657
Centers for children and youths	891	840	19,729	7,553
Women's education centers	358	358	11,310	4,302
Public sports facilities	46,981	45,658	526,725	280,631
Private sports facilities	16,397	#* 29,821	107,939	#* 179,328
Theaters, concert halls, etc.	1,827	1,832	…	…
Lifelong learning centers	478	496	27,290	11,698

1) As of October 1. 2) Total of fiscal year. 3) Including similar facilities.
4) Including the same type of facilities.
Source: Ministry of Education, Culture, Sports, Science and Technology.

3. Cultural Assets

Throughout its 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. In addition to preserving cultural assets, measures to utilize such assets are being established, such as expansion of viewing opportunities through exhibitions.

Table 16.4
Cultural Properties Designated by the National Government
(as of April 1, 2024)

Type of cultural properties	Number	
Important cultural properties	13,446	a) 1,137
Fine arts and crafts	10,872	a) 906
Structures	2,574	a) 231
Historic sites, places of scenic beauty and natural monuments	3,364	b) 174
Historic sites	1,895	b) 63
Places of scenic beauty	429	b) 36
Natural monuments	1,040	b) 75
Important tangible folk cultural properties	277	
Important intangible folk cultural properties	333	
Important intangible cultural properties		
Individual recognition	69	
Performing arts	36	
Craft techniques	33	
Group recognition	31	
Performing arts	15	
Craft techniques	16	
Traditional building preservation areas	127	

a) National treasures only. b) Specially designated places only.
Source: Agency for Cultural Affairs.

As of April 1, 2024, 13,446 items were designated as important cultural properties, of which 1,137 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 accepted the UNESCO World Heritage Convention (the Convention Concerning the Protection of the World Cultural and Natural Heritage) in 1992.

In July 2021, two new sites were registered in the World Heritage List: Amami-Oshima Island, Tokunoshima Island, Northern part of Okinawa Island, and Iriomote Island; and Jomon Prehistoric Sites in Northern Japan.

Amami-Oshima Island, Tokunoshima Island, Northern part of Okinawa Island, and Iriomote Island are natural heritage. They have a mild, humid subtropical climate, and are regions inhabited by distinctive land animals, including many endemic species and endangered species.

The Jomon Prehistoric Sites in Northern Japan are cultural heritage consisting of 17 historic sites. These sites present the daily life and spiritual culture of people who lived in the region for more than 10,000 years through hunting, gathering, and fishing.

Table 16.5

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	Shirakami-Sanchi (mountains)	Aomori, Akita
	Natural	Yakushima (island)	Kagoshima
1994	Cultural	Historic Monuments of Ancient Kyoto	Kyoto, Shiga
1995	Cultural	Historic Villages of Shirakawa-go and Gokayama	Gifu, Toyama
1996	Cultural	Hiroshima Peace Memorial (Genbaku Dome)	Hiroshima
	Cultural	Itsukushima Shinto Shrine	Hiroshima
1998	Cultural	Historic Monuments of Ancient Nara	Nara
1999	Cultural	Shrines and Temples of Nikko	Tochigi
2000	Cultural	Gusuku Sites and Related Properties of the Kingdom of Ryukyu	Okinawa
2004	Cultural	Sacred Sites and Pilgrimage Routes in the Kii Mountain Range	Mie, Nara, Wakayama
2005	Natural	Shiretoko (peninsula)	Hokkaido
2007	Cultural	Iwami Ginzan Silver Mine and its Cultural Landscape	Shimane
2011	Cultural	Hiraizumi-Temples, Gardens and Archaeological Sites Representing the Buddhist Pure Land	Iwate
	Natural	Ogasawara Islands	Tokyo
2013	Cultural	Fujisan, Sacred Place and Source of Artistic Inspiration	Yamanashi, Shizuoka
2014	Cultural	Tomioka Silk Mill and Related Sites	Gumma
2015	Cultural	Sites of Japan's Meiji Industrial Revolution: Iron and Steel, Shipbuilding and Coal Mining	Fukuoka, Saga, Nagasaki, Kumamoto, Kagoshima,Yamaguchi, Iwate, Shizuoka
2016	Cultural	The National Museum of Western Art - The Architectural Work of Le Corbusier, an Outstanding Contribution to the Modern Movement	Tokyo
2017	Cultural	Sacred Island of Okinoshima and Associated Sites in the Munakata Region	Fukuoka
2018	Cultural	Hidden Christian Sites in the Nagasaki Region	Nagasaki, Kumamoto
2019	Cultural	Mozu-Furuichi Kofun Group: Mounded Tombs of Ancient Japan	Osaka
2021	Natural	Amami-Oshima Island, Tokunoshima Island, Northern part of Okinawa Island, and Iriomote Island	Kagoshima, Okinawa
	Cultural	Jomon Prehistoric Sites in Northern Japan	Hokkaido, Aomori, Iwate, Akita

1) As of October, 2023.

Source: Agency for Cultural Affairs.

In 2006, the UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage entered into force. As of December 2023, 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 Japan.

4. Publishing and Mass Media

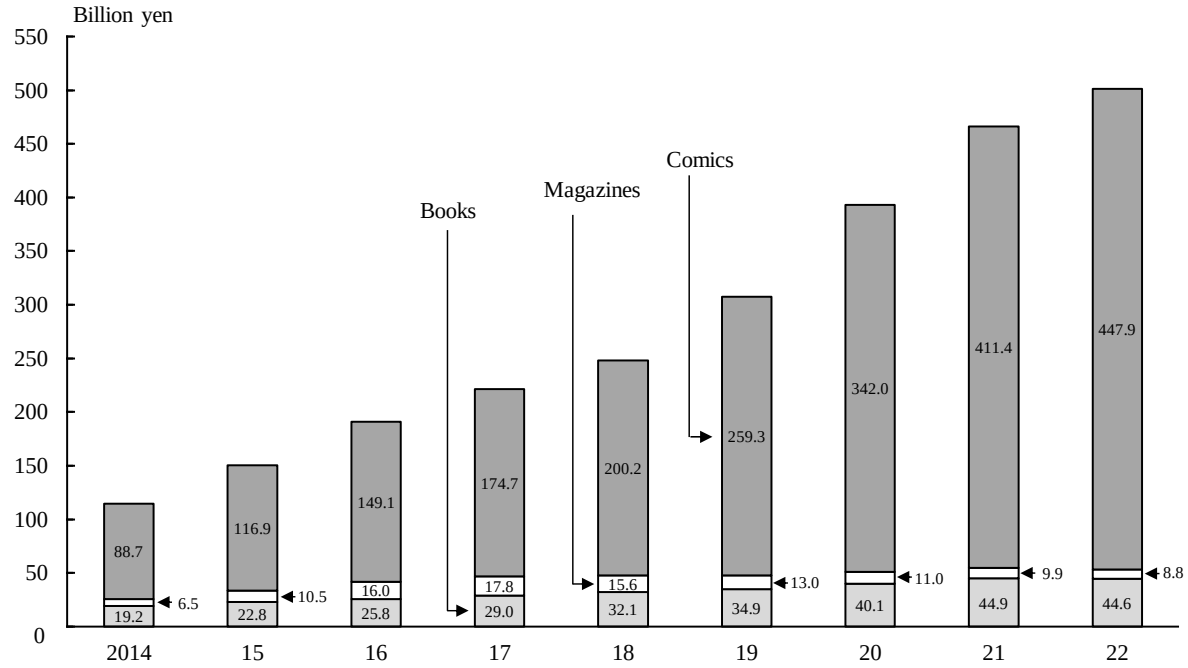
A total of 66,885 new book titles were released in 2022. The number of magazine titles published was 2,482 (including 2,400 monthlies and 82 weeklies). In recent years, a wider range of electronic book content has become available, leading to continuing growth of the electronic books market.

Table 16.6
Number of New Book Titles Published

Subject	2018	2019	2020	2021	2022
Total	71,661	71,903	68,608	69,052	66,885
General works	767	804	805	760	705
Philosophy	3,955	3,743	3,507	3,402	3,280
History and geology	3,530	3,890	3,927	3,902	3,339
Social sciences	15,220	15,482	14,068	14,159	13,537
Natural sciences	5,325	5,066	5,117	5,043	4,972
Engineering and technology	3,906	3,951	3,608	3,662	3,659
Industry and commerce	2,492	2,444	2,310	2,275	2,177
Arts and life	11,856	12,383	12,068	12,289	12,104
Language	1,535	1,473	1,329	1,332	1,161
Literature	13,048	12,979	12,104	12,071	12,108
Children's books	4,721	4,583	4,295	4,446	4,465
Reference books	5,306	5,105	5,470	5,711	5,378

Source: The Research Institute for Publications, The All Japan Magazine and Book Publisher's and Editor's Association.

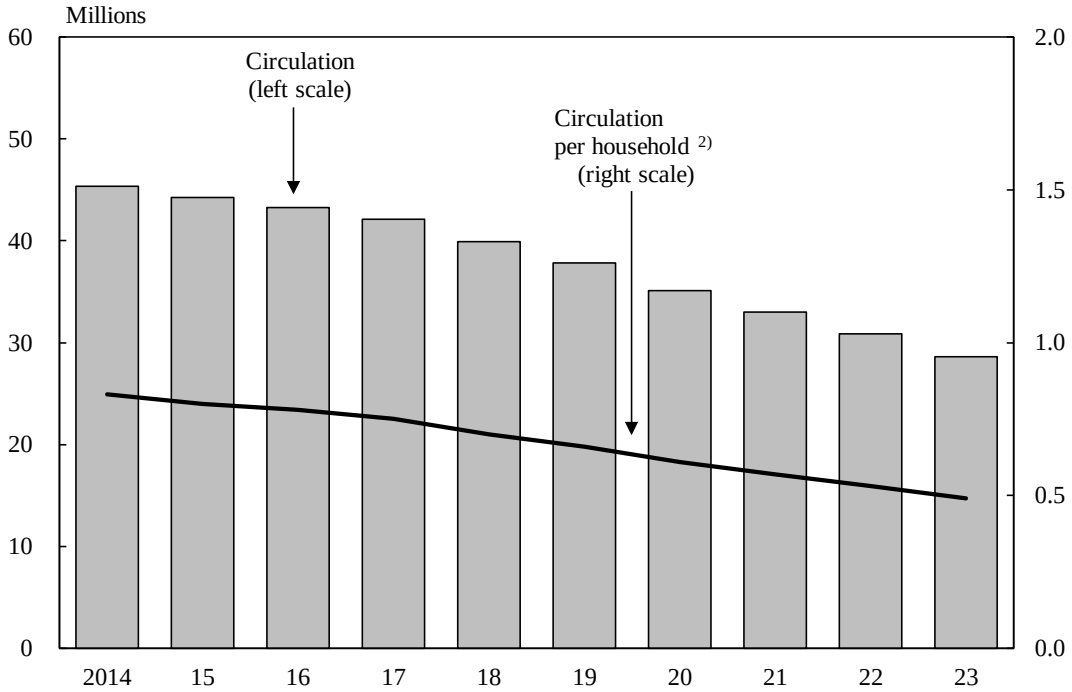
Figure 16.4
Trends in the Size of the Electronic Publication Market



Source: The Research Institute for Publications, The All Japan Magazine and Book Publisher's and Editor's Association.

A total of 110 daily newspapers were in circulation, and the penetration rate was 0.49 newspapers per household as of October 2023.

Figure 16.5
Trends in the Circulation of Newspaper (as of October) [1)]



1) Set paper counted as one copy. 2) Number of households used for calculation are derived from the Basic Resident Registration as of January 1 of the year.
Source: The Japan Newspaper Publishers and Editors Association.

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

Television broadcasting in Japan became fully digital at the end of March 2012, and practices like broadcasting of video and data with high-definition image quality have become common. New 4K and 8K satellite broadcasting began in December 2018, and products such as televisions enabling viewing of 4K and 8K broadcasts have been disseminated. Efforts are being made to further improve the appeal of satellite broadcasting, such as improving and broadening 4K programs, and steps are being taken to disseminate and develop 4K and 8K broadcasting.

In 2023, advertising expenditures in the traditional media in Japan (newspapers, magazines, radio and television) totaled 2.3 trillion yen, down compared with the previous year. This accounted for 31.7 percent of total advertising expenditures, which were 7.3 trillion yen. Spending on Internet advertising reached 3.3 trillion yen (up 7.8 percent from the previous year). This amounted to 45.5 percent of the total advertising expenditures, which was more than the advertising expenditures in the traditional media.

Table 16.7
Advertising Expenditures by Medium

Year	Total	Traditional media	Newspapers	Magazines	Radio	Television	Internet	Promotional media
Advertising expenditures (billion yen)								
2015	6,171.0	2,869.9	567.9	244.3	125.4	1,932.3	1,159.4	2,141.7
2020	6,159.4	2,253.6	368.8	122.3	106.6	1,655.9	# 2,229.0	# 1,676.8
2021	6,799.8	2,453.8	381.5	122.4	110.6	1,839.3	2,705.2	1,640.8
2022	7,102.1	2,398.5	369.7	114.0	112.9	1,801.9	3,091.2	1,612.4
2023	7,316.7	2,316.1	351.2	116.3	113.9	1,734.7	3,333.0	1,667.6
Percentage distribution (%)								
2015	100.0	46.5	9.2	4.0	2.0	31.3	18.8	34.7
2020	100.0	36.6	6.0	2.0	1.7	26.9	36.2	27.2
2021	100.0	36.1	5.6	1.8	1.6	27.1	39.8	24.1
2022	100.0	33.8	5.2	1.6	1.6	25.4	43.5	22.7
2023	100.0	31.7	4.8	1.6	1.6	23.7	45.5	22.8

Source: Dentsu Inc.

5. Leisure Activities

The results of the "2021 Survey on Time Use and Leisure Activities" conducted on people living in Japan, aged 10 years old and over, show that the amount of free time each person has spent was 6 hours and 16 minutes, which was the time remaining after activities that were physiologically necessary (sleeping, eating, etc.) and societally essential (work, housework, etc.).

Table 16.8
Major Leisure Activities by Sex (Aged 10 years old and over) (2021)

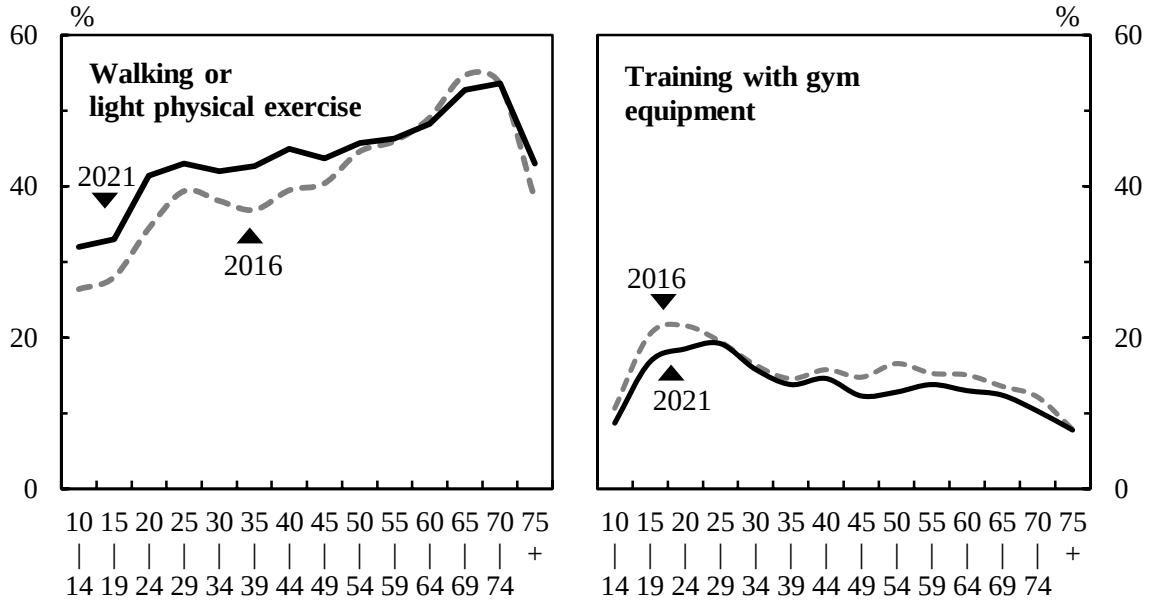
Leisure Activities	Total	Males	Females
Free time per day (hours. minutes)	6.16	6.34	6.00
Participation rate (%) [1]			
Hobbies and amusements	86.3	86.8	85.8
Sports [2] [3]	66.5	69.9	63.3
Travel and excursion	49.5	48.9	50.1
Learning, self-education, and training [2] [4]	39.6	39.8	39.5
Volunteer activities	17.8	18.2	17.5

1) Participants in the activity / Population × 100. 2) Including club activities at school. 3) Excluding sports performed by professional players as their job and by students in PE class. 4) Excluding worker training at the workplace, and study and research activities performed by children, pupils or students as schoolwork, such as study in class, preparation for class and review of lessons.
Source: Statistics Bureau, MIC.

The participation rate for "hobbies and amusements" was 86.3 percent (percentage of people (aged 10 years old and over) who engaged in the activity within the past 12 months), and by sex, the participation rate for males was 86.8 percent and that for females was 85.8 percent. In addition, for participation rates by type of activity, "listening to music by CDs, smartphone, etc." was the highest at 53.5 percent, followed by "watching movies other than movie theater" at 52.7 percent, "playing games on a smartphone, home video game consoles, etc." at 42.9 percent, and so on.

The participation rate for "sports" was 66.5 percent, and by sex, the participation rate for males was 69.9 percent and that for females was 63.3 percent. In addition, for participation rates by type of sport, "walking or light physical exercise" was the highest at 44.3 percent, followed by "training with gym equipment" at 12.9 percent, and so on.

Figure 16.6
Participation Rates for Major "Sports" by Age Group



Source: Statistics Bureau, MIC.

Chapter 17

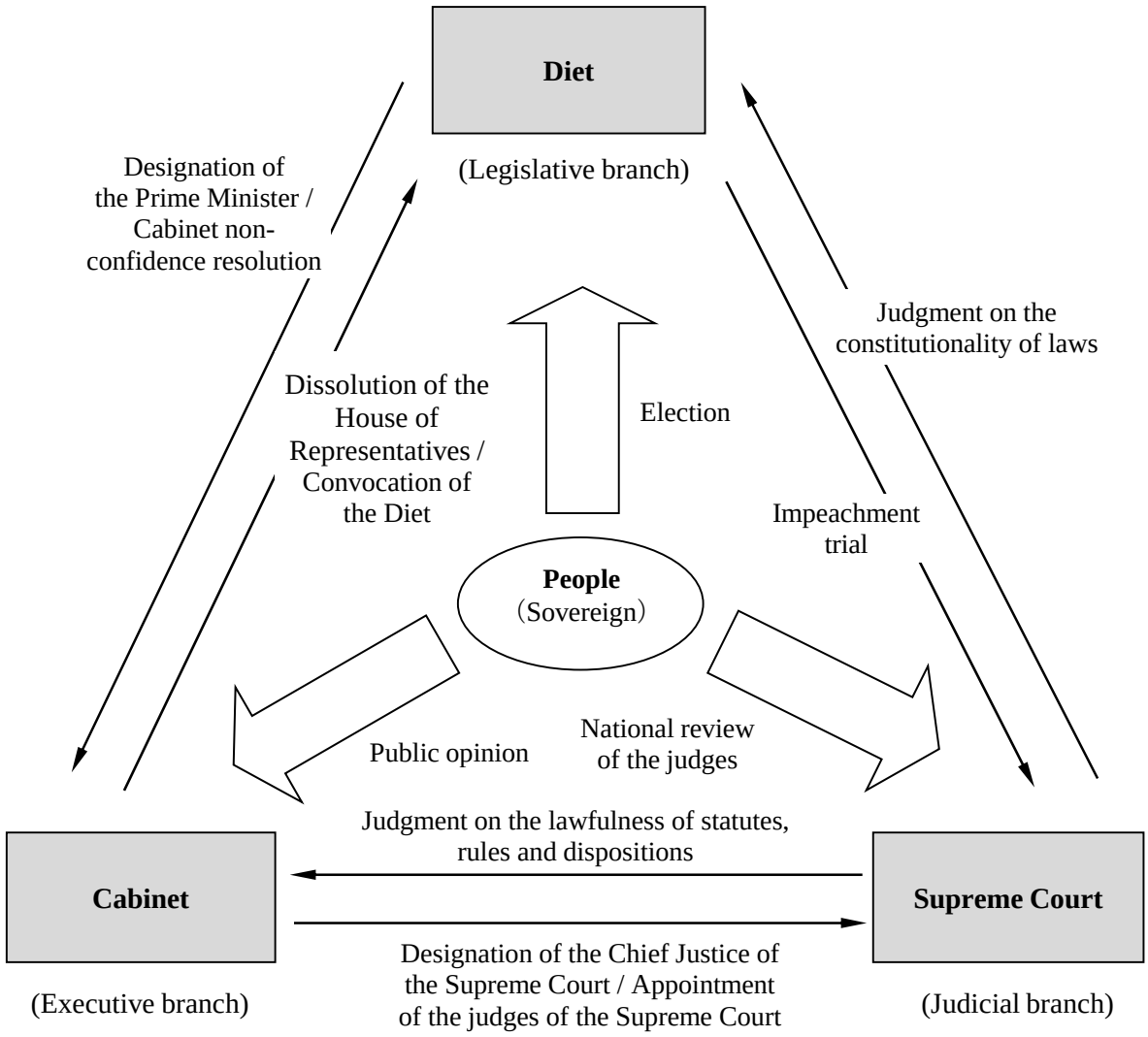
Government System

The COVID-19 pandemic has had a significant impact on educational activities in schools over the past few years, but now routine is being restored in all aspects of society, including at home and at school.

1. Separation of Powers

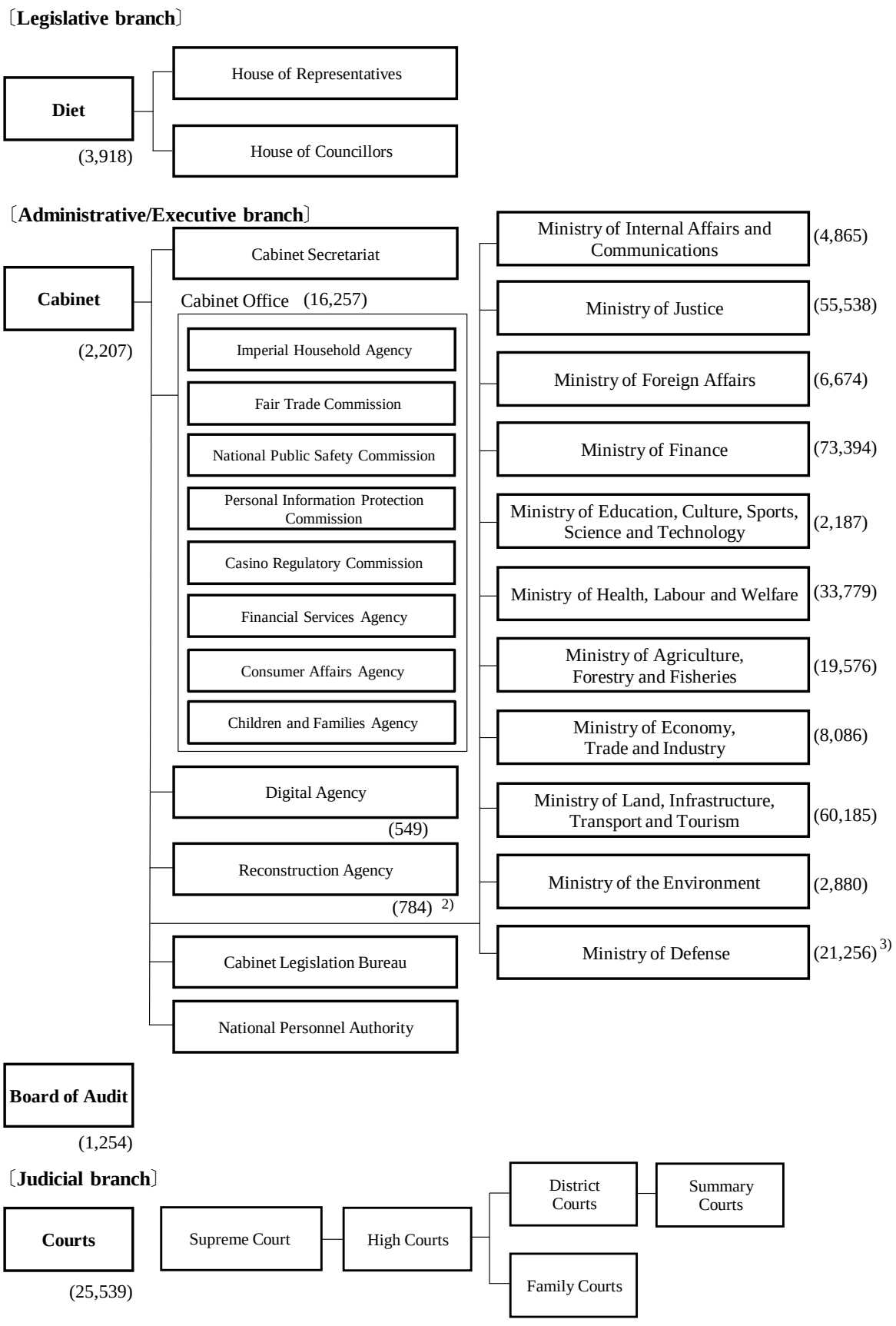
The Constitution of Japan, which went into effect on May 3, 1947, is based on three core principles: sovereignty of the people, respect for fundamental human rights and pacifism. To control governmental power effectively through checks and balances, governmental power is separated into three independent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

Figure 17.1
Separation of Powers under the Constitution of Japan



Source: Prime Minister of Japan and His Cabinet.

Figure 17.2
Government Organization [1] (FY2024)



1) Figures in parentheses refer to budgetary fixed number of national government employees.
2) Of the 784 employees, 221 are from the Reconstruction Agency and 563 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. 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, the 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 4-year term, while members of the House of Councillors, 6 years. Elections for the latter are held every 3 years, so that one half of the seats are contested in each election.

The House of Representatives has 465 members. Of these, 289 are elected under a single-seat constituency system, while 176 are elected under a proportional representation system in which the nation is divided into 11 regions. The last general election was held in October 2021. The House of Councillors has 248 members, of whom 100 are elected through proportional representation, and 148 are elected as representatives from 45 electoral districts of the nation, based upon prefectures. The last regular election was held in July 2022.

In June 2015, revisions to the Public Offices Election Law, which consist mainly of lowering the voting age from 20 to 18 years or older, were established and promulgated. The revisions were applied starting with the House of Councillors regular election, which was officially announced in June 2016. 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
Diet Members by Political Group

House of Representatives (as of April 30, 2024) Membership 465, Vacancies 3			House of Councillors (as of April 30, 2024) Membership 248, Vacancies 2		
Name	Males	Females	Name	Males	Females
Incumbents	413	49	Incumbents	180	66
Liberal Democratic Party	236	21	Liberal Democratic Party	91	24
The Constitutional Democratic Party of Japan and the Independent	83	14	The Constitutional Democratic Party of Japan and Social Democratic Party	20	20
Japan Innovation Party and Free Education For All (Nippon Ishin and Free Education For All)	40	5	Komeito	23	4
Komeito	28	4	Japan Innovation Party and Free Education For All (Nippon Ishin and Free Education For All)	16	5
Japanese Communist Party	8	2	Democratic Party For the People and The Shin-Ryokufukai	8	3
Democratic Party For the People	6	1	Japanese Communist Party	6	5
Yushi no Kai	4	0	REIWA SHINSENGUMI	4	1
REIWA SHINSENGUMI	1	2	Okinawa Whirlwind	2	0
			The Party to Protect People from NHK	2	0
Independents	7	0	Independents	8	4

Source: The House of Representatives; The House of Councillors.

3. 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 Ministers of State are appointed by the Prime Minister, and the majority of them 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 designating 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
Oct. 4, 2021	KISHIDA Fumio	Sep. 26, 2007	FUKUDA Yasuo
Sep. 16, 2020	SUGA Yoshihide	Sep. 26, 2006	ABE Shinzo
Dec. 26, 2012	ABE Shinzo	Apr. 26, 2001	KOIZUMI Junichiro
Sep. 2, 2011	NODA Yoshihiko	Apr. 5, 2000	MORI Yoshiro
Jun. 8, 2010	KAN Naoto	Jul. 30, 1998	OBUCHI Keizo
Sep. 16, 2009	HATOYAMA Yukio	Jan. 11, 1996	HASHIMOTO Ryutaro
Sep. 24, 2008	ASO Taro	Jun. 30, 1994	MURAYAMA Tomiichi

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

4. 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 4 lower-level courts (High Court, District Court, Family Court and Summary Court). At present, there are 8 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 are the High Courts, and the highest court is the Supreme Court. The system thus allows a case to be heard and ruled on up to 3 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 courts.

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 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. In 2023, the minimum applicable age was lowered from 20 years old to 18 years old. From the start of the system to December 2023, approximately 120,000 lay judges and alternate lay judges have been appointed.

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
2010	2,179	2,241	536	1,158	1,161	36
2015	1,432	1,426	409	1,033	1,030	34
2020	1,350	1,324	456	852	851	32
2021	1,374	1,400	429	845	847	31
2022	1,369	1,380	418	813	813	30
Year	Domestic cases			Juvenile cases [1]		
	Commenced	Terminated	Pending	Commenced	Terminated	Pending
2010	815	815	106	165	168	25
2015	970	959	133	95	98	13
2020	1,105	1,092	159	53	54	8
2021	1,150	1,156	154	47	48	7
2022	1,148	1,146	155	46	45	8

1) The number of persons.
Source: Supreme Court of Japan.

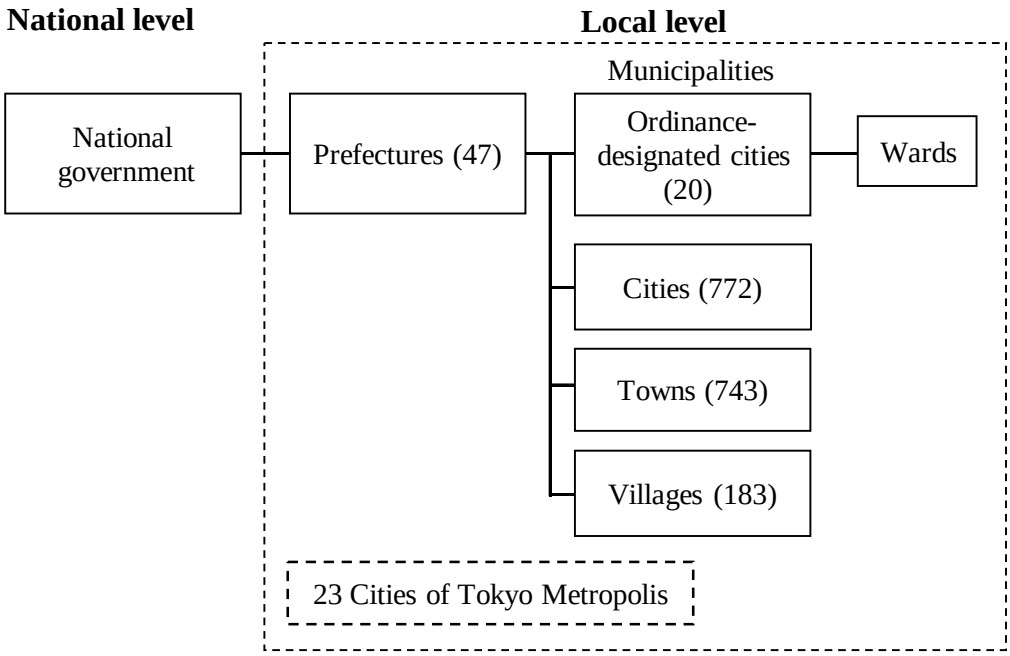
5. Local Governments

The affairs of local governments in Japan are conducted by ordinary local governments (prefectures and municipalities within each prefecture) and by special local governments, such as special wards. Japan has 47 prefectures, within which there are 1,718 municipalities, plus the 23 Cities of Tokyo metropolis. 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

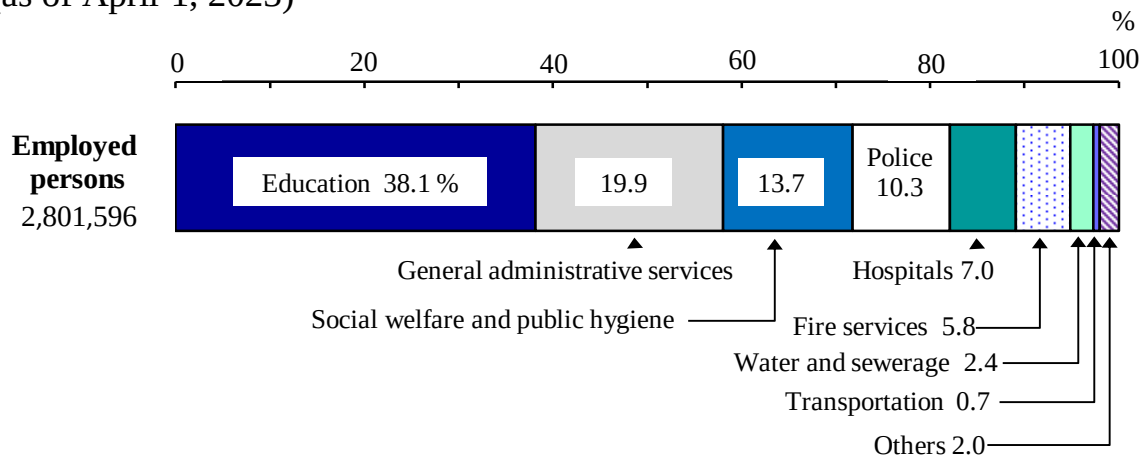
designation gives them administrative and fiscal authority equivalent to those of prefectures. With the addition of Kumamoto City in April 2012, there are presently 20 cities that have earned this designation. See the map on the inside back cover.

Figure 17.3
Government System by Level 1)



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, 2023)



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
		2020 [1]	2023 [2]	2022	2022	2022	2022
Japan		126,146	124,352	377,973	122,954	335	1,016
Hokkaido	Sapporo City	5,225	5,092	83,424	22,699	66	226
Aomori	Aomori City	1,238	1,184	9,646	3,254	125	370
Iwate	Morioka City	1,211	1,163	15,275	3,751	77	315
Miyagi	Sendai City	2,302	2,264	7,282	3,186	313	716
Akita	Akita City	960	914	11,638	3,233	80	288
Yamagata	Yamagata City	1,068	1,026	9,323	2,873	112	362
Fukushima	Fukushima City	1,833	1,767	13,784	4,231	130	423
Ibaraki	Mito City	2,867	2,825	6,098	3,889	466	730
Tochigi	Utsunomiya City	1,933	1,897	6,408	3,005	298	635
Gumma	Maebashi City	1,939	1,902	6,362	2,269	301	843
Saitama	Saitama City	7,345	7,331	3,798	2,603	1,932	2,819
Chiba	Chiba City	6,284	6,257	5,157	3,533	1,215	1,774
Tokyo	23 Cities of Tokyo	14,048	14,086	2,194	1,423	6,398	9,867
Kanagawa	Yokohama City	9,237	9,229	2,416	1,474	3,821	6,263
Niigata	Niigata City	2,201	2,126	12,584	4,550	171	473
Toyama	Toyama City	1,035	1,007	4,248	1,842	239	552
Ishikawa	Kanazawa City	1,133	1,109	4,186	1,395	267	802
Fukui	Fukui City	767	744	4,191	1,077	180	699
Yamanashi	Kofu City	810	796	4,465	953	180	842
Nagano	Nagano City	2,048	2,004	13,562	3,249	149	622
Gifu	Gifu City	1,979	1,931	10,621	2,211	183	880
Shizuoka	Shizuoka City	3,633	3,555	7,777	2,774	461	1,291
Aichi	Nagoya City	7,542	7,477	5,173	2,996	1,449	2,502
Mie	Tsu City	1,770	1,727	5,774	2,064	302	844
Shiga	Otsu City	1,414	1,407	4,017	1,300	351	1,084
Kyoto	Kyoto City	2,578	2,535	4,612	1,177	553	2,166
Osaka	Osaka City	8,838	8,763	1,905	1,334	4,609	6,583
Hyogo	Kobe City	5,465	5,370	8,401	2,769	643	1,951
Nara	Nara City	1,324	1,296	3,691	854	354	1,530
Wakayama	Wakayama City	923	892	4,725	1,123	191	804
Tottori	Tottori City	553	537	3,507	904	155	602
Shimane	Matsue City	671	650	6,708	1,271	98	518
Okayama	Okayama City	1,888	1,847	7,115	2,229	262	836
Hiroshima	Hiroshima City	2,800	2,738	8,479	2,298	326	1,201
Yamaguchi	Yamaguchi City	1,342	1,298	6,113	1,715	215	766
Tokushima	Tokushima City	720	695	4,147	1,016	170	693
Kagawa	Takamatsu City	950	926	1,877	1,005	498	929
Ehime	Matsuyama City	1,335	1,291	5,676	1,666	230	784
Kochi	Kochi City	692	666	7,103	1,161	95	583
Fukuoka	Fukuoka City	5,135	5,103	4,988	2,765	1,026	1,851
Saga	Saga City	811	795	2,441	1,335	328	600
Nagasaki	Nagasaki City	1,312	1,267	4,131	1,668	311	769
Kumamoto	Kumamoto City	1,738	1,709	7,409	2,747	232	626
Oita	Oita City	1,124	1,096	6,341	1,795	175	617
Miyazaki	Miyazaki City	1,070	1,042	7,734	1,875	136	561
Kagoshima	Kagoshima City	1,588	1,549	9,186	3,287	170	476
Okinawa	Naha City	1,467	1,468	2,282	1,126	643	1,304

1) Population Census. 2) Population Estimates.

Source: Statistics Bureau, MIC; Geospatial Information Authority of Japan.

Appendix 2
Conversion Factors

	Metric units	British Imperial and U.S. equivalents
Length:	1 centimeter (cm)	0.39370 inches
	1 meter (m)	3.28084 feet 1.09361 yards
	1 kilometer (km)	0.62137 miles
Area:	1 square meter (m^2)	10.7639 square feet 1.19599 square yards
	1 square kilometer (km^2)	0.38610 square miles
	1 hectare (ha) 10,000 square meters (m^2)	2.47105 acres
Volume:	1 cubic meter (m^3)	35.3147 cubic feet 1.30795 cubic yards
Weight:	1 kilogram (kg)	35.2740 ounces 2.20462 pounds
	1 ton (t)	0.98421 long tons 1.10231 short tons
Capacity:	1 liter (L)	0.87988 imp. Quarts 1.05669 U.S. liq. Quarts

Temperature: centigrade (℃) ..... 5 / 9 ×(Fahrenheit - 32)

Appendix 3
Foreign Exchange Rates [1)]

(Yen per U.S. dollar)

Year	Average	End of year
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
2015	121.03	120.42
2016	108.84	117.11
2017	112.16	112.65
2018	110.39	110.40
2019	109.01	109.15
2020	106.78	103.33
2021	109.80	115.12
2022	131.38	132.14
2023	140.48	141.40

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