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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

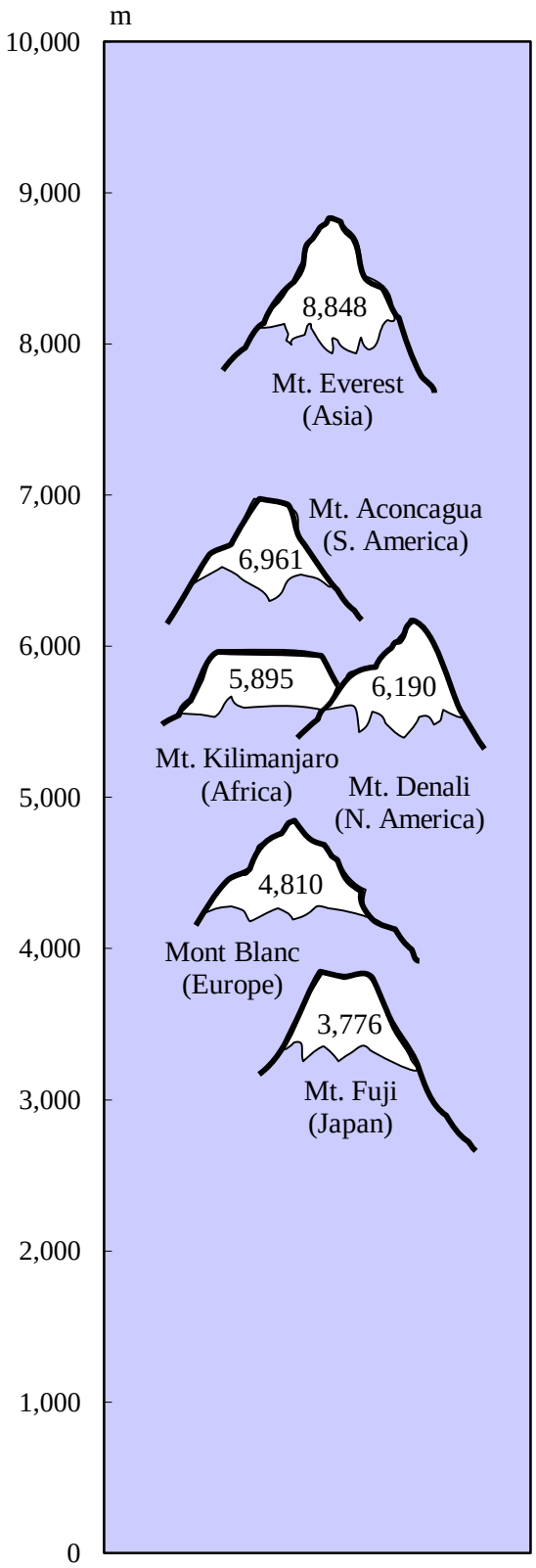
Source: Geospatial Information Authority of Japan.

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)

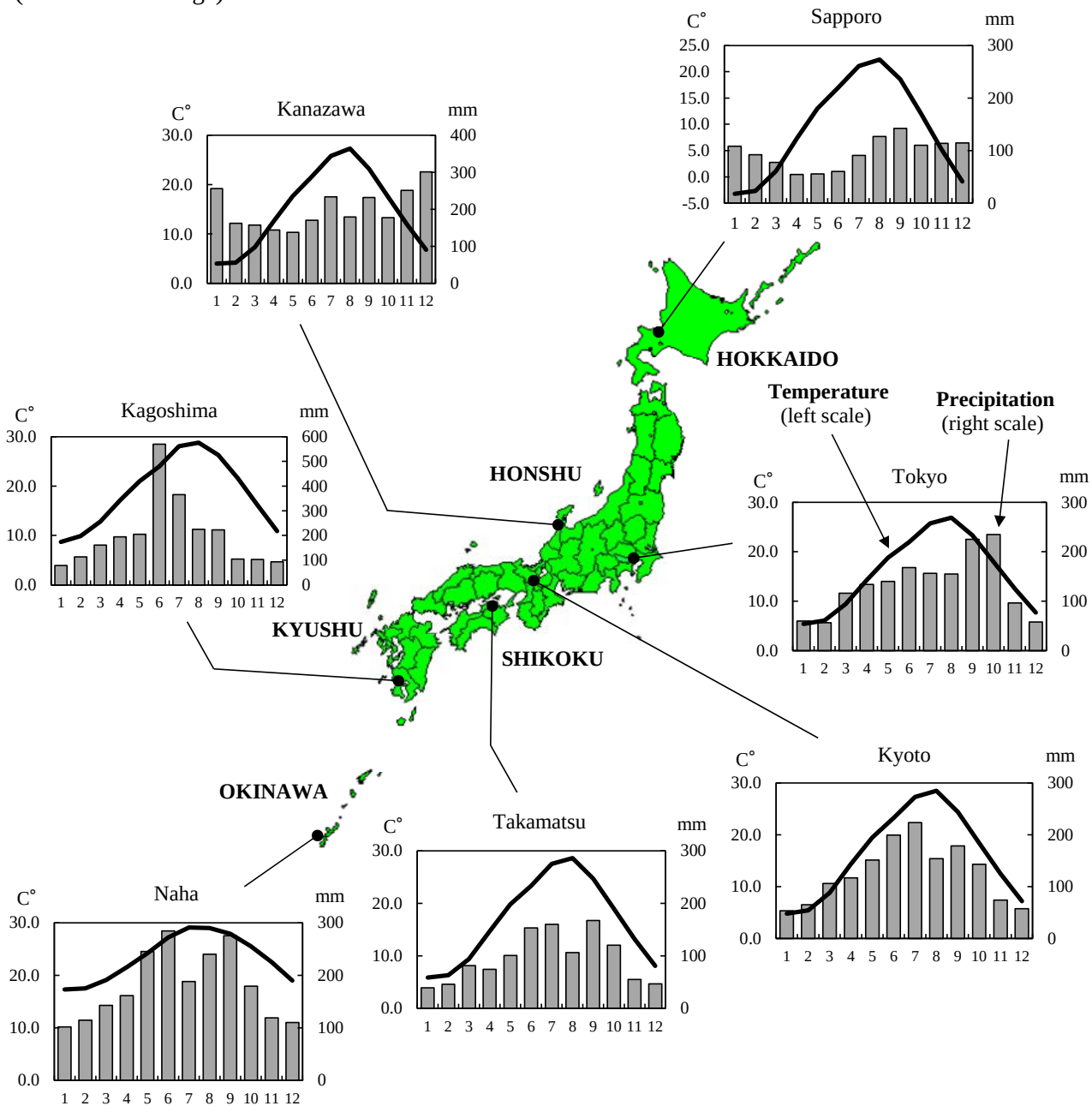
Year	Total	Forestland and fields	Farmland	Inland water	Roads [1)]	Developed land [2)]	Others
1980	37.77	25.68	5.59	1.31	0.99	1.39	2.81
1990	37.77	25.52	5.33	1.31	1.14	1.60	2.87
2000	37.79	25.38	4.91	1.35	1.27	1.79	3.09
2010	37.79	25.35	4.67	1.33	1.36	1.90	3.19
2020	37.80	# 25.34	# 4.37	1.35	1.42	# 1.97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

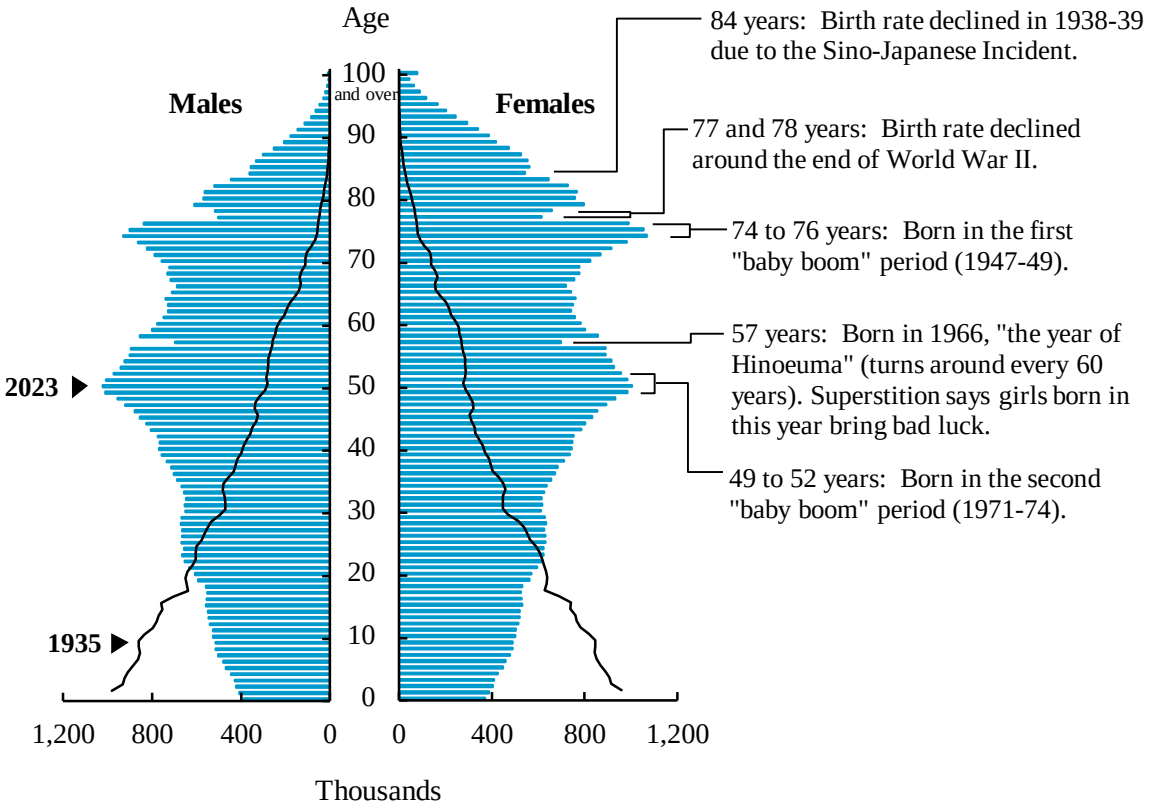
Population

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.

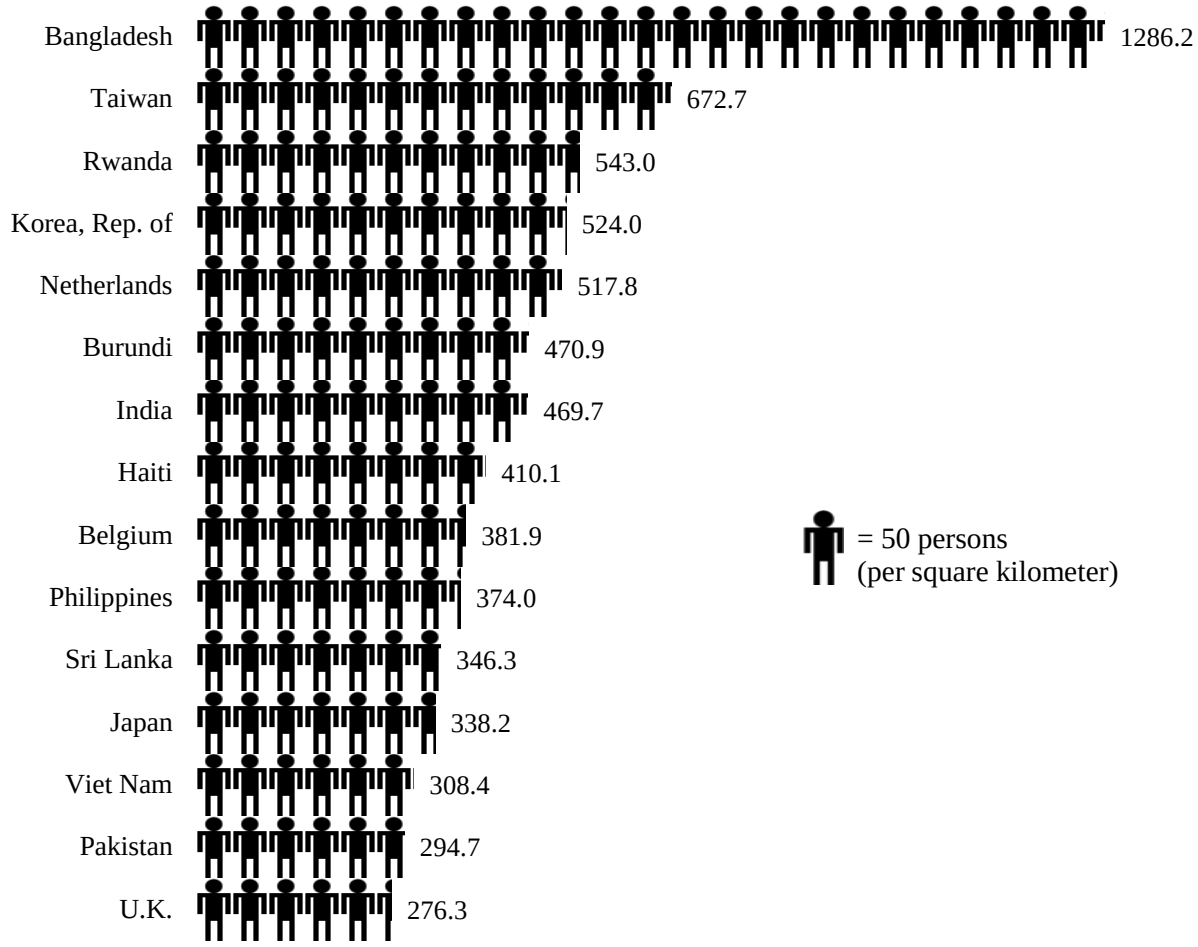
Table 2.1
Countries with a Large Population (2023)

(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.

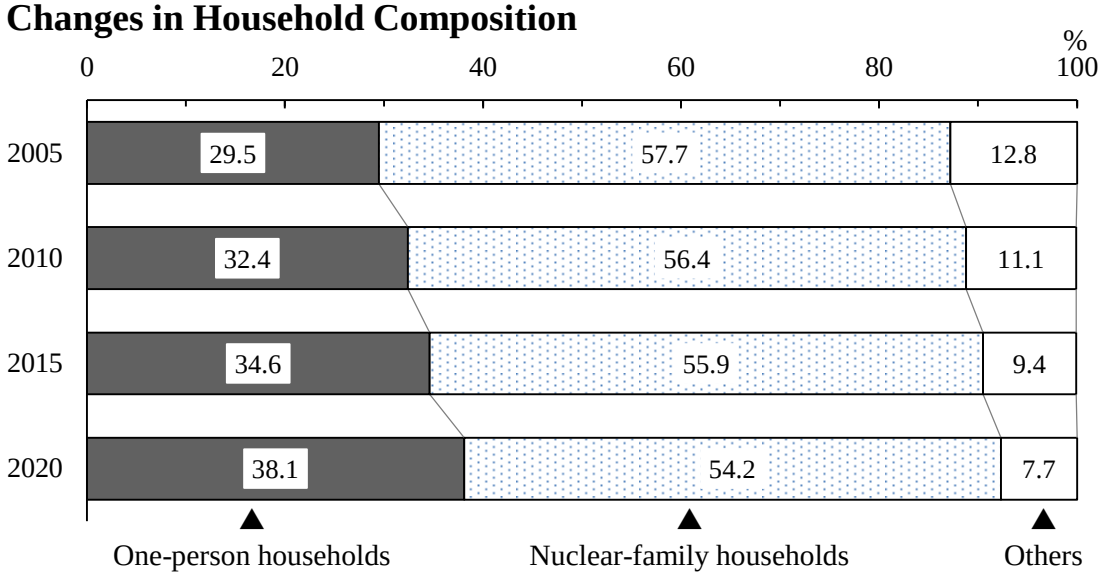
2. Households

(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)

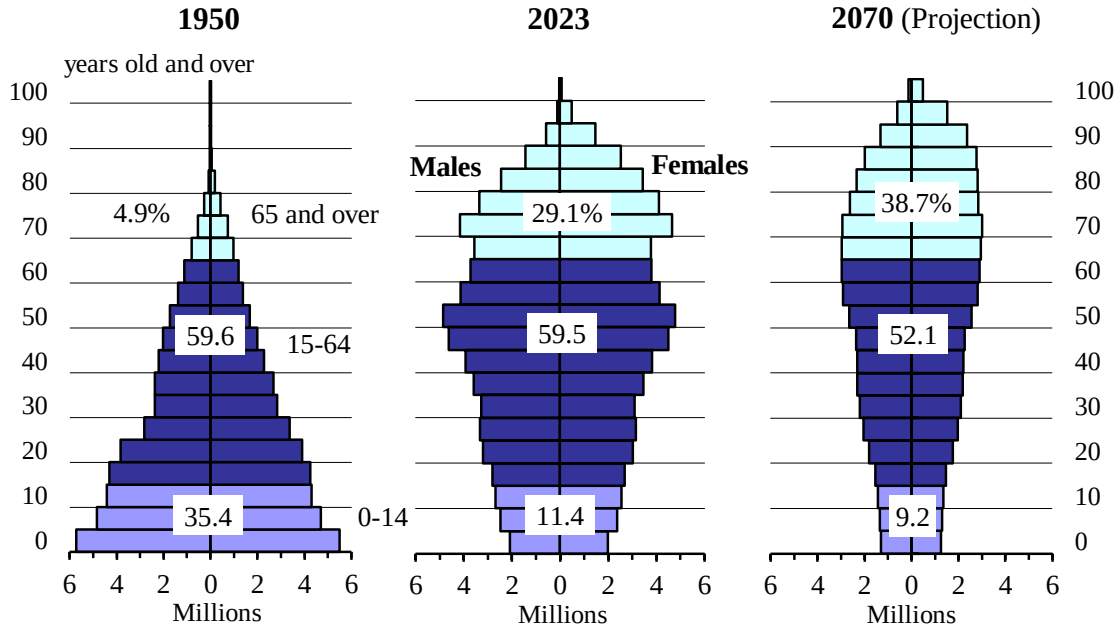
Type of households	2005	2010	2015	2020
Private households	49,063	51,842	53,332	55,705
Elderly households	17,220	19,338	21,713	22,655
(percentage)	35.1	37.3	40.7	40.7
One-person households	3,865	4,791	5,928	6,717
Males	1,051	1,386	1,924	2,308
Females	2,814	3,405	4,003	4,409
Nuclear-family households	8,398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

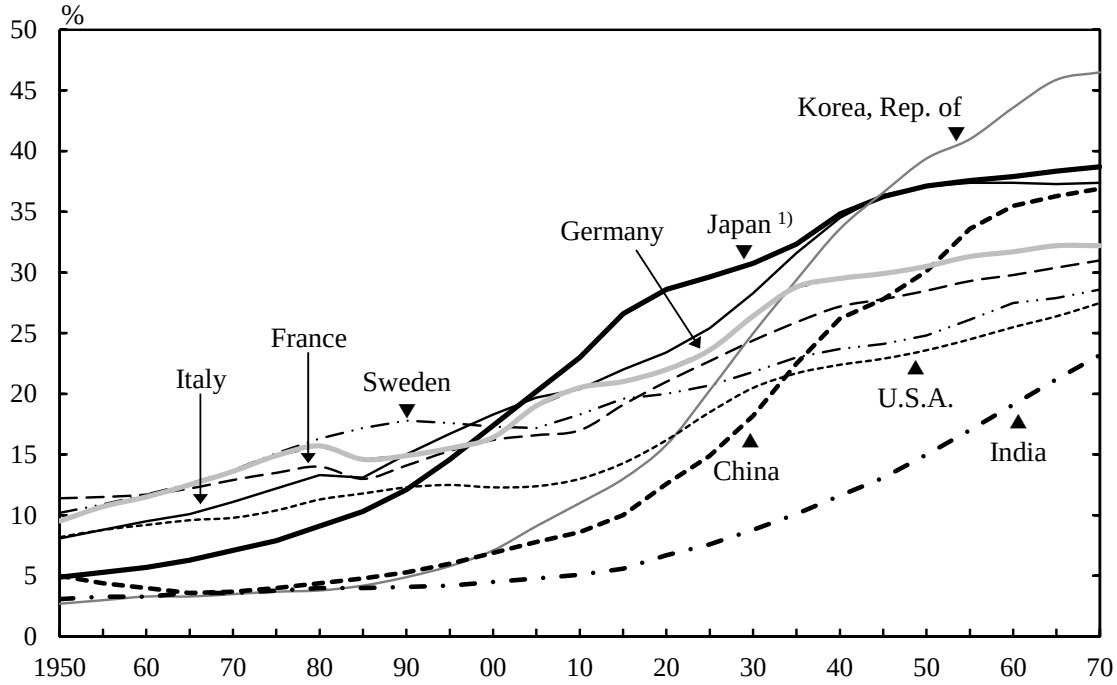
Figure 2.4
Changes in the Population Pyramid



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.

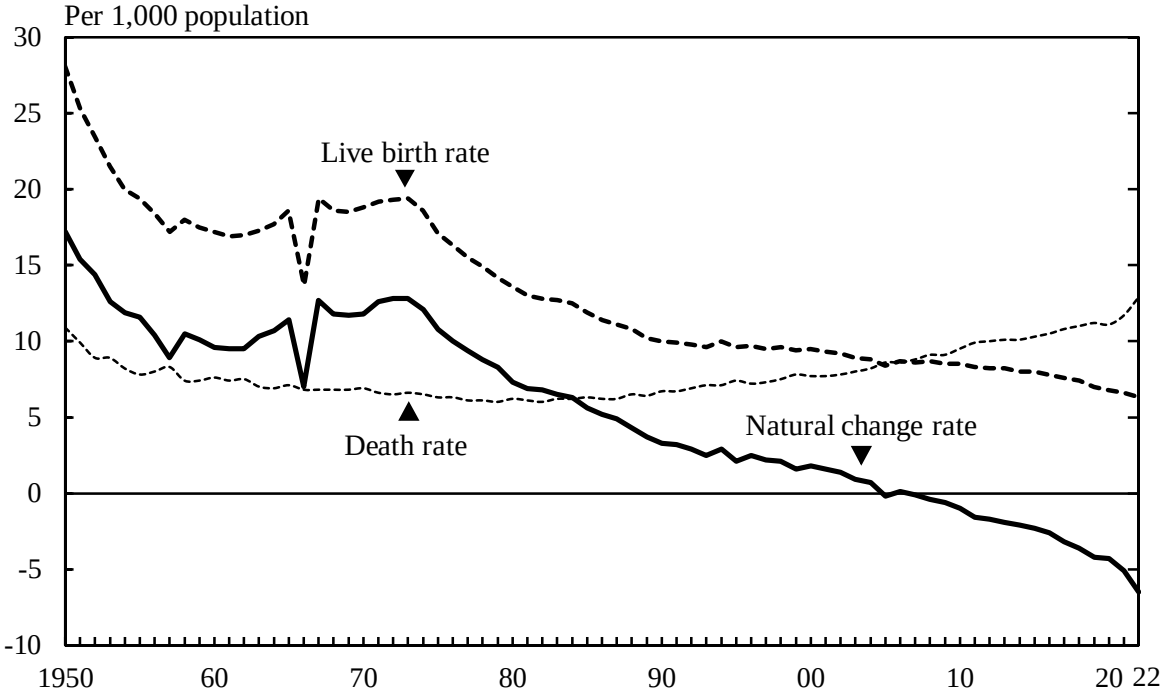
Source: Statistics Bureau, MIC; National Institute of Population and Social Security Research; United Nations.

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.

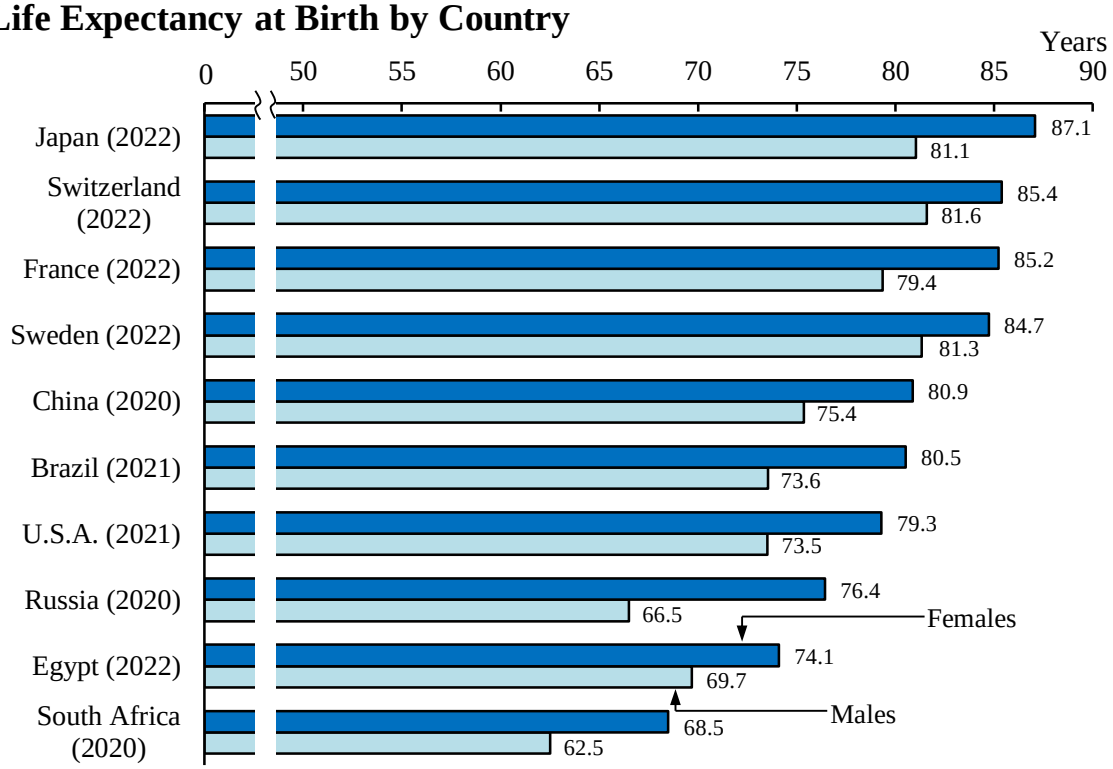
Table 2.7
Changes of Mothers' Age at Childbirth

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)]

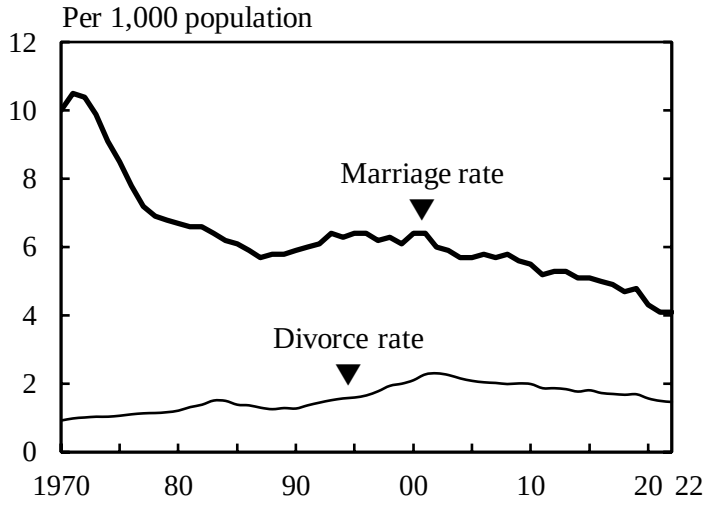
(%)

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.

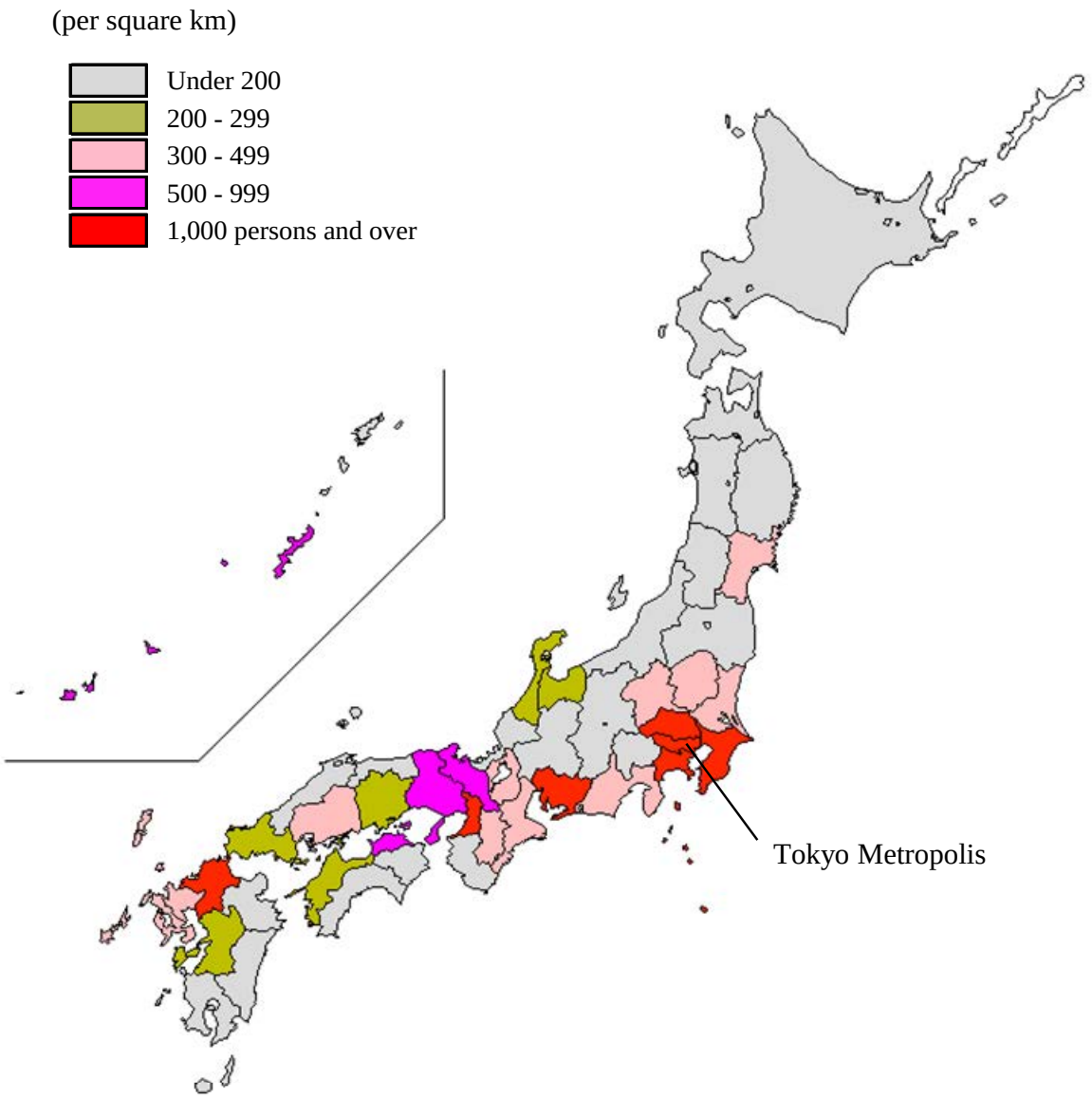
6. Population Density and Regional Distribution

(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

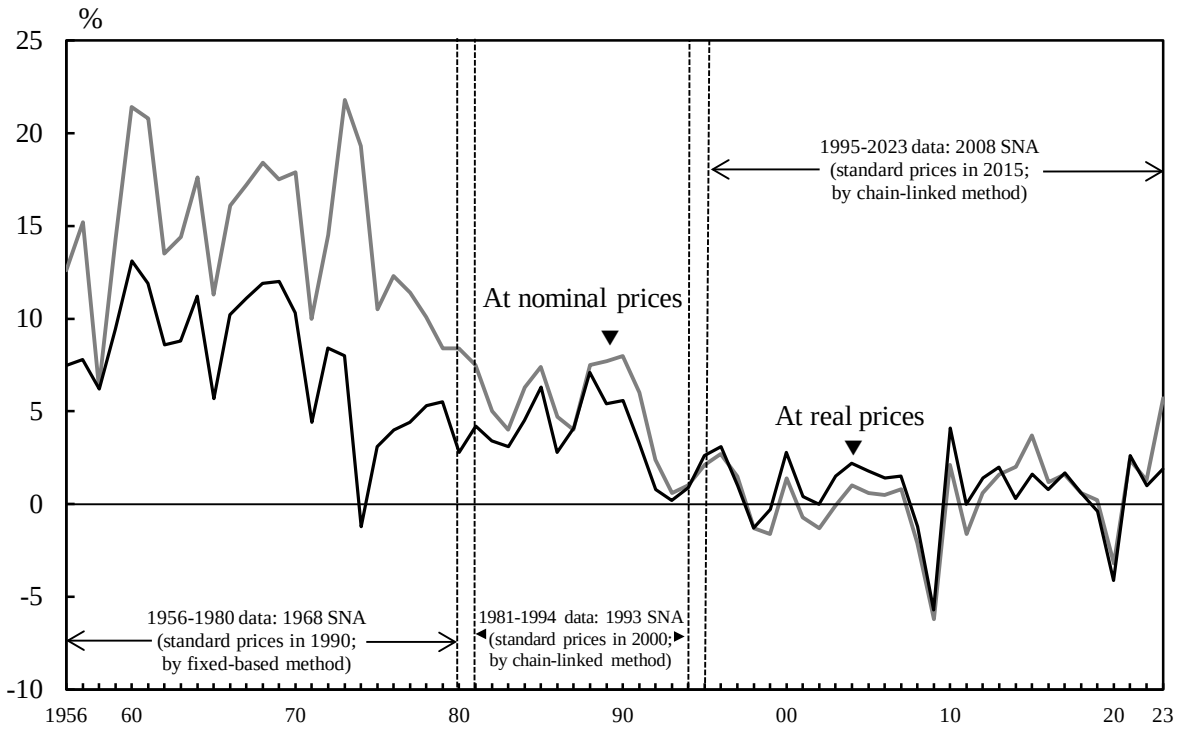
Economy

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.

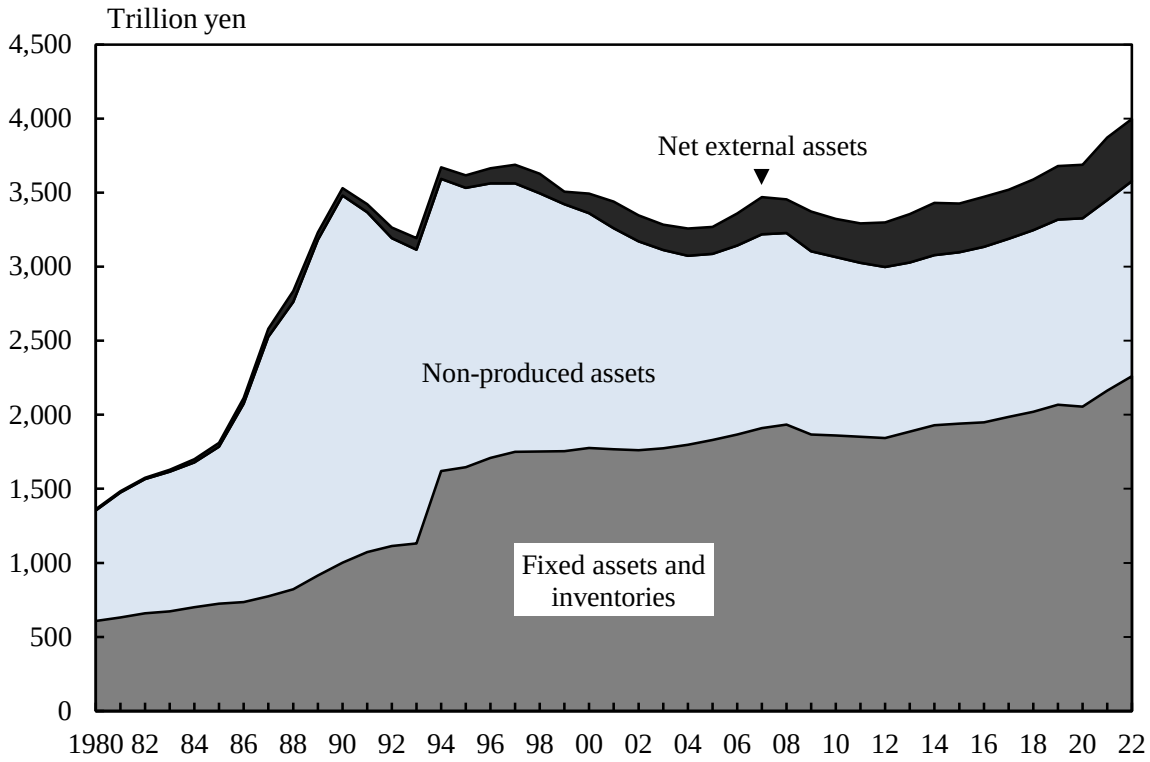
2. Bubble Economy and Its Collapse

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)

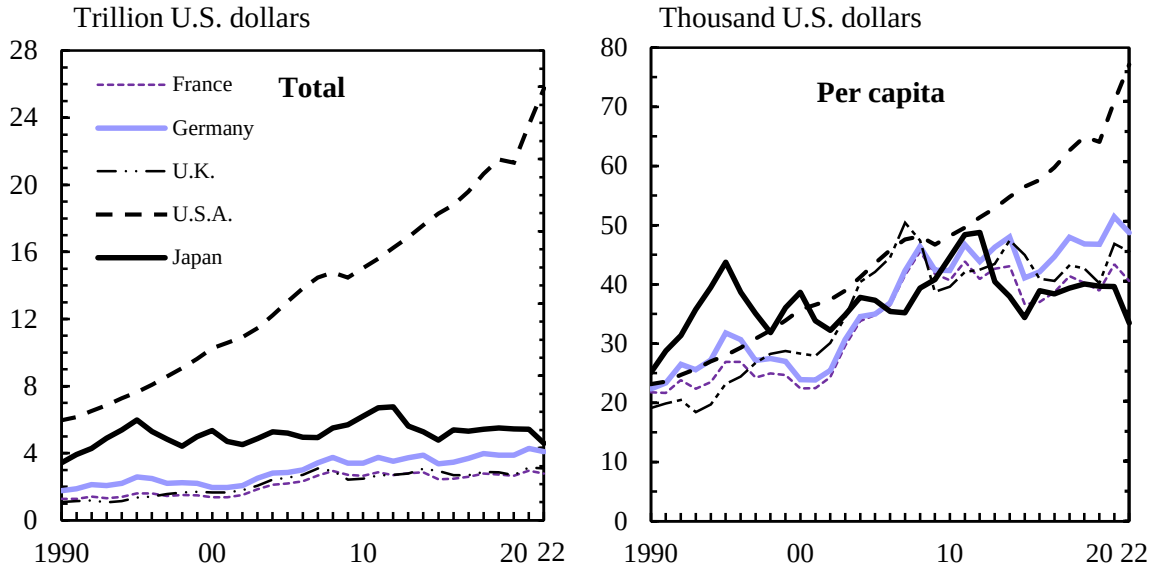


1) Data was estimated using a different method beginning in 1994.
Source: Economic and Social Research Institute, Cabinet Office.

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.

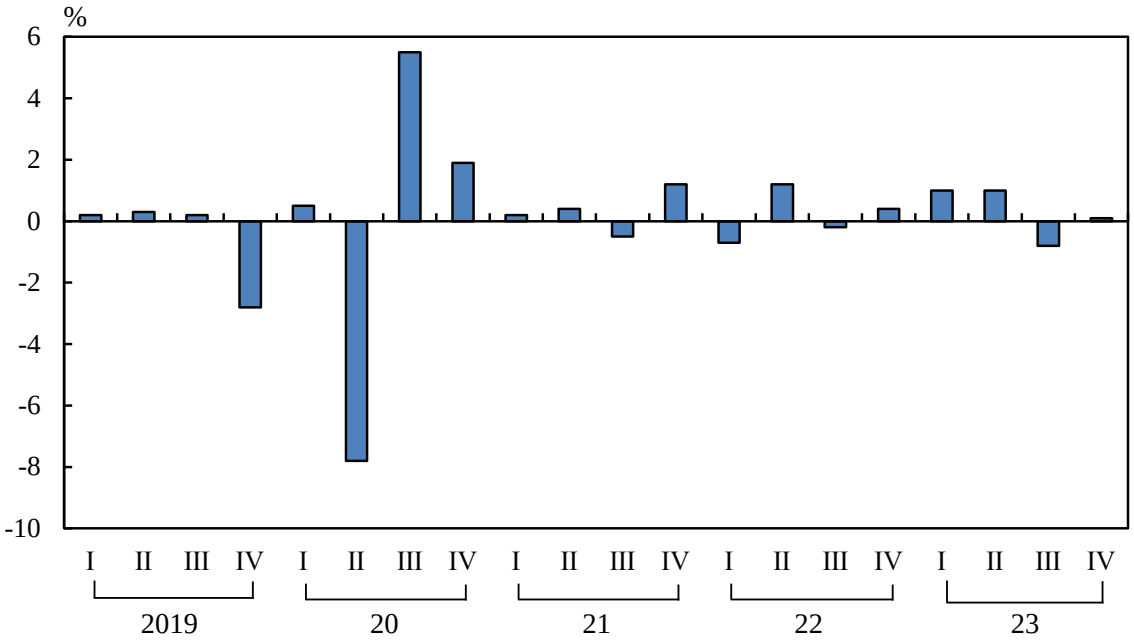
Subsequently, the Japanese economy recovered with foreign demand and economic measures after April 2009, and came to a standstill starting around October 2010. In early 2011, however, it began to rally. The Great East Japan Earthquake taking place on March 11, 2011, and the nuclear power plant accident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

(%)

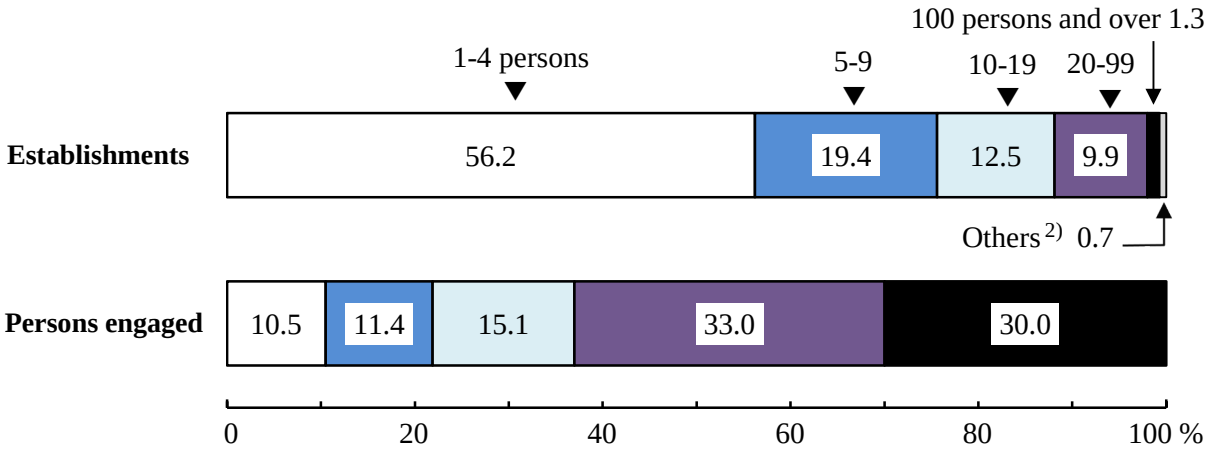
	1995	2000	2005	2010	2015	2020
Primary industry						
Agriculture, forestry and fishing	1.6	1.5	1.1	1.1	1.0	1.1
Secondary industry						
Mining	0.2	0.1	0.1	0.1	0.1	0.1
Manufacturing	23.5	22.5	21.4	20.8	20.5	20.1
Construction	7.6	6.7	5.4	4.6	5.2	5.7
Tertiary industry						
Electricity, gas and water supply 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".

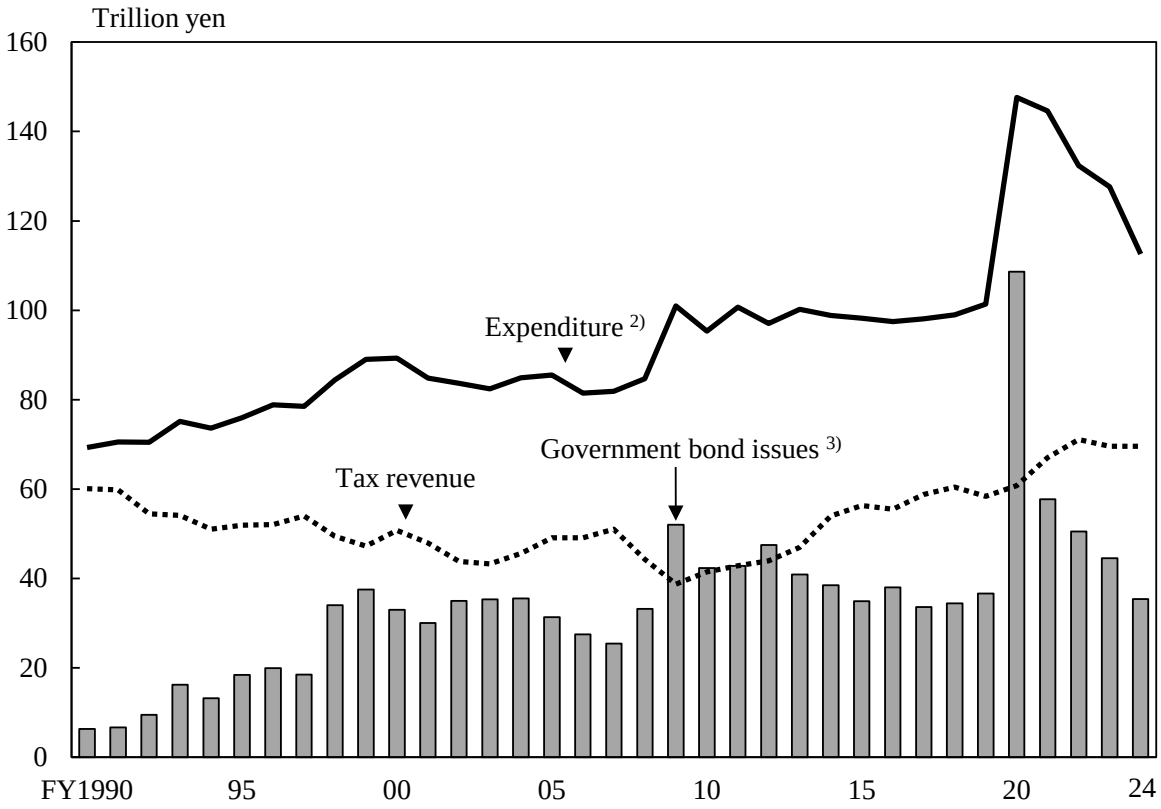
Japan's national budget consists of the general account budget, special account budgets, and the budgets of government-affiliated agencies. Using revenues from general sources such as taxes, the general account covers core national expenditures such as social security, public works, education and science,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

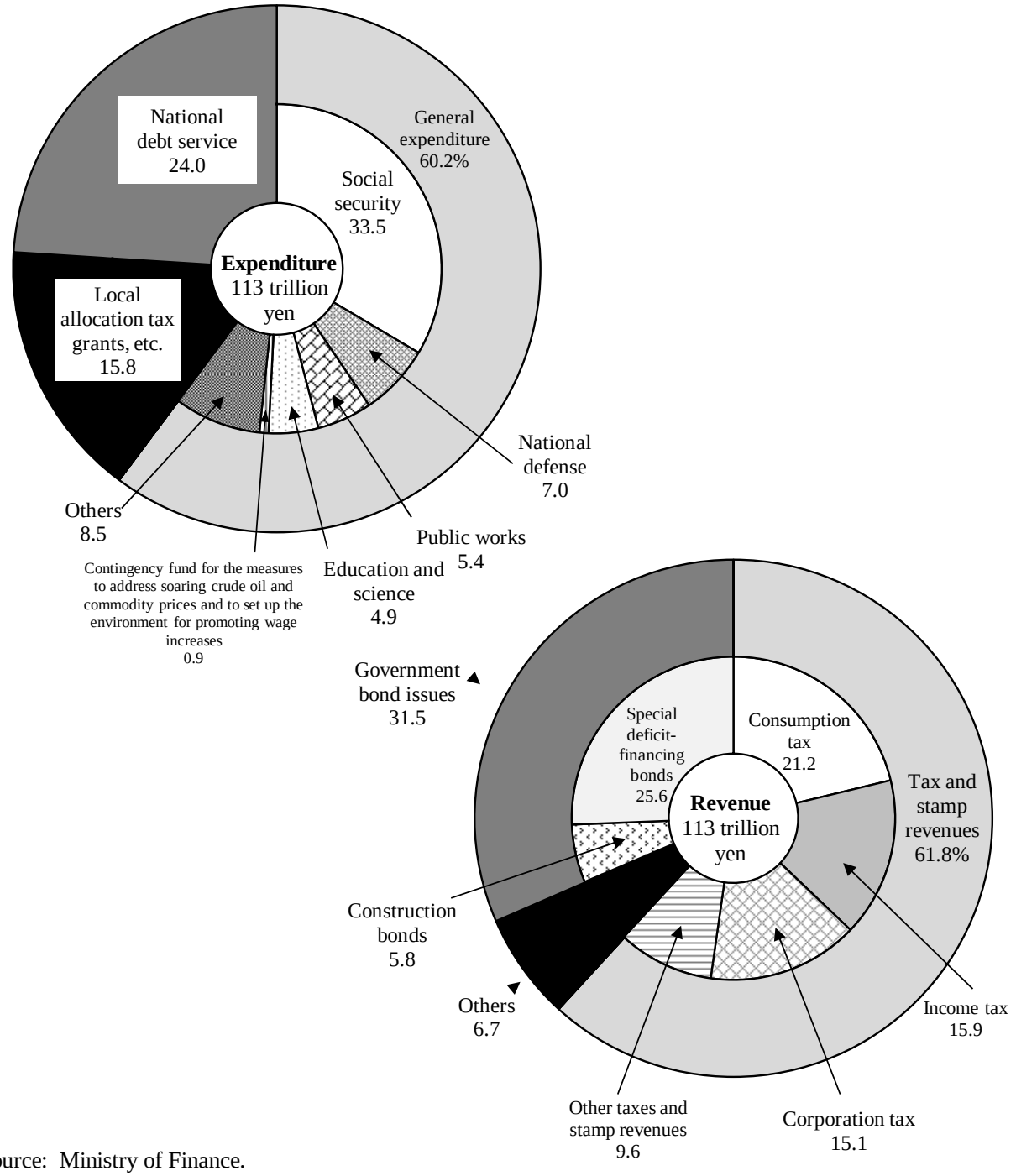
Fiscal year	Economic cooperation	Small and medium-sized business promotion	Energy measures	Food stable supply	Others	National debt service (B)	Local allocation tax grants, etc. (C)
2000	1,012	933	677	247	6,434	21,446	15,829
2005	784	237	493	657	6,536	18,736	17,441
2010	746	830	845	1,122	7,953	19,544	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)

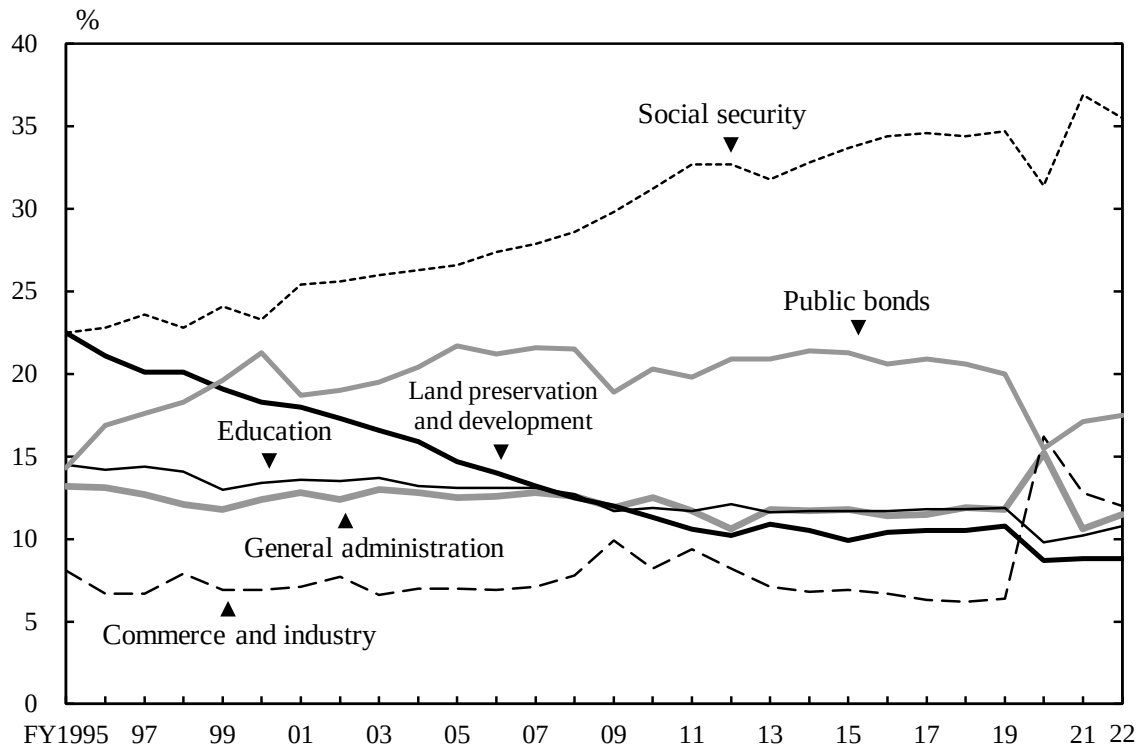
(Billion yen)

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

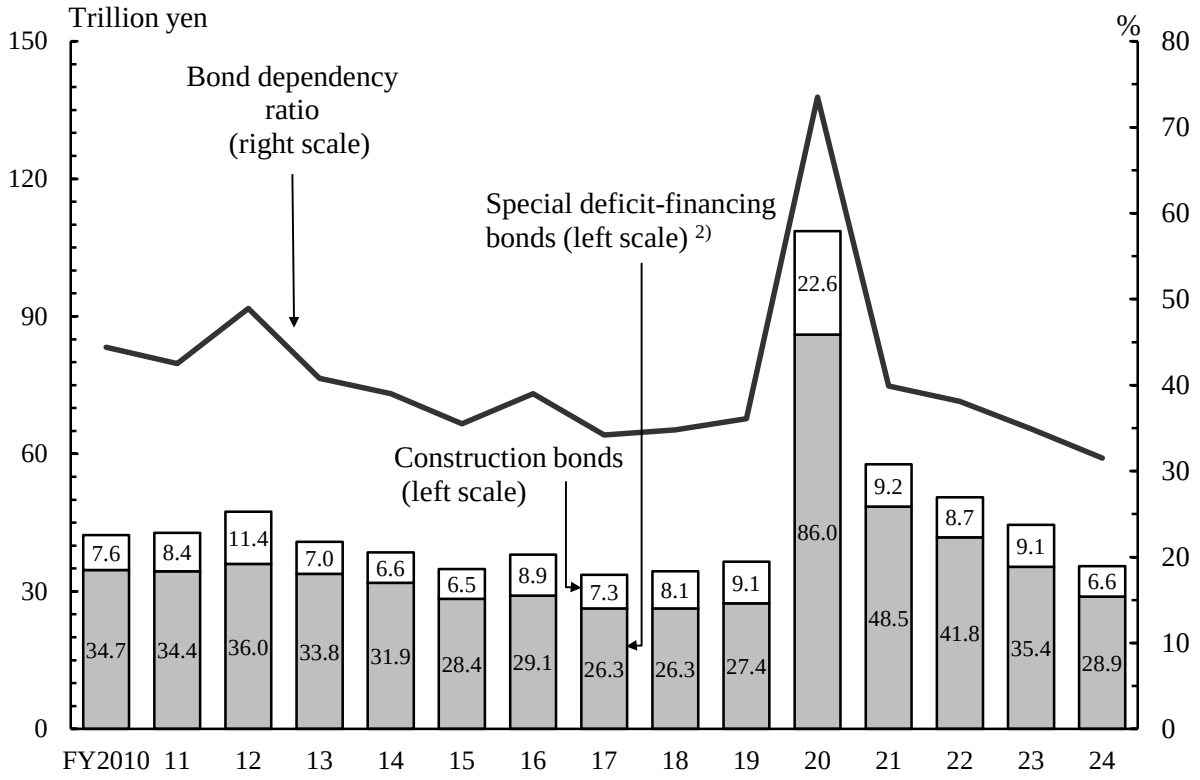


Source: Ministry of Internal Affairs and Communications.

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.

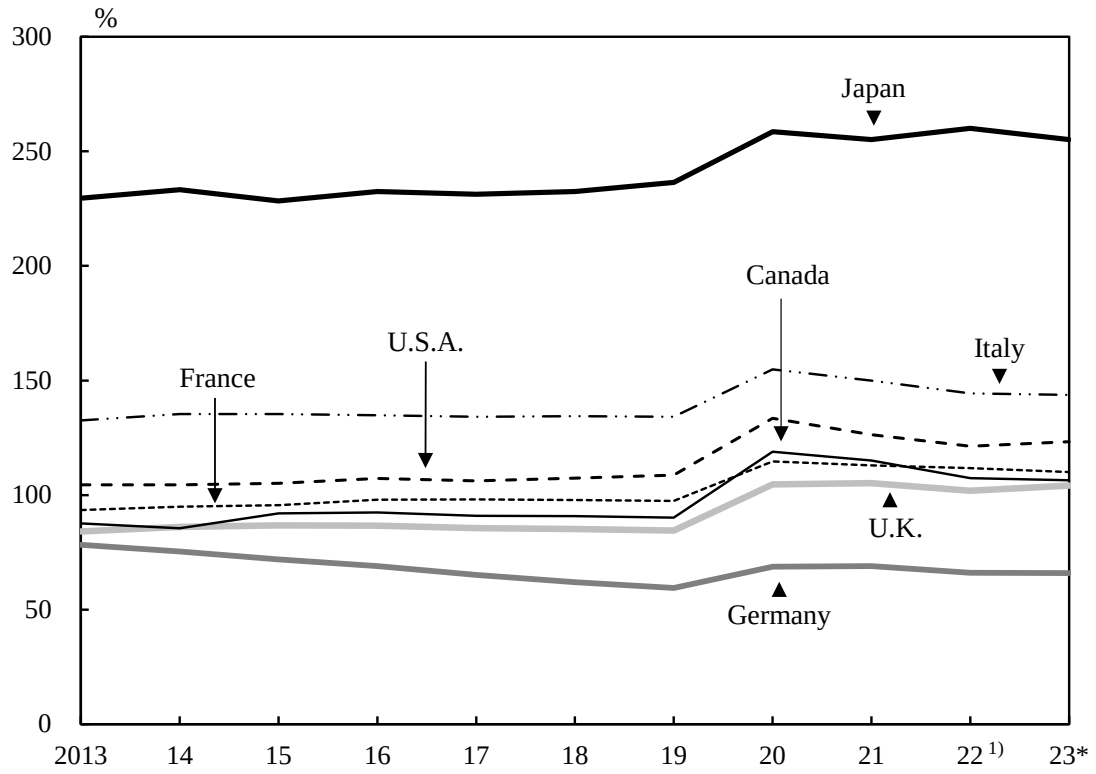
Figure 4.4
National Government Bond Issue and Bond Dependency Ratio [1)]



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



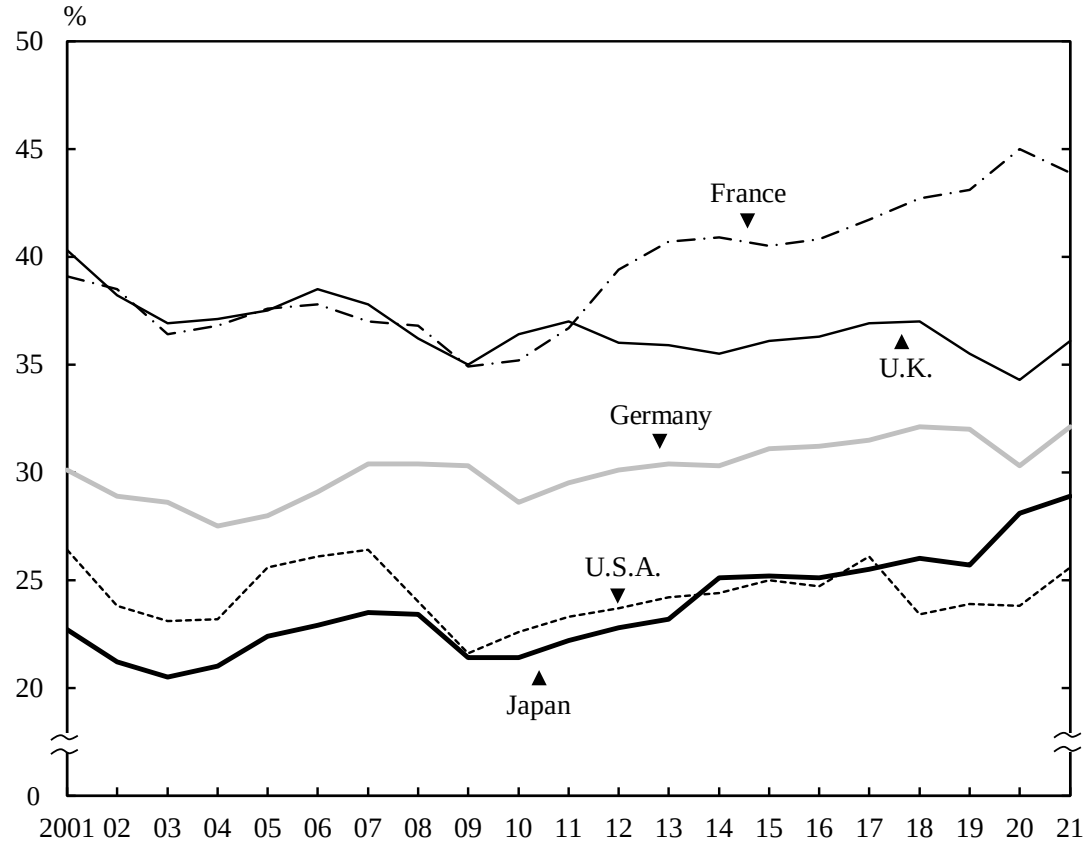
1) The data for Japan indicates estimated figure.
Source: Ministry of Finance.

(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.

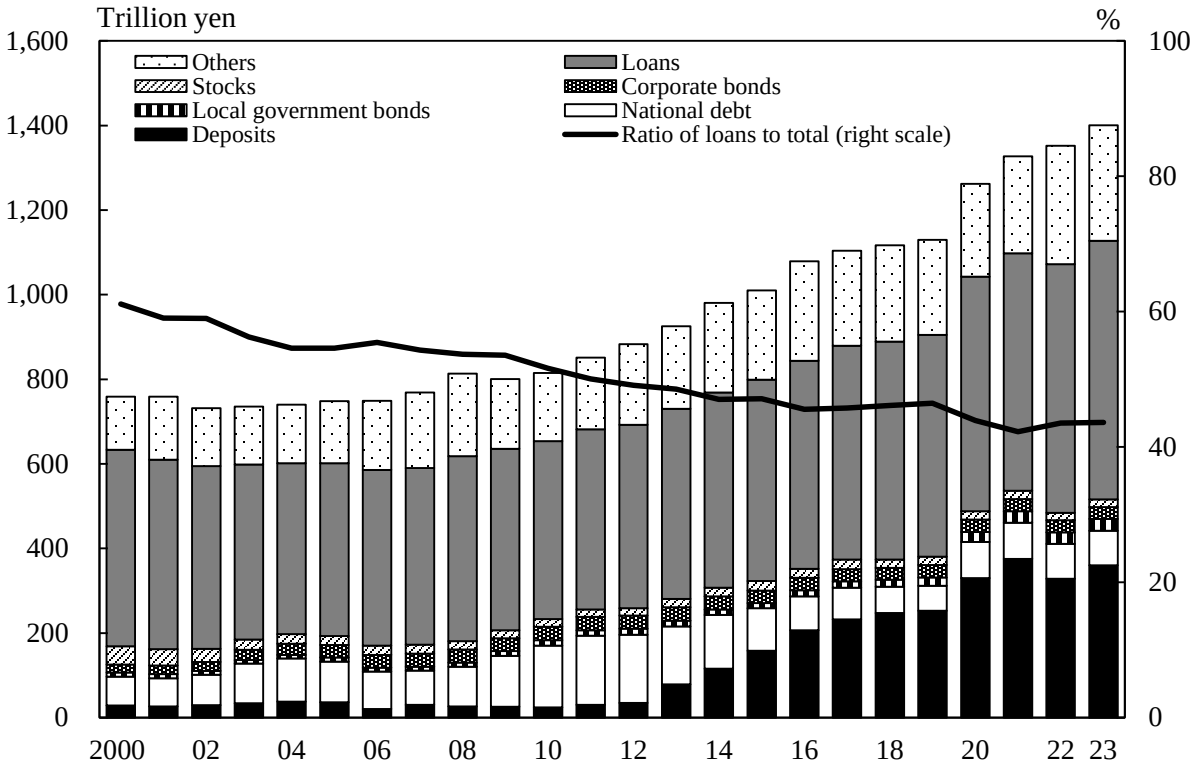
3. Financial Institutions

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)

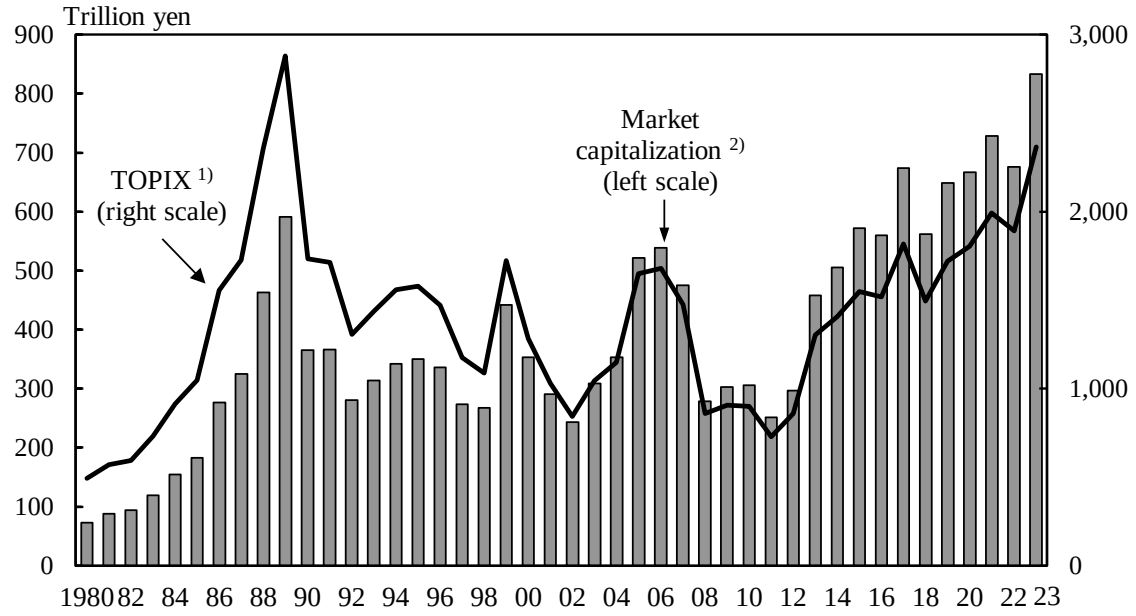
Sectors	FY2021	FY2022	Annual change (%)
Financial assets			
Domestic sectors	9,072,905	9,241,608	1.9
Financial institutions	4,863,734	4,920,474	1.2
Domestic nonfinancial sector	4,209,171	4,321,134	2.7
Nonfinancial corporations	1,372,443	1,422,636	3.7
General government	752,780	775,880	3.1
Households (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

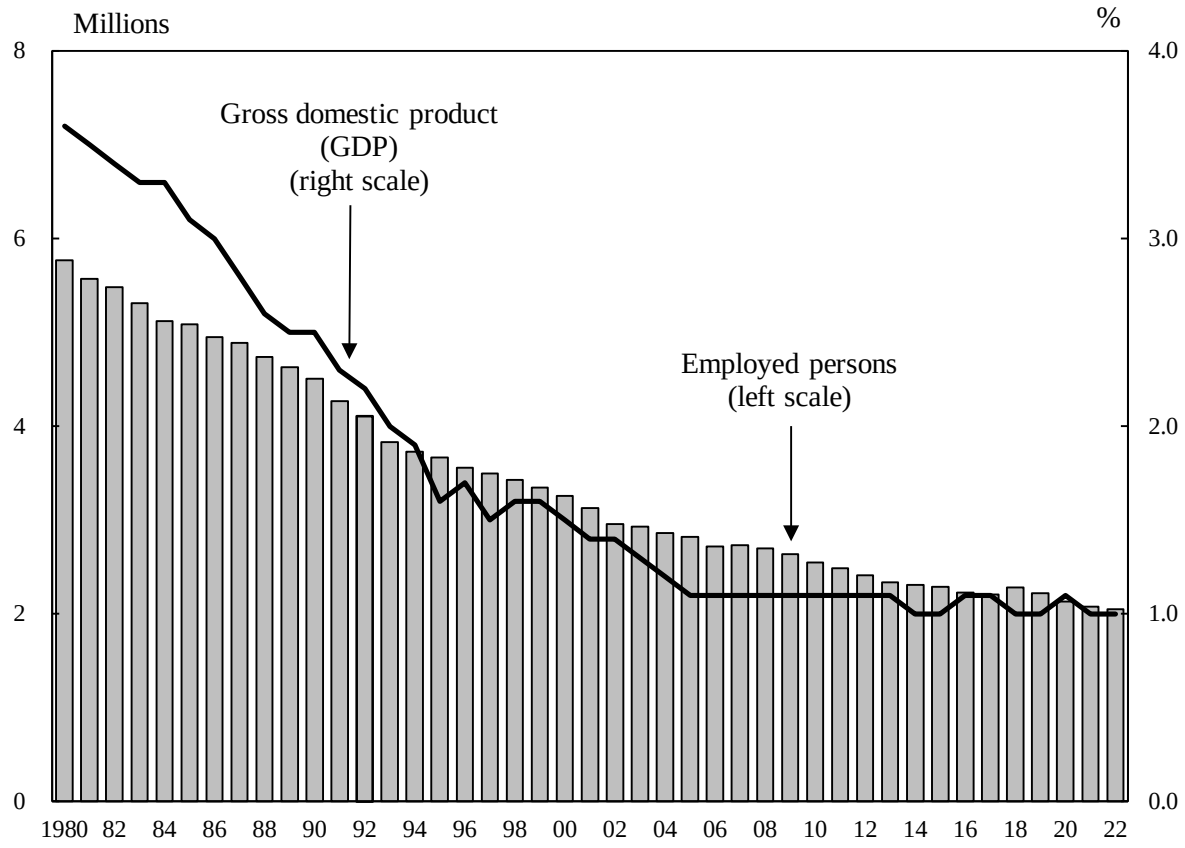
Agriculture, Forestry, and Fisheries

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.

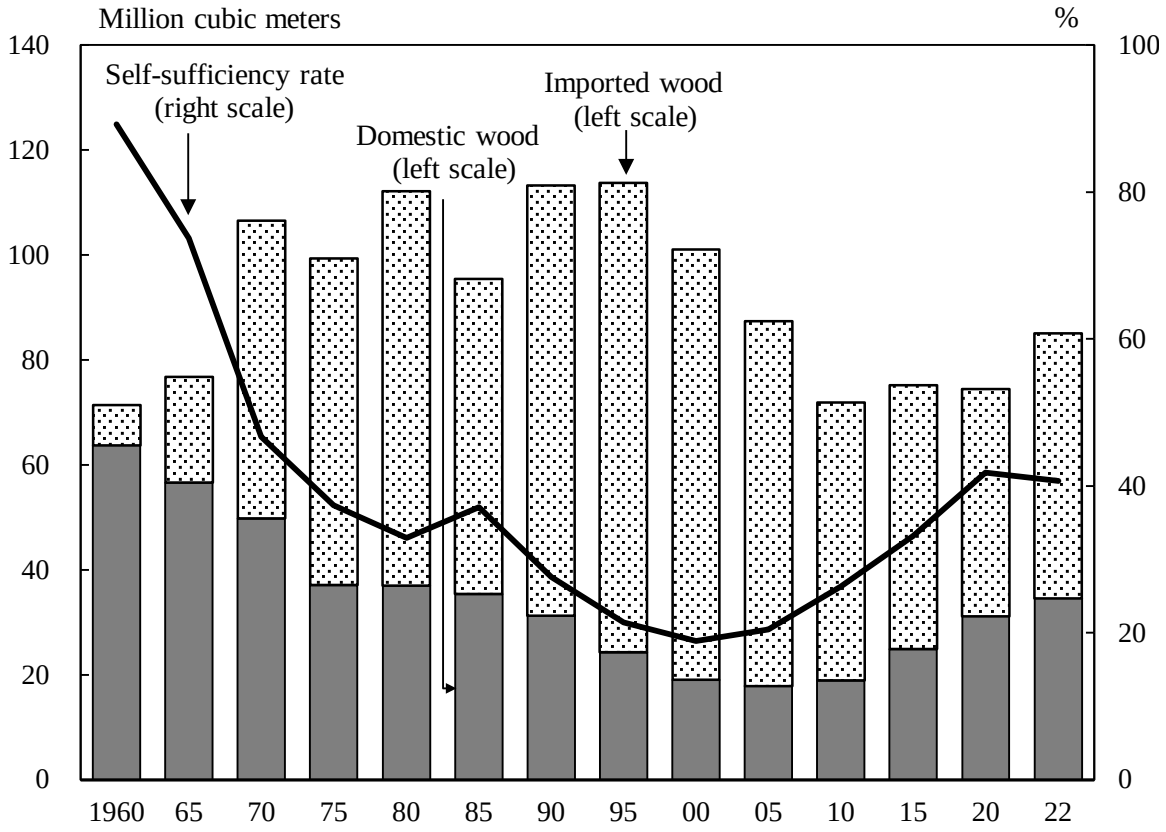
Table 5.4
Forest Land Area and Forest Resources (2022)

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.

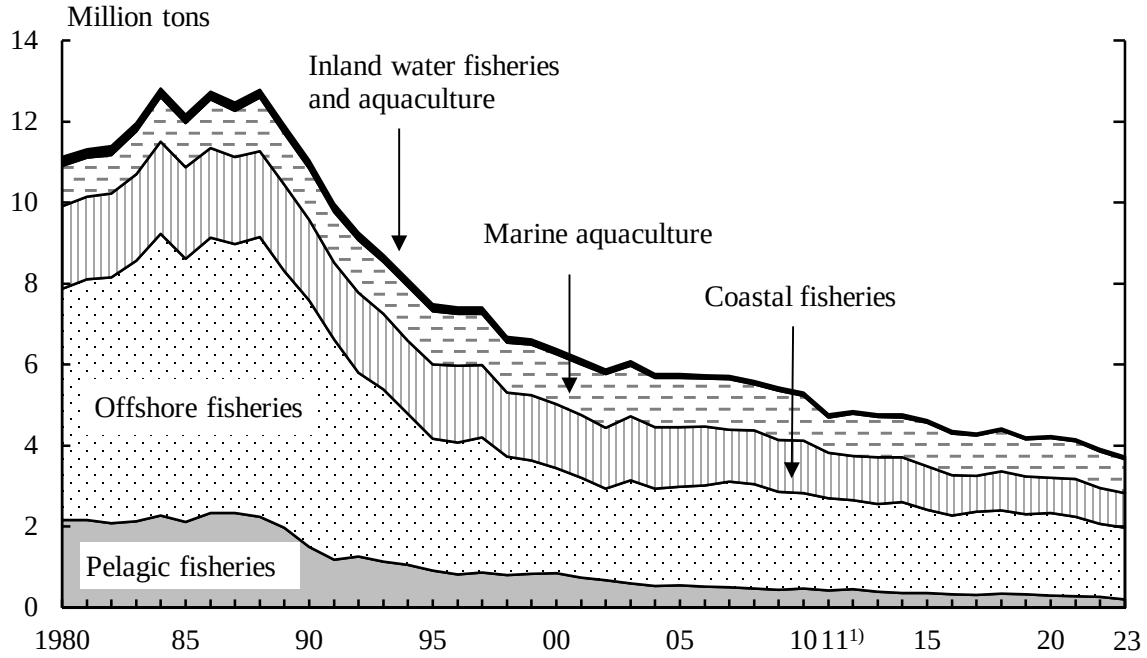
4. Fisheries

(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.

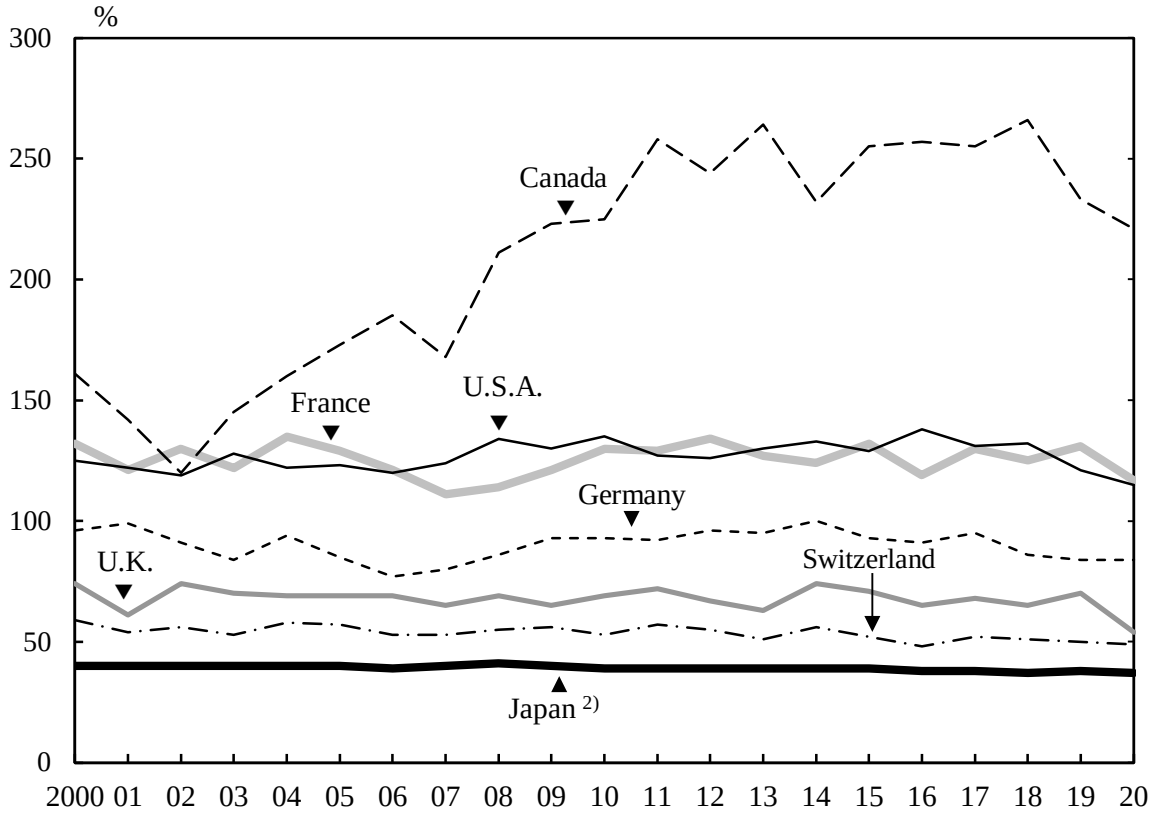
Table 5.7
Food Supply and Demand

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)

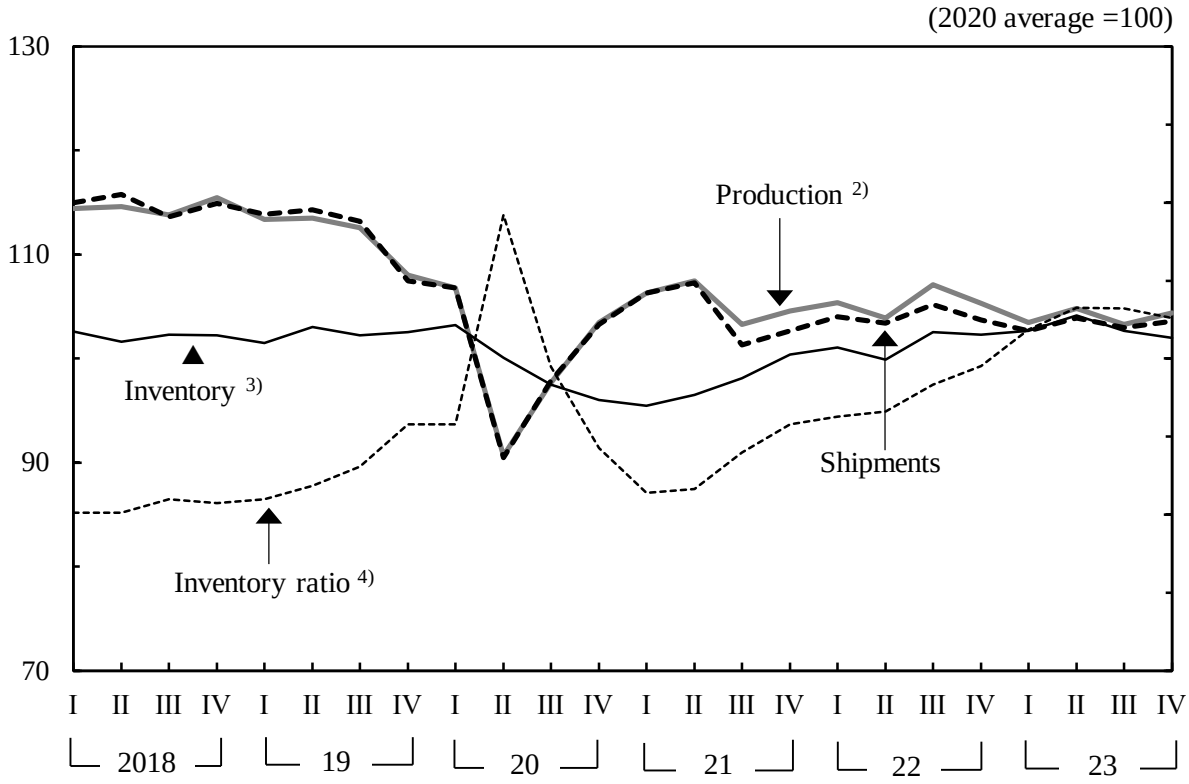
(2020 average =100)

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

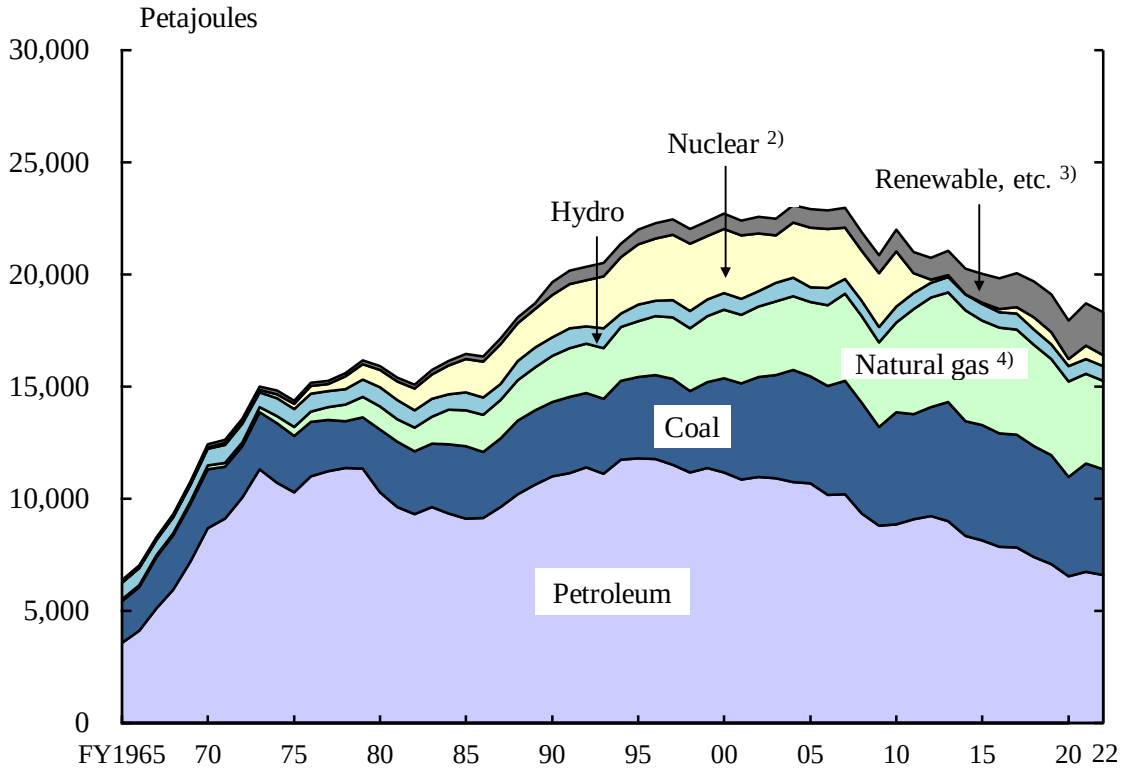
Joule (J) is employed as a common unit (International System of Units: SI) for energy across all energy sources in presenting international statistical information. The unit Petajoule (PJ: 10^{15} or quadrillion joules), etc. is used here to reduce the number of digits. The energy of one kiloliter of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

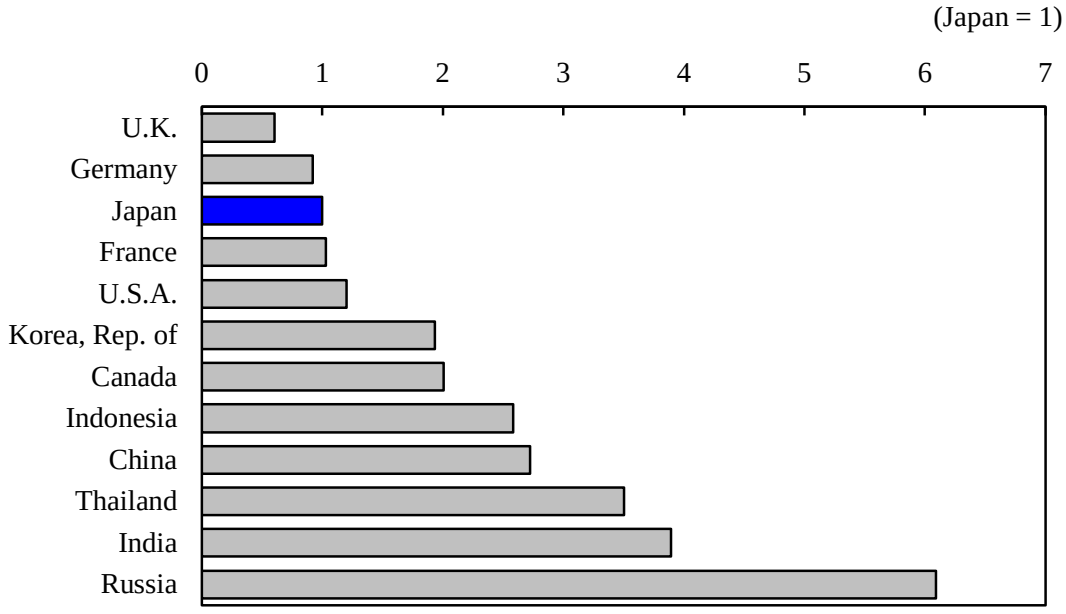
Table 7.1
Trends in Domestic Supply of Primary Energy and Percentage by Energy Source

(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)

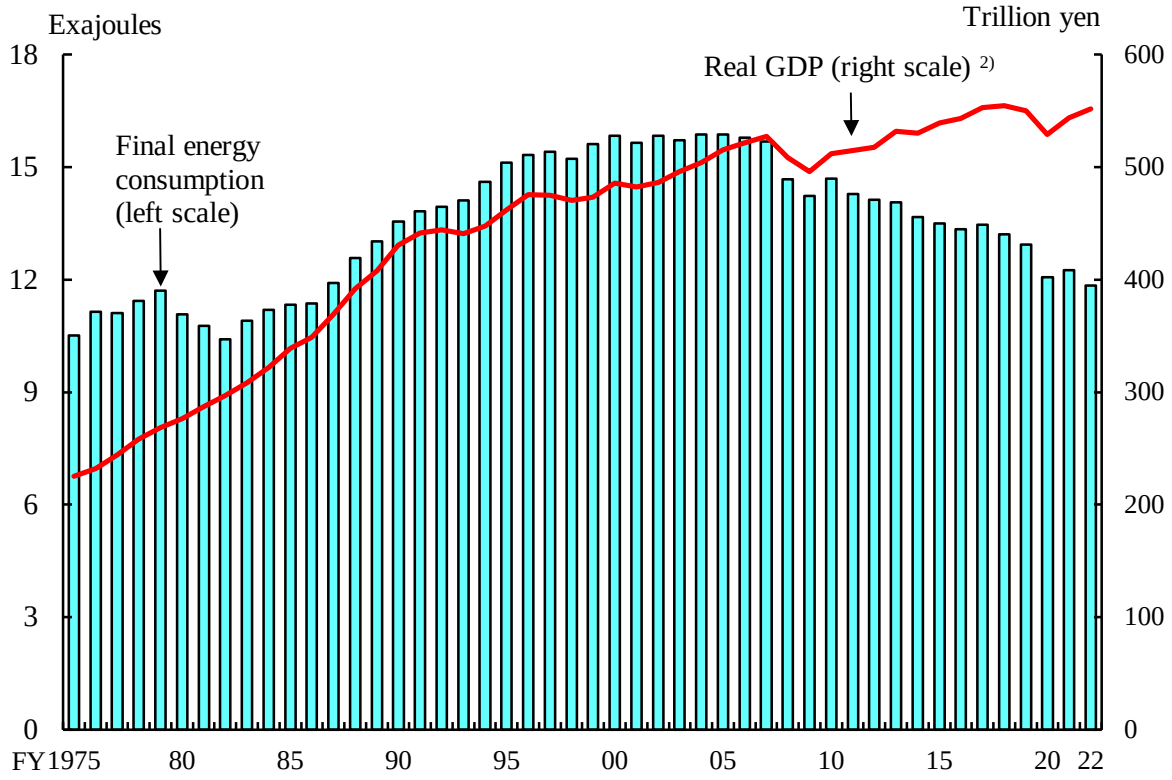


1) Primary energy consumption (tons of oil equivalent) / Real GDP (2015 U.S. dollars).
Source: Agency for Natural Resources and Energy.

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)

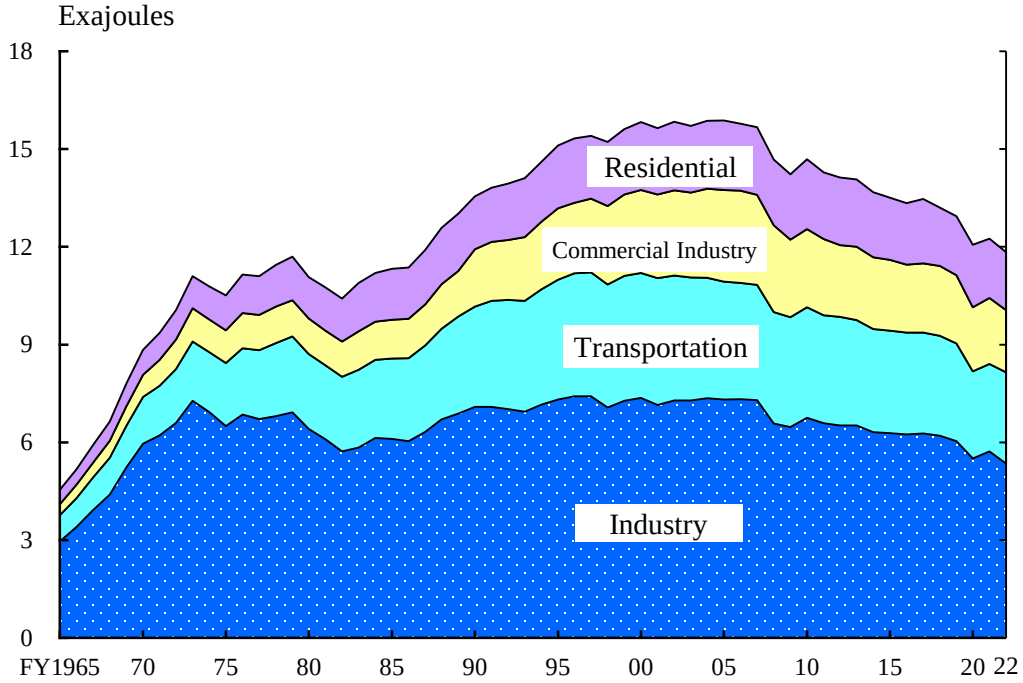


1) A different statistical method was used for the figures since FY1990. 2) Figures are based on 2015 standards.
Source: Cabinet Office; Agency for Natural Resources and Energy.

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

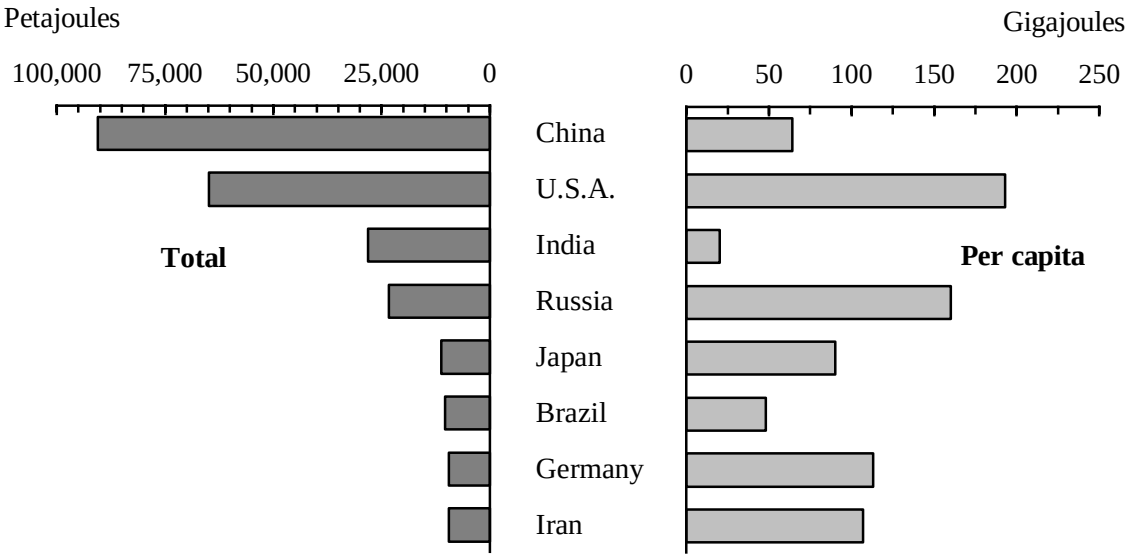
and a warm winter, and decreased in the residential sector due to factors such as a warm winter. Meanwhile, it increased for the second consecutive year in the transportation sector due to recovery of transport passenger volume, etc.

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

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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.

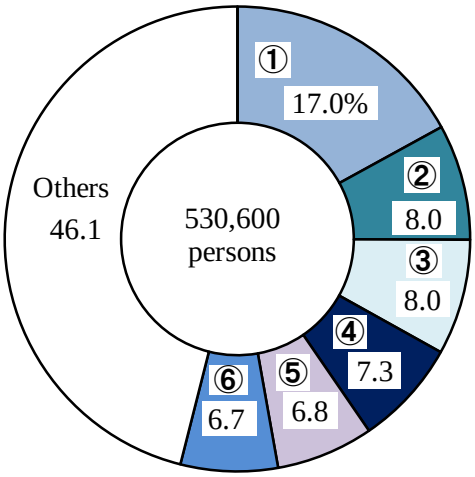
With regard to the portion in the R&D expenditures in fiscal 2022 by specific objective, 3.4 trillion yen went to the life sciences field (16.3 percent of total R&D expenditures), 3.0 trillion yen (14.6 percent) to the information technology field, 1.4 trillion yen (6.9 percent) to the environmental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

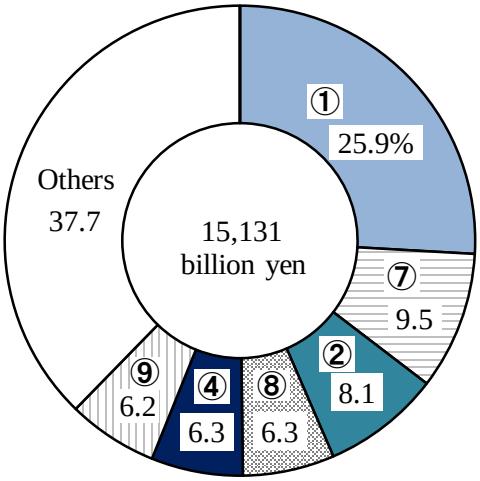
In terms of R&D expenditures in fiscal 2022, of 15.1 trillion yen spent by business enterprises, 12.8 trillion yen was spent by manufacturing industries. The motor vehicles, parts and accessories industry spent the most, followed by the medicines industry, then by the electronic parts, devices and electronic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

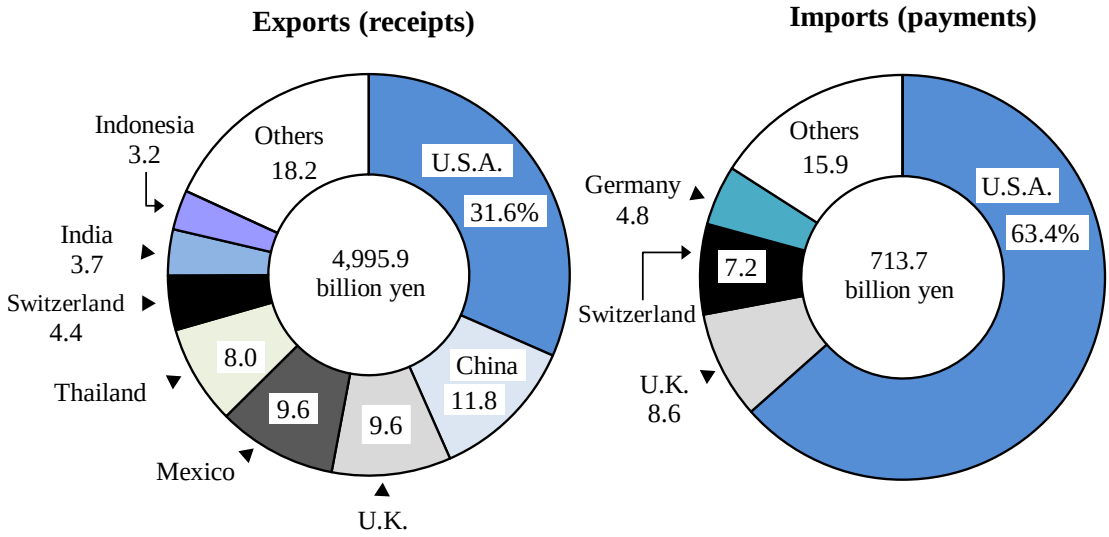
Technology Trade by Business Enterprises

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

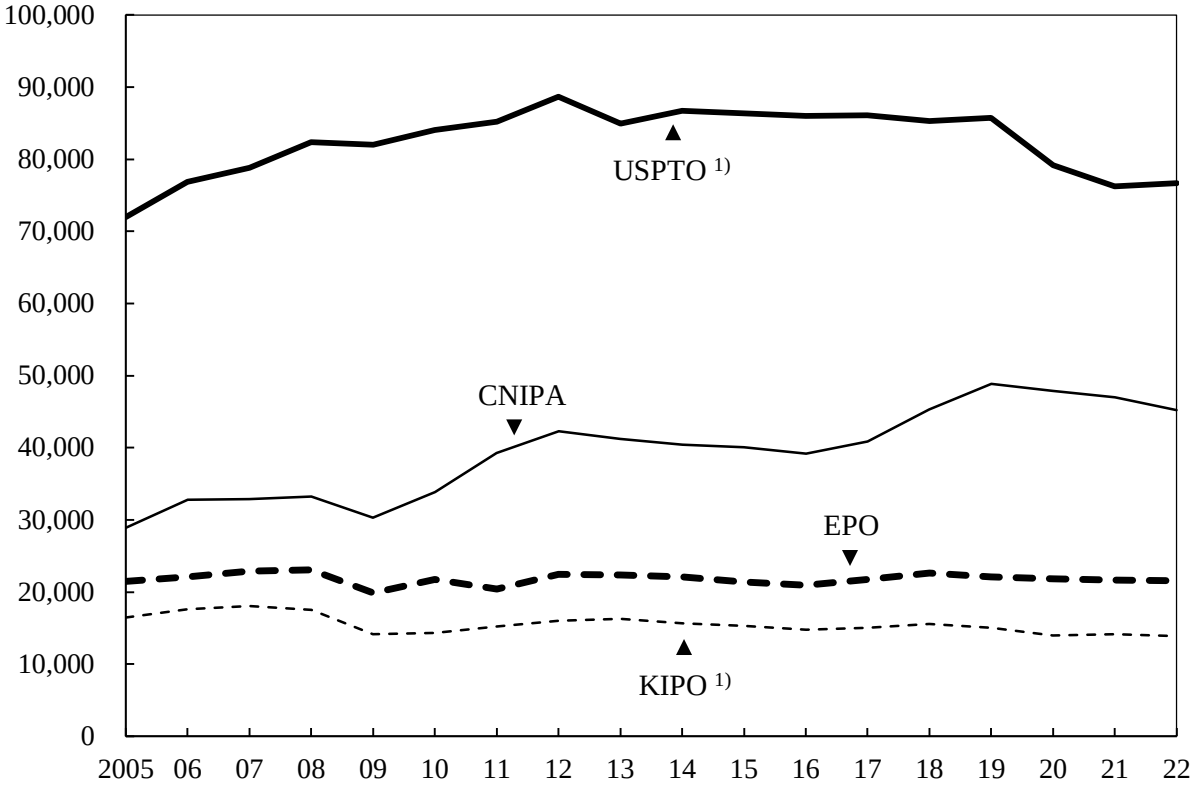
Country	2020	2021	2022*	Change from 2021 (%)
Total	274,889	277,182	278,100	0.3
China	68,935	69,604	70,015	0.6
U.S.A.	58,431	59,403	59,056	-0.6
Japan	50,582	50,275	50,345	0.1
Korea, Rep. of	20,050	20,723	22,012	6.2
Germany	18,491	17,266	17,530	1.5
France	7,788	7,334	7,764	5.9
U.K.	5,892	5,841	5,739	-1.7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



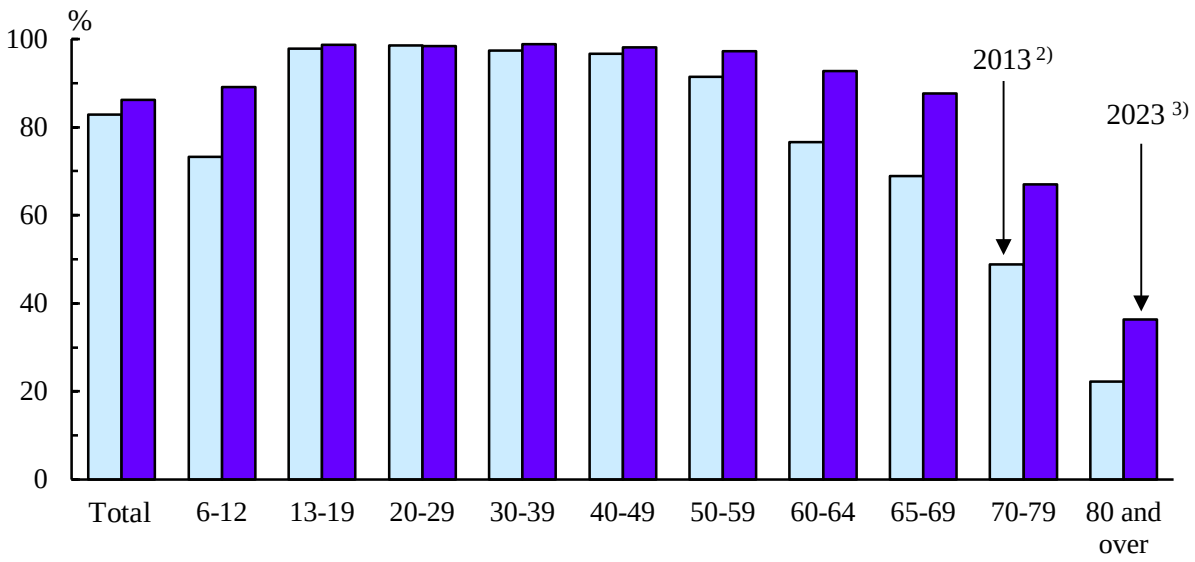
1) The USPTO and KIPO data for 2022 are provisional.
USPTO: United States Patent and Trademark Office; CNIPA: China National Intellectual Property Administration; EPO: European Patent Office; KIPO: Korean Intellectual Property Office.
Source: Japan Patent Office.

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)]

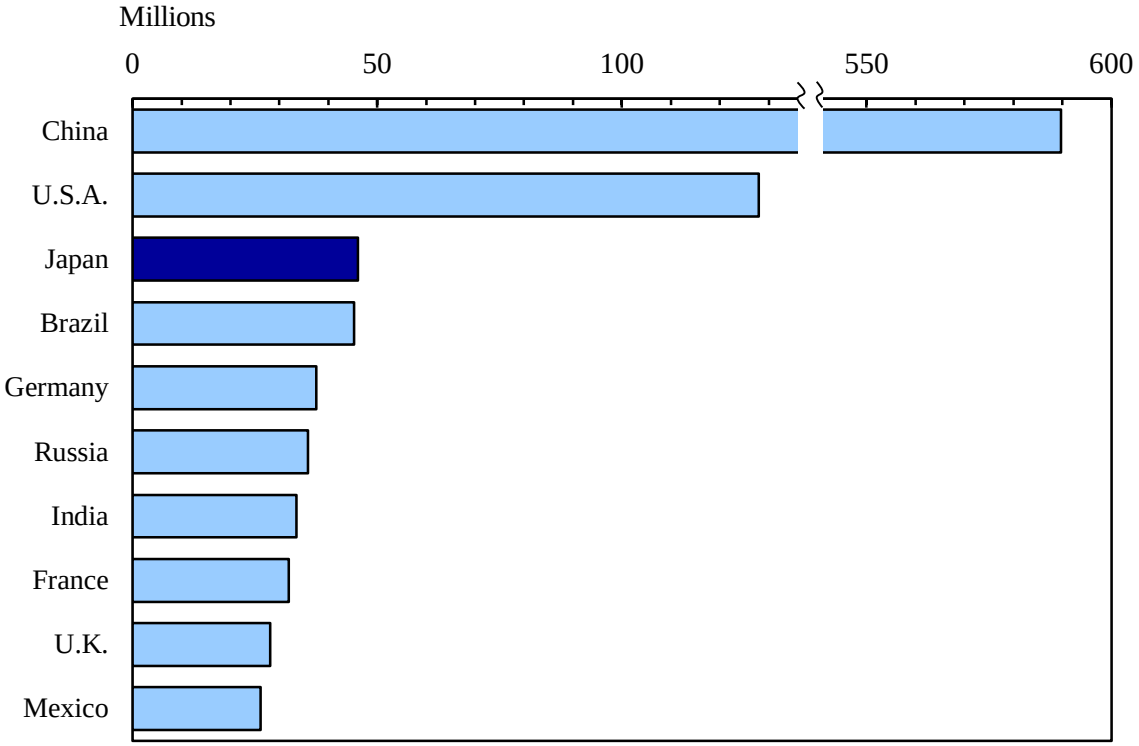
(Thousands)

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)

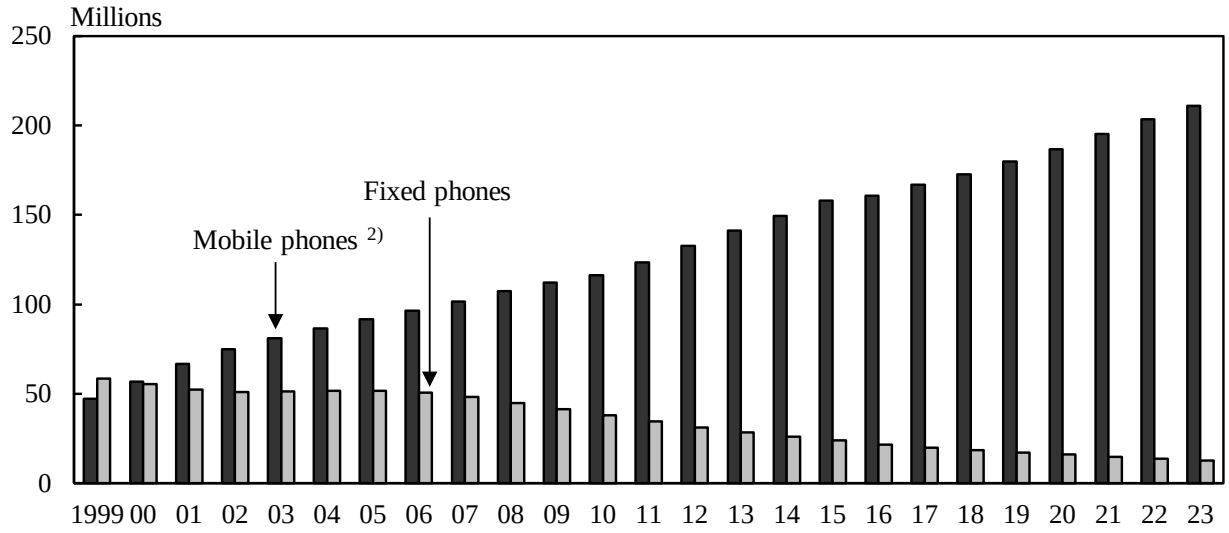


Source: International Telecommunication Union.

(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.