

Chapter 2

Population

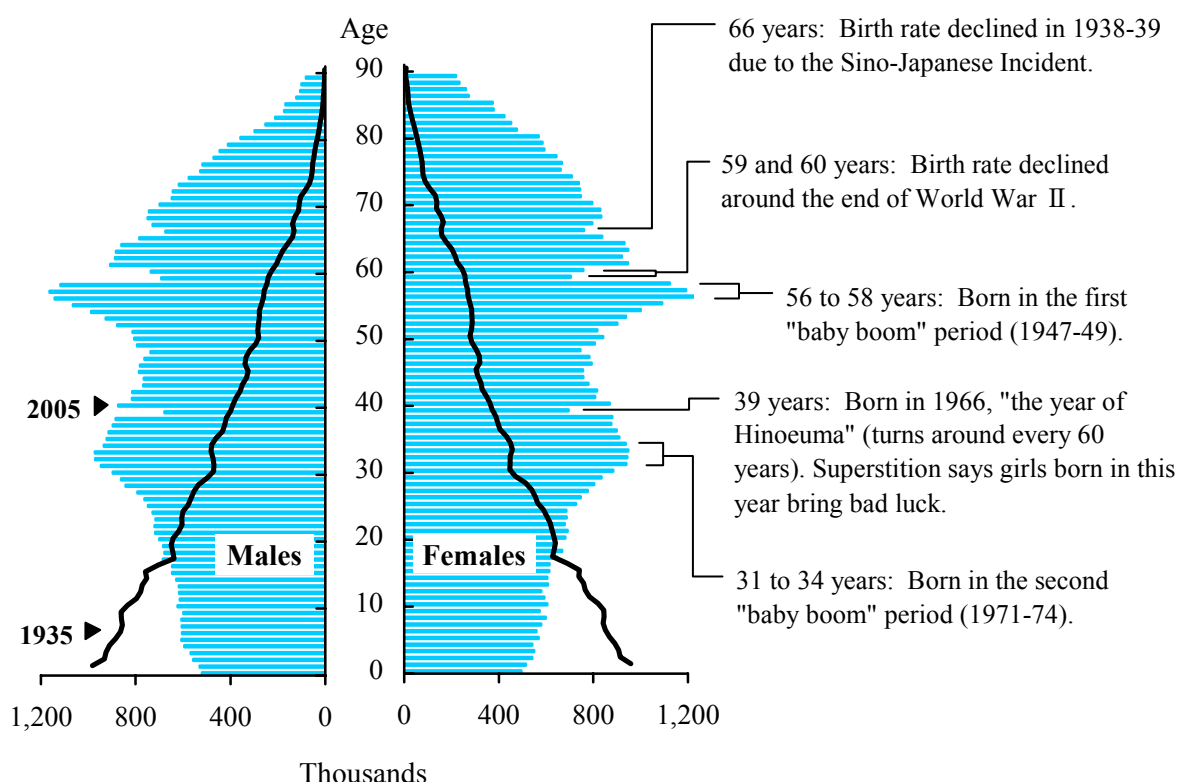


A village named Kita-aiki with a population of around 1,000 lies in the mountain ranges (about 1,000 meters above sea level) of Nagano-ken. Every year, on the third of March, the children of the village purify themselves by casting paper dolls on the river.

Total Population

In 2005, Japan had a total population of 127.76 million. Japan's population in 2005 was the tenth largest in the world, equivalent to 2.0 percent of the global total. Its population density measured 343 persons per square kilometer, ranking it fourth among countries with a population of 10 million or more.

Figure 2.1
Population Pyramid



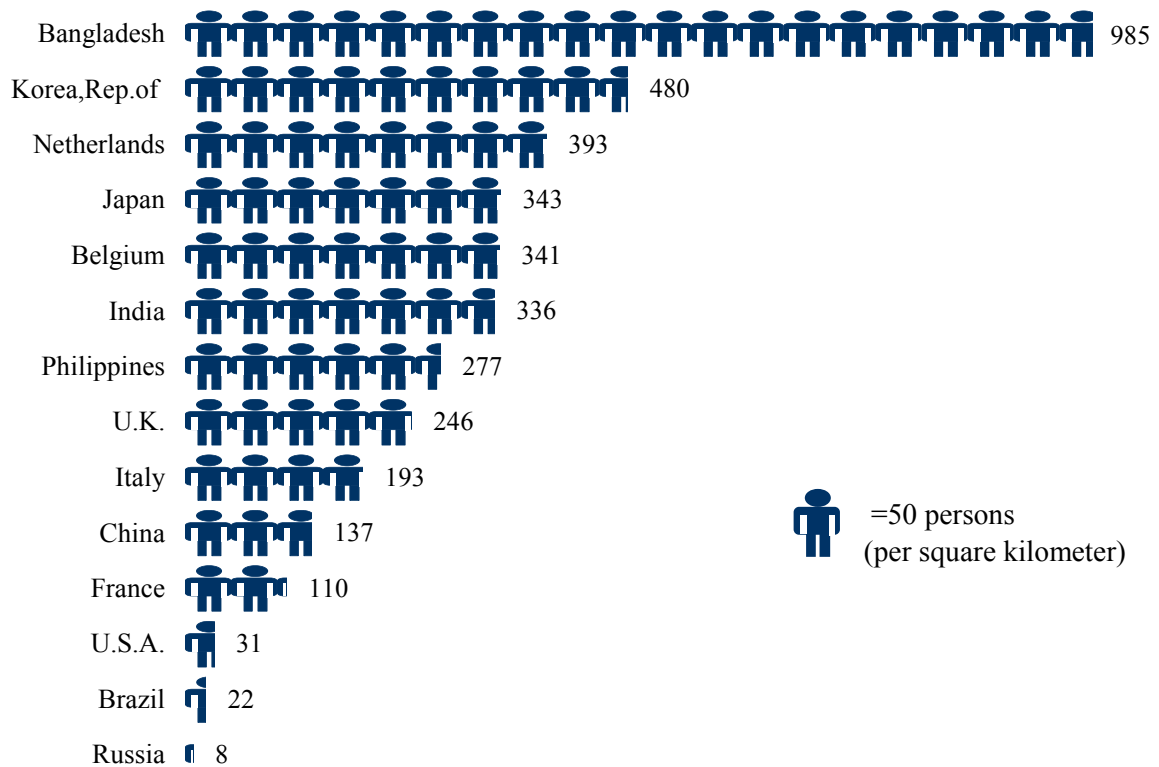
Source: Statistics Bureau, MIC.

Table 2.1
Countries with a Large Population (2005*)

		(Millions)	
Country	Population	Country	Population
World	6,465		
China	1,316	Pakistan	158
India	1,103	Russia	143
U.S.A.	298	Bangladesh	142
Indonesia	223	Nigeria	132
Brazil	186	Japan	128

Source: Statistics Bureau, MIC; United Nations.

Figure 2.2
Population Density by Country (2005*)



Source: Statistics Bureau, MIC; United Nations.

From the eighteenth century through the first half of the nineteenth century, Japan's population remained steady, at 30 million-plus citizens. However, following the Meiji Restoration in 1868, it began expanding in tandem with the drive to build a modern nation-state. In 1926, it reached 60 million, and in 1967, it surpassed the 100 million mark. However, Japan's population growth has slowed in more recent years, with the annual pace of population growth averaging about one percent from the 1960s through the 1970s. Since the 1980s, it has declined sharply. The population figure of 127.76 million released in the 2005 Population Census was below the 2004 population estimate (127.78 million). This marked the first time since World War II that the population has fallen compared to the previous year, and the beginning of a population decline in Japan.

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Table 2.2
Trends in Population

Year	Population (1,000)	Age composition (%)			Average annual rate of increase (%)	Population density (per km ²)
		0 - 14 years	15 - 64	65 and over		
1872	34,806	91
1900	43,847	33.9	60.7	5.4	0.83	115
1910	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	67.3	9.1	0.90	314
1985	121,049	21.5	68.2	10.3	0.67	325
1990	123,611	18.2	69.5	12.0	0.42	332
1995	125,570	15.9	69.4	14.5	0.31	337
2000	126,926	14.6	67.9	17.3	0.21	340
2003*	127,687	14.0	66.9	19.0	0.16	342
2004*	127,776	13.9	66.6	19.5	0.07	343
2005*	127,756	13.6	65.3	21.0	-0.02	343
Projection as of Jan. 2002						
2010	127,473	13.4	64.1	22.5	-0.04	342
2020	124,107	12.2	60.0	27.8	-0.27	333
2030	117,580	11.3	59.2	29.6	-0.54	315
2040	109,338	11.0	55.8	33.2	-0.72	293
2050	100,593	10.8	53.6	35.7	-0.83	270

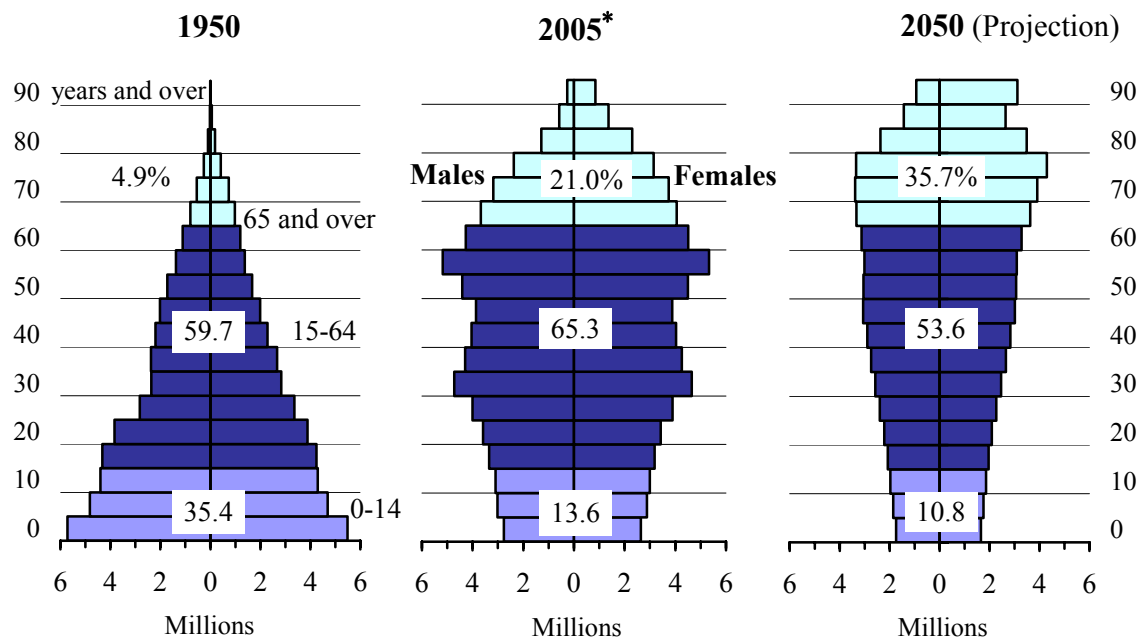
Source: Statistics Bureau, MIC; Ministry of Health, Labour and Welfare.

Declining Birth Rate and Aging Population

Comparing the age structure of Japan's population, the population pyramid of 1950 shows that Japan had a standard-shaped pyramid with a broad base. However, the shape of the pyramid has changed dramatically as the birth rate and death rate have declined. In 2005, the population of elderly citizens (65 years and over) was 26.82 million, constituting 21.0 percent of the total population and marking record highs in both number and percentage terms. The speed of aging of Japan's population is much faster than in advanced Western European countries or the U.S.A. Although the

population of the elderly in Japan accounted for only 7.1 percent of the total population in 1970, 24 years later in 1994, it had almost doubled in scale, to 14.1 percent. In other countries with an aged population, it took 61 years in Italy, 85 years in Sweden, and 115 years in France for the percentage of the elderly to increase from 7 percent to 14 percent of the population. These comparisons clearly highlight the rapid progress of demographic aging in Japan.

Figure 2.3
Changes in the Population Pyramid



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

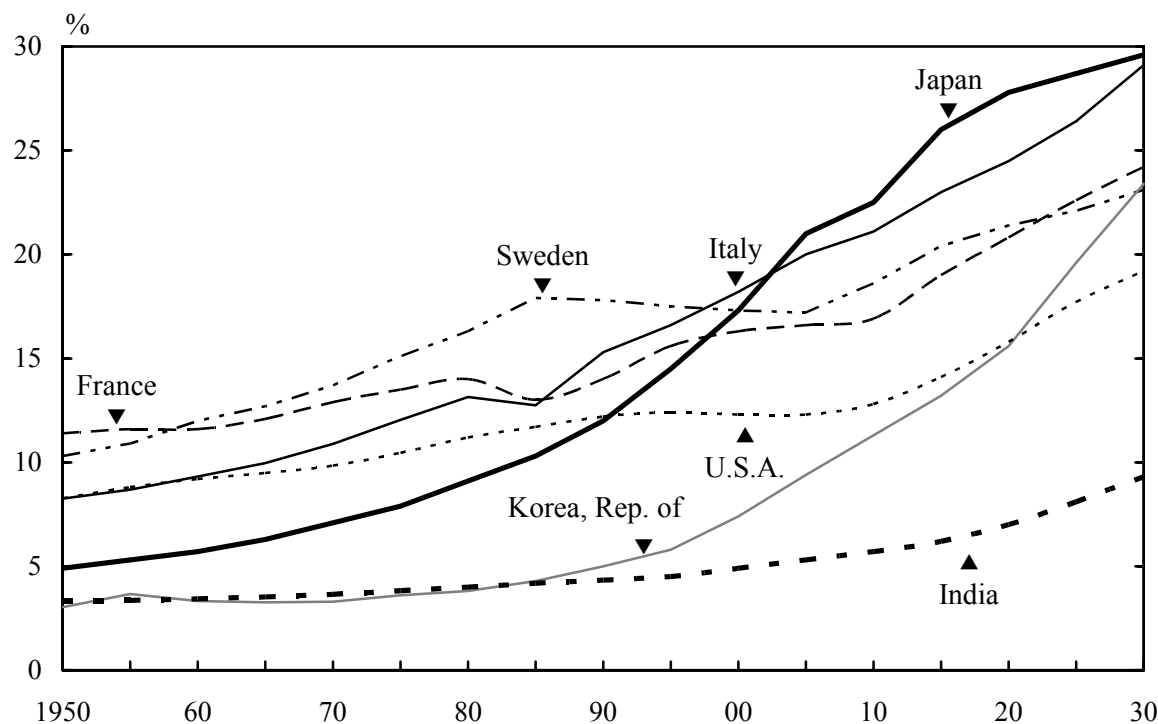
On the other hand, the percentage of the younger age population in Japan (0-14 years) has been shrinking since 1982. In 2005, the younger age population amounted to 17.40 million, accounting for 13.6 percent of the total population, the lowest level on record since the Population Census began. The working-age population (15-64 years) totaled 83.37 million, continuing its decline from the year before. In share terms, it accounted for 65.3 percent of the entire population. As a result, the ratio of the dependent population (the sum of the elderly and younger age population divided by the working-age population) was 53.0 percent. In terms of their proportion of the total population, the elderly have surpassed the younger age group since 1997.

Table 2.3
Age Structure of Population by Country

Country	2005*			2030 (projection)		
	0-14 years	15-64	65 and over	0-14 years	15-64	65 and over
	Japan	13.6	65.3	21.0	11.3	59.2
Italy	14.0	66.0	20.0	11.9	59.0	29.1
Germany	14.3	66.9	18.8	14.0	59.5	26.6
Switzerland	16.5	67.6	16.0	14.9	58.7	26.3
France	18.2	65.2	16.6	16.1	59.6	24.2
Korea, Rep. of	18.6	72.0	9.4	12.7	63.9	23.4
Canada	17.6	69.3	13.1	15.6	61.1	23.3
Sweden	17.5	65.3	17.2	17.0	59.9	23.1
U.K.	17.9	66.1	16.0	17.3	61.3	21.4
Australia	19.6	67.7	12.7	17.4	62.0	20.6
U.S.A.	20.8	66.9	12.3	18.1	62.6	19.2
China	21.4	71.0	7.6	16.9	66.8	16.3
Brazil	27.9	66.0	6.1	20.9	66.6	12.5
India	32.1	62.7	5.3	22.6	68.1	9.3

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

Figure 2.4
Proportion of Elderly Population by Country (Aged 65 years and over)



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

Births and Deaths

Population growth in Japan has primarily been driven by natural increase, with only a minor percentage by social increase. In 2005, the natural increase rate (per 1,000 population) showed -0.2, the first minus recorded since the vital statistics began in its present form in 1899.

Between 1971 and 1973 when the second baby boom occurred, the birth rate averaged 19 (per 1,000 population). Since the latter half of the 1970s, however, it has followed a steady downtrend, reaching 9.6 in 1993. It climbed to 10.0 in 1994, surpassing the level of the previous year for the first time in 21 years, but moved back into a renewed downtrend, falling to a low of 8.4 in 2005.

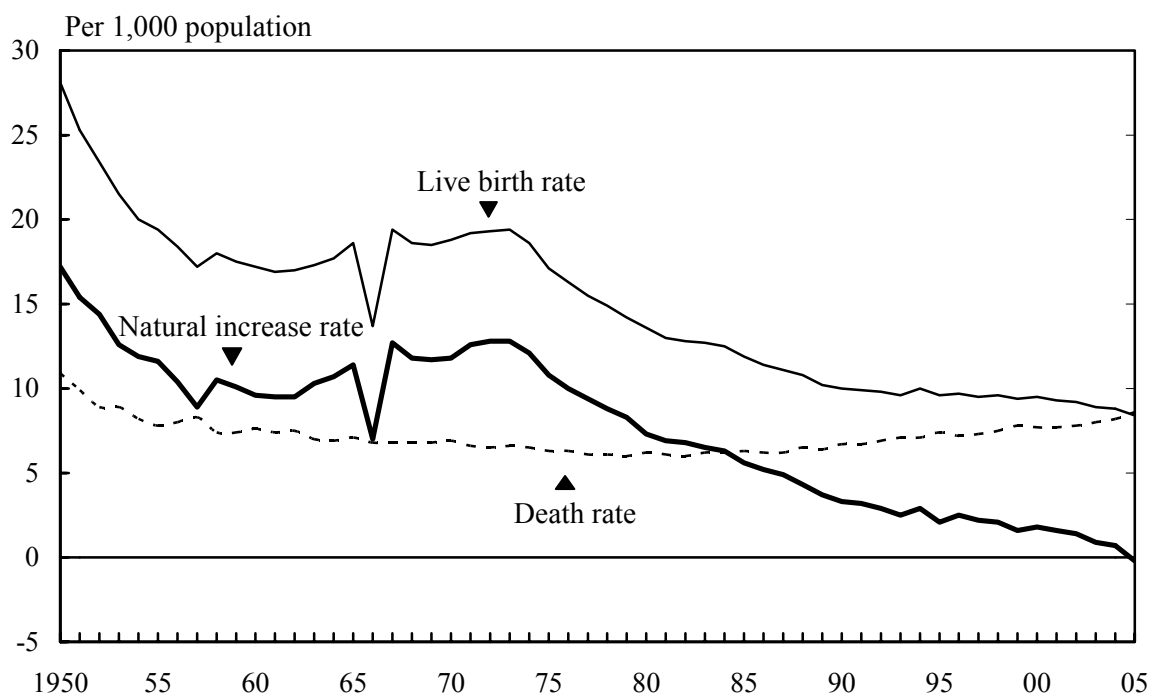
Table 2.4
Vital Statistics

Year	Rates per 1,000				Total fertility rate ¹⁾	Life expectancy at birth (years)	
	Live births	Deaths	Infant mortality	Natural increase		Males	Females
1950	28.1	10.9	60.1	17.2	3.65	a) 59.57	a) 62.97
1955	19.4	7.8	39.8	11.6	2.37	63.60	67.75
1960	17.2	7.6	30.7	9.6	2.00	65.32	70.19
1965	18.6	7.1	18.5	11.4	2.14	67.74	72.92
1970	18.8	6.9	13.1	11.8	2.13	69.31	74.66
1975	17.1	6.3	10.0	10.8	1.91	71.73	76.89
1980	13.6	6.2	7.5	7.3	1.75	73.35	78.76
1985	11.9	6.3	5.5	5.6	1.76	74.78	80.48
1990	10.0	6.7	4.6	3.3	1.54	75.92	81.90
1995	9.6	7.4	4.3	2.1	1.42	76.38	82.85
2000	9.5	7.7	3.2	1.8	1.36	77.72	84.60
2001	9.3	7.7	3.1	1.6	1.33	78.07	84.93
2002	9.2	7.8	3.0	1.4	1.32	78.32	85.23
2003	8.9	8.0	3.0	0.9	1.29	78.36	85.33
2004	8.8	8.2	2.8	0.7	1.29	78.64	85.59
2005	* 8.4	* 8.6	* 2.8	* -0.2	* 1.25	78.53	85.49

1) The average number of children that would be born alive to a hypothetical cohort of women if, throughout their reproductive years, the age-specific fertility rates for the specified year remained unchanged. a) 1950-52 period.

Source: Ministry of Health, Labour and Welfare.

Figure 2.5
Natural Increase of Population



Source: Ministry of Health, Labour and Welfare.

The general decline in the birth rate is partly attributable to the rise in the average age at which women bear their first child; the average age rose from 25.6 years in 1970 to 29.1 in 2005. The total fertility rate was 2.16 in 1971. It has continued to decline, and was 1.25 in 2005.

The death rate (per 1,000 population) was steady at 6.0 - 6.3 between 1975 and 1987. Since 1988, however, it has followed a growth track, reflecting the increased percentage of the elderly in the overall population. The death rate was 8.6 in 2005.

Average life expectancy in Japan climbed sharply after World War II, and is today the highest of any other countries in the world. In 2005, life expectancy at birth was 85.49 years for women and 78.53 years for men.

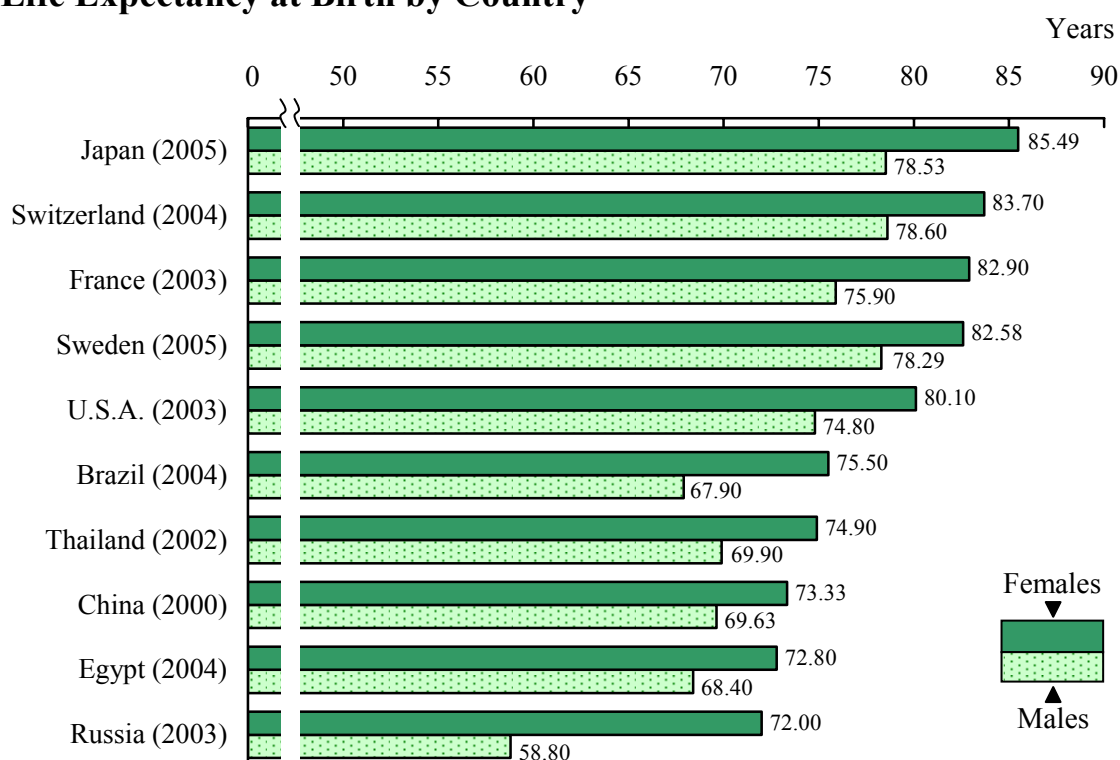
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Table 2.5
Changes of Mothers' Age

Year	Number of babies (1,000)	Distribution of mothers' age (%)						Mean age bearing first child
		-19	20-24	25-29	30-34	35-39	40 and over	
1970	1,934	1.0	26.5	49.2	18.5	4.2	0.5	25.6
1975	1,901	0.8	25.2	53.4	16.8	3.3	0.5	25.7
1980	1,577	0.9	18.8	51.4	24.7	3.7	0.5	26.4
1985	1,432	1.2	17.3	47.7	26.6	6.5	0.6	26.7
1990	1,222	1.4	15.7	45.1	29.1	7.6	1.0	27.0
1995	1,187	1.4	16.3	41.5	31.3	8.4	1.1	27.5
2000	1,191	1.7	13.6	39.5	33.3	10.6	1.3	28.0
2003	1,124	1.7	12.6	35.2	36.4	12.4	1.6	28.6
2004	1,111	1.7	12.3	33.3	37.4	13.5	1.7	28.9
2005*	1,063	1.6	12.1	31.9	38.1	14.4	1.9	29.1

Source: Ministry of Health, Labour and Welfare.

Figure 2.6
Life Expectancy at Birth by Country



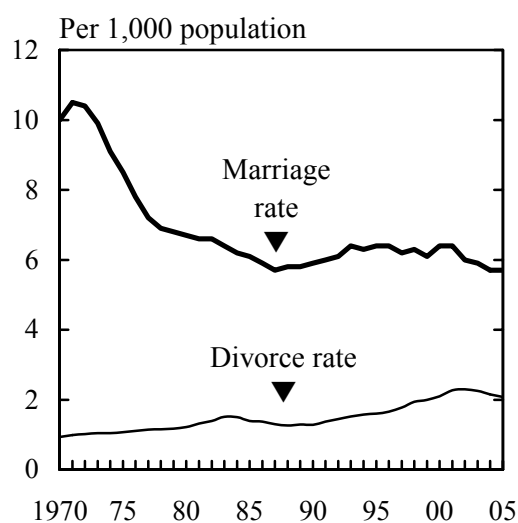
Source: Ministry of Health, Labour and Welfare.

Marriages and Divorces

The number of marriages per year exceeded one million in the early 1970s; the marriage rate at that time averaged above 10.0 (per 1,000 population), highlighting signs of a marriage boom. In 2005, there were 714,000 marriages, and the marriage rate was 5.7 (per 1,000 population).

In 2005, the mean ages of first marriage were 29.8 and 28.0, getting 1.6 years and 2.5 years older for men and women, respectively, in the past twenty years. The declining marriage rate and the older marrying age in recent years are considered to be two factors behind the downtrend in the live birth rate.

Figure 2.7
Changes in Marriage Rate
and Divorce Rate



Source: Ministry of Health, Labour and Welfare.

Table 2.6
Mean Age of First Marriage

Year	Groom	Bride
1950	25.9	23.0
1955	26.6	23.8
1960	27.2	24.4
1965	27.2	24.5
1970	26.9	24.2
1975	27.0	24.7
1980	27.8	25.2
1985	28.2	25.5
1990	28.4	25.9
1995	28.5	26.3
2000	28.8	27.0
2003	29.4	27.6
2004	29.6	27.8
2005 *	29.8	28.0

Source: Ministry of Health, Labour and Welfare.

In contrast, divorces have shown an upward trend since the 1960s, hitting a peak of 290,000 in 2002. Since then, the number of divorces and the divorce rate both has declined for three years straight. In 2005, the number of divorces totaled 262,000, and the divorce rate was 2.08 (per 1,000 population).

Households

1. Household Size and Household Composition

The Population Census shows that Japan had 48.22 million households in 2005. Of that total, 58.9 percent were nuclear-family households, and 27.6 percent were one-person households.

From the 1920s to the mid-1950s, the average number of household members remained about five. However, reflecting the progressive decline in the birth rate through the 1960s, the size of household was down significantly in 1970, to 3.41 members. The size of household members continued to decline to 2.60 in 2005, principally due to the increase of one-person households and the conversion of households into nuclear families.

By current projections, the average number of household members is expected to keep declining in the years ahead, reaching 2.37 in 2025. Although the Japanese population has shifted into decline, the number of households is expected to continue to increase for some years to come, because the size of the average household will shrink further. The number of households is projected to peak in 2015 and then decrease thereafter.

Table 2.7
Households and Household Members

Year	Households (1,000)	Average annual rate of increase (%)	Household members (1,000)	Members per household	Population (1,000)	Average annual rate of increase (%)
1970	30,297	a) 3.00	103,351	3.41	104,665	1.08
1975	33,596	2.09	110,338	3.28	111,940	1.35
1980	35,824	1.29	115,451	3.22	117,060	0.90
1985	37,980	1.18	119,334	3.14	121,049	0.67
1990	40,670	1.38	121,545	2.99	123,611	0.42
1995	43,900	1.54	123,646	2.82	125,570	0.31
2000	46,782	1.28	124,725	2.67	126,926	0.21
2005*	48,225	0.61	125,240	2.60	127,756	0.13

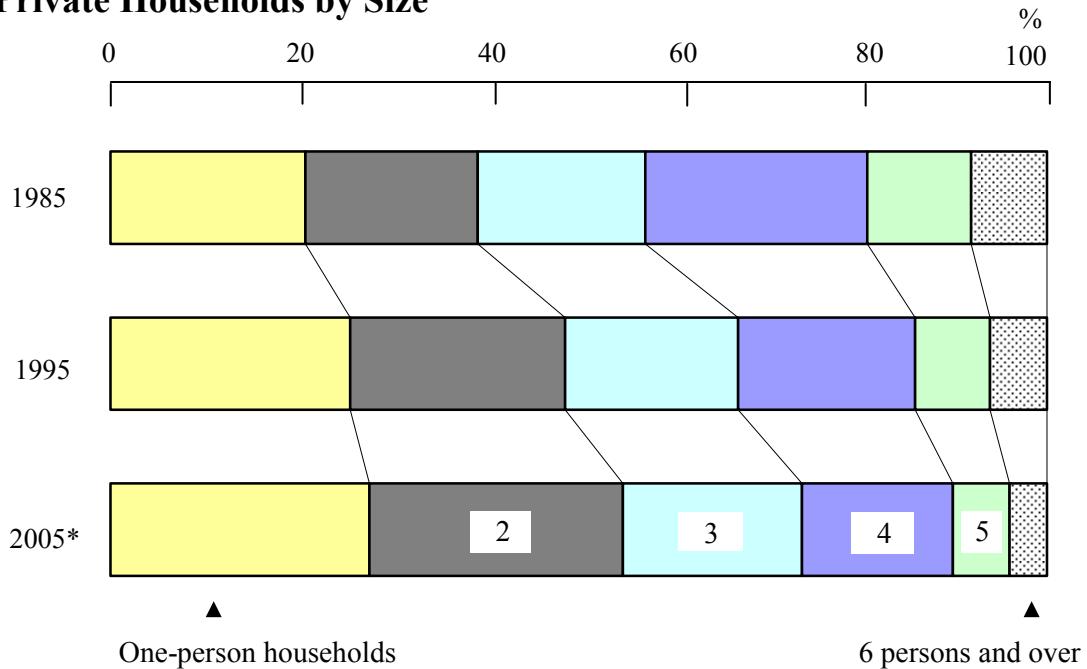
a) Annual rate of increase between 1960-1970.

Source: Statistics Bureau, MIC.

In terms of household composition, nuclear families accounted for the largest share of total households. One-person households have recorded a steadily growing share since 1975.

Figure 2.8

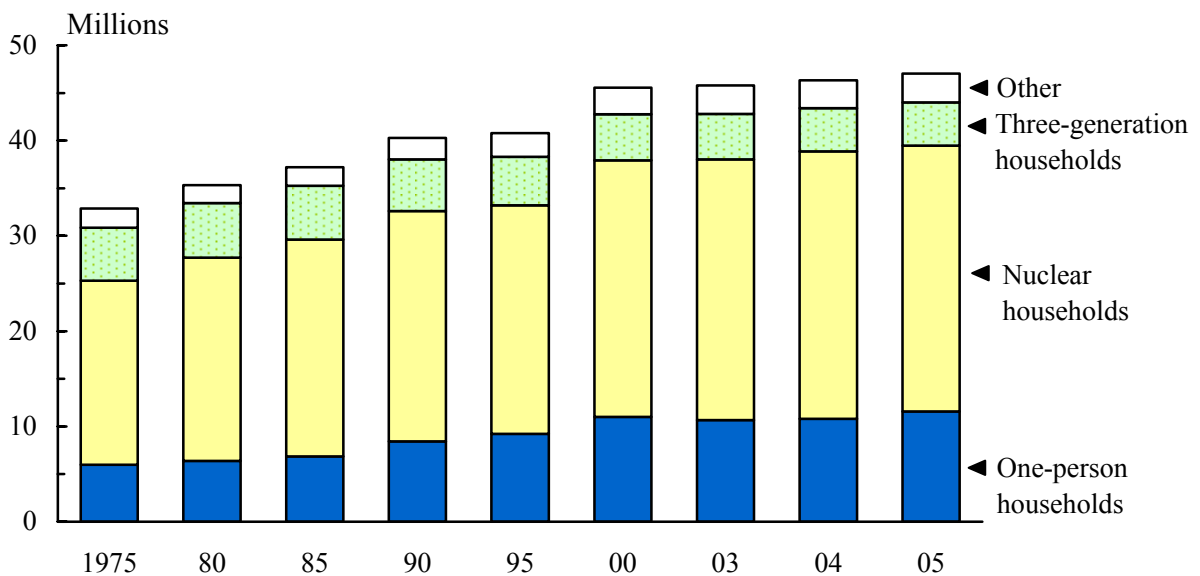
Private Households by Size



Source: Statistics Bureau, MIC.

Figure 2.9

Changes in Household Composition



Source: Ministry of Health, Labour and Welfare.

2. Elderly Households

Elderly households (defined as households consisting of individuals aged 65 years or older, with or without unmarried dependents below the age of 18) numbered 1.09 million in 1975, representing 3.3 percent of the total households for that year. By comparison, there were 8.35 million elderly households in 2005, accounting for a sharply increased share of 17.7 percent. The number of one-person elderly households increased 6.7 times between 1975 and 2005: from 611,000 to 4.07 million. In 2005, three out of four one-person elderly households were women's. The number of households consisting only of wife and husband aged 65 years or older reached 4.07 million in 2005, a 9.2 times increase over the figure in 1975.

Table 2.8
Increase of Elderly Households

	(Thousands)									
Type of households	1975	1980	1985	1990	1995 ¹⁾	2000	2003	2004	2005	
All households.....	32,877	35,338	37,226	40,273	40,770	45,545	45,800	46,323	47,043	
Elderly households	1,089	1,684	2,192	3,113	4,390	6,261	7,250	7,874	8,349	
(percentage).....	3.3	4.8	5.9	7.7	10.8	13.7	15.8	17.0	17.7	
One-person households....	611	910	1,131	1,613	2,199	3,079	3,411	3,730	4,069	
Males.....	138	192	218	295	449	682	776	906	1,010	
Females.....	473	718	913	1,318	1,751	2,398	2,635	2,824	3,059	
Elderly couples.....	443	722	996	1,400	2,050	2,982	3,594	3,899	4,071	
Other elderly households.	36	52	65	100	141	199	245	245	209	

1) Excluding Hyogo Prefecture where the survey was canceled because of earthquakes.

Source: Ministry of Health, Labour and Welfare.

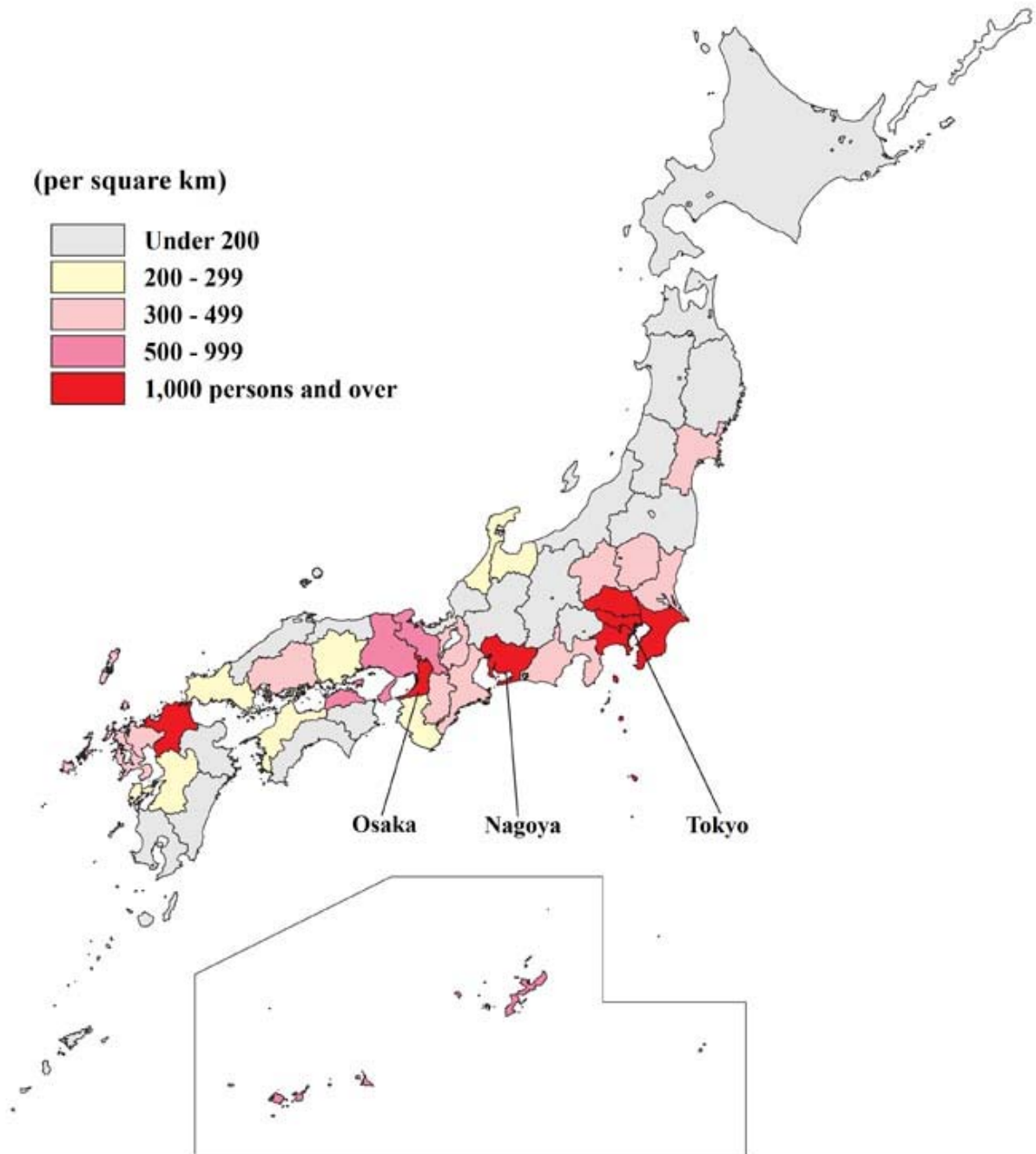
Population Density and Regional Distribution

1. Population Density

In 2005, Tokyo had the largest population among Japan's 47 prefectures: 12.57 million citizens. It was followed, in decreasing order, by the prefectures of Osaka, Kanagawa, Aichi, and Saitama. These five prefectures each had a population of seven million or more, and together accounted for 34.8 percent of the total Japanese population. The order of the five largest prefectures has not changed since 1985.

The population density in Tokyo was the highest among Japan's prefectures, at 5,748 persons per square kilometer. This was almost 17 times the national average (343 per square kilometer).

Figure 2.10
Population Density by Prefecture (2005*)



Source: Statistics Bureau, MIC.

Table 2.9
Ten Largest Prefectures

Prefectures	Population (1,000)	
	2000	2005*
Japan	126,926	127,756
Tokyo-to	12,064	12,570
Osaka-fu	8,805	8,817
Kanagawa-ken ...	8,490	8,791
Aichi-ken	7,043	7,254
Saitama-ken	6,938	7,054
Chiba-ken	5,926	6,056
Hokkaido	5,683	5,627
Hyogo-ken	5,551	5,590
Fukuoka-ken	5,016	5,049
Shizuoka-ken	3,767	3,792

Source: Statistics Bureau, MIC.

Table 2.10
Population of Major Cities

Cities	Population (1,000)	
	2000	2005*
Tokyo ¹⁾	8,135	8,483
Yokohama-shi ...	3,427	3,579
Osaka-shi	2,599	2,628
Nagoya-shi	2,172	2,215
Sapporo-shi	1,822	1,881
Kobe-shi	1,493	1,525
Kyoto-shi	1,468	1,475
Fukuoka-shi	1,341	1,401
Kawasaki-shi	1,250	1,327
Saitama-shi	–	1,176
Hiroshima-shi ...	1,126	1,155
Sendai-shi	1,008	1,025

1) 23 wards (*ku*) of Tokyo-to .

Source: Statistics Bureau, MIC.

In 2005, there were 12 cities in Japan with a population of one million or more. Their total populations topped 27 million, a figure equivalent to 21.8 percent of the national total. The largest single city was the 23 wards (*ku*) of central Tokyo, with 8.48 million citizens. It was followed in decreasing order by Yokohama-*shi* (3.58 million), Osaka-*shi* (2.63 million), and Nagoya-*shi* (2.21 million).

2. Population Distribution

The percentage of the population living in urban area has been climbing since the latter 1950s. In 1980, 42.4 percent of the total population was concentrated within a 50-kilometer radius of the three top metropolitan centers: Tokyo, Osaka and Nagoya. In 2000, 44.2 percent of the entire national population was concentrated within the three major metropolitan zones (each spanning a 50-kilometer radius from the city center, and together comprising 5.9 percent of the nation's total land mass). Population density measured 4,028 persons per square kilometer in the Tokyo area, 2,209 in the Osaka area, and 1,206 in the Nagoya area, all significantly higher levels than the national average (340 per square kilometer).

Table 2.11
Population of Three Major Metropolitan Areas¹⁾

Areas	(Thousand persons)			
	1980	1990	1995	2000
Japan	117,060	123,611	125,570	126,926
Tokyo metropolitan area	26,343	29,200	29,872	30,724
Osaka metropolitan area	15,422	16,210	16,349	16,567
Nagoya metropolitan area	7,828	8,432	8,657	8,852
Total of three major metropolitan areas	49,593	53,842	54,878	56,143
Percentage to the total population (%)	42.4	43.6	43.7	44.2

1) As of October 1. Areas within 50 kilometers radius from each municipal office.

Source: Statistics Bureau, MIC.