

The Latest Development in Population of Japan: The 2008 Revision

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Population Size

According to the Statistics Bureau, the total population of Japan on October 1, 2008 was 127,692,273. The number is the result of a decrease of 78,521 since October 1, 2007, when the population was 127,770,794. The rate of population growth was -0.061%. The population of Japan is now entering the phase of long-term decline. The population growth rate was negative in 2005 for the first time since 1945. Although the population increased by a very small amount in 2006 and 2007, it is predicted that negative growth rates will become dominant and the rate of population decline will accelerate. The official population projection by the National Institute of Population and Social Security Research published in 2006 projected that the population of Japan will be 95 million in 2050, which is a 25.5% decline from 128 million in 2005. This implies that, although the population growth rate is practically zero presently, the average annual growth rate between 2005 and 2050 will be approximately -0.7%.

Both the natural growth and the net immigration between 2007 and 2008 were negative. Between October 1 of 2007 and 2008 there were 1,142,230 deaths and 1,108,335 births; there were 33,895 more deaths than births. The number of emigrants was 2,908,431 and outnumbered the number of immigrants, 2,863,805, by 44,626. The natural increase rate and the net migration rate were -0.027% and -0.035%, respectively.

The provisional estimate by the Statistics Bureau shows that the total population on October 1, 2009 will be approximately 127,560,000. Thus, there will be a further population decline since 2008.

Sex and Age Structure

The total population on October 1, 2008 consisted of 62,251,004 (48.8%) males and 65,441,269 (51.2%) females. The sex ratio of the population was 95.12 males to 100 females. The ratio declined slightly from 95.19 a year earlier due to the longer life expectancy of the female population.

On October 1, 2008, there were 28,216,000 elderly people, that is, those aged 65 or older.

This accounts for 22.1% of the total population. Figure 1 shows the proportion of the population in Japan comprising this group between 1950 and 2050. It took 25 years for the proportion to grow from 7.1% in 1970 to 14.6% in 1995. However, population aging accelerated and a further growth of 7% was completed in just 12 years. The official projection by the NIPSSR (2006) projected that the proportion will be 39.6% in 2050.

Figure 2 shows the child dependency ratio, defined as the ratio of the population under 15 to that between 15 and 64; and the elderly dependency ratio, defined as the ratio of the population over 65 to that between 15 and 64. The sum of these two ratios is the total dependency ratio. The decline in total dependency ratio due to fertility decline is called "demographic gift" or "demographic

Figure 1 Population 65+ (%)

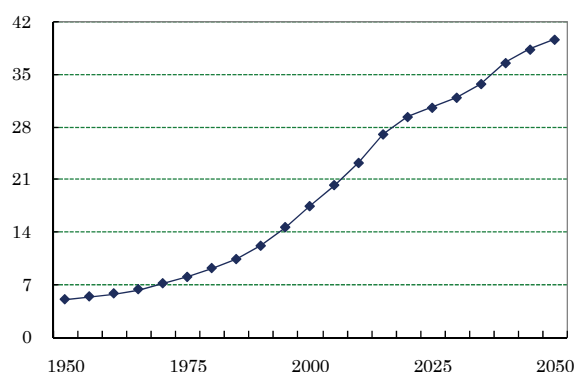
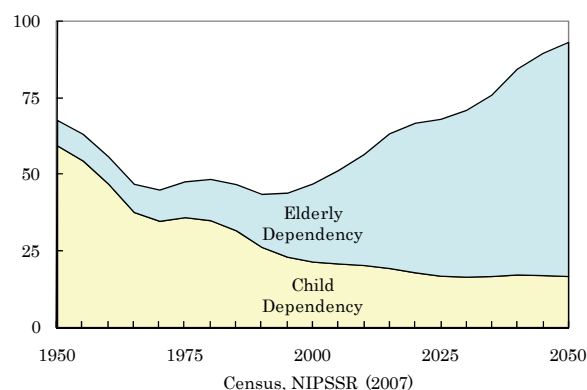


Figure 2 Dependency Ratios in Japan (%)



bonus.” While Japan enjoyed this gift between 1970 and 1990, the rapid aging of the population started elevating the total dependency ratio after 1990. The elderly dependency ratio increased from 33.1% in 2007 to 34.3% in 2008. According to the NIPSSR (2006), the elderly dependency ratio will be 76.4% in 2050. The total dependency ratio of 93.0% in 2050 implies that there will be 93 net consumers for 100 net producers, compared with 55 net consumers in 2008.

Of 28,216,000 elderly people in 2008, 13,218,000 or 46.8% were 75 years old or older. As shown in Figure 3, the aging of the elderly accelerates in the early 2020s when the postwar baby boom cohort, born in the late 1940s, reaches the age of 75. While the total population of Japan will start declining soon, the elderly population will not decline until 2043. The younger elderly group, aged between 65 and 74, will shrink after 2020 when the baby boom cohort becomes the older elderly group. The proportion of the elderly in the older group, who are aged 75 or older, will grow to 63.0% in 2050.

Figure 4 shows the decline and compositional change in the working age population. The working age population, that is, people aged between 15 and 64, was 82,300,000 on October 1, 2008.

Figure 3 Elderly Population in Japan (1,000)

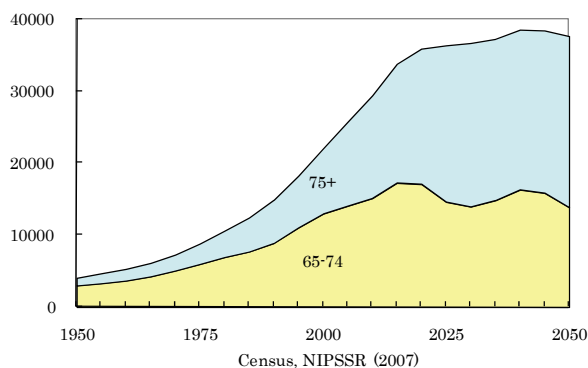
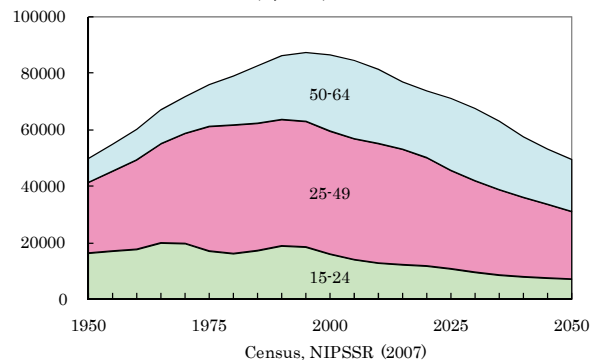


Figure 4 Working Age Population in Japan (1,000)



The NIPSSR (2006) predicts that the working age population will be 49,297,000 in 2050, which is 40.1% smaller than that in 2008. The decline will be rapid for younger workers. While the population of older workers, those aged 50 and older, will be 30.8% smaller in 2050 than in 2008, the middle and young worker groups will be 43.8% and 46.8% smaller, respectively.

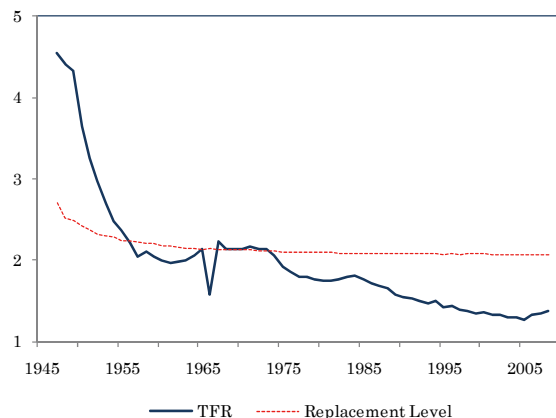
The provisional estimate by the Statistics Bureau tells that there will be 62,150,000 (48.7%) males and 65,410,000 (51.3%) females on October 1, 2009. The sex ratio will decline slightly from 95.13 to 95.02 within a year. The estimate expects that there will be 29,010,000 people aged 65 or over, and that there will be 13,720,000 aged 75 or over. Thus, the proportion of the elderly people aged 65 or over will grow from 22.1% to 22.7% within a year. The proportion of the elderly aged 75 or over among the total elderly population also will grow from 46.8% to 47.3%.

Fertility

According to the Vital Statistics by the Ministry of Health, Labour and Welfare, there were 1,091,156 births in 2008. Dividing this number by the Japanese population (not total population) produces the Crude Birth Rate (CBR) of 8.7 per thousand, which slightly increased from 8.6 in 2007. The Total Fertility Rate (TFR) also increased from 1.34 in 2007 to 1.37 in 2008.

Figure 5 shows the TFR of Japan together with the replacement level, which is the TFR corresponding to zero population growth. The replacement level depends on mortality. While a TFR of 2.4 or more was required in the late 1940s to compensate for the death rate, a TFR of 2.07 is enough to sustain a population with low mortality these days. After the postwar baby boom in the late 1940s, the TFR of Japan dropped dramatically and the first demographic transition ended

Figure 5 TFR of Japan



in the late 1950s. The TFR fluctuated around the replacement level until the mid 1970s except for the big drop to 1.58 in the hinoeuma year of 1966 (a bad year to be born according to a superstition). The second demographic transition started in the late 1970s and the TFR marked 1.57 in 1989, a smaller figure than that of the hinoeuma year. This “1.57 shock” forced the government to introduce various pronatal policy measures, such as raising the amount of the child allowance in 1991, introducing child care leave in 1992, and announcing the governmental action program called “Angel Plan” in 1994.

In spite of these governmental efforts, the TFR did not stop declining and crossed the line of 1.5 downward in 1993. The 1.5 line was chosen by McDonald (2005; 2008) as the threshold to “very low fertility.” There is a cultural divide shown by the fact that countries with very low fertility are Eastern European countries, Southern European countries, German-speaking Western European countries and advanced Eastern Asian countries. No Northern European country, English-speaking country or French-speaking Western European country suffers from very low fertility. In addition, the line is important because no country that has experienced very low fertility has recovered to a moderately low fertility rate of over 1.5 (Sato 2008, p. 12).

Kohler et al. (2002) chose the 1.3 line to define “lowest-low fertility.” The emergence of lowest-low fertility in Europe in the 1990s surprised demographers because national fertility had not experienced such a low level, except only for a brief period. Many countries in Southern Europe, Eastern Europe and the former Soviet Union experienced that low level in the 1990s. After the turn of the century, lowest-low fertility spread in advanced Eastern Asian countries, including Japan, South Korea and Taiwan. Japan experienced lowest-low fertility between 2003 and 2005. Although Japan escaped from the threshold in 2006, it is not certain if it is possible to regain a moderately low fertility rate of 1.5 or more in the future.

The preliminary estimate by the Ministry of Health, Labour and Welfare expects 1,069,000 births in 2009, which is smaller than the 1,091,156 births of 2008. Thus, it is plausible that the CBR and TFR will decline from 2008.

Mortality

According to the Vital Statistics by the Ministry of Health, Labour and Welfare, there were 1,142,407 deaths in 2008. Dividing this number by the Japanese population produces a Crude Death

Rate (CDR) of 9.1 per thousand, which is a slight increase from 8.8 per thousand in 2007. The natural decrease between October 1, 2007 and September 30, 2008, based on the estimates by the Statistics Bureau was, as mentioned above, 33,895. On the other hand, the natural decrease between January 1 and December 31 in 2008, according to the Vital Statistics, was 51,251. Dividing the latter number by the Japanese population produces a Natural Increase Rate (NIR) in 2008 of -0.4 per thousand.

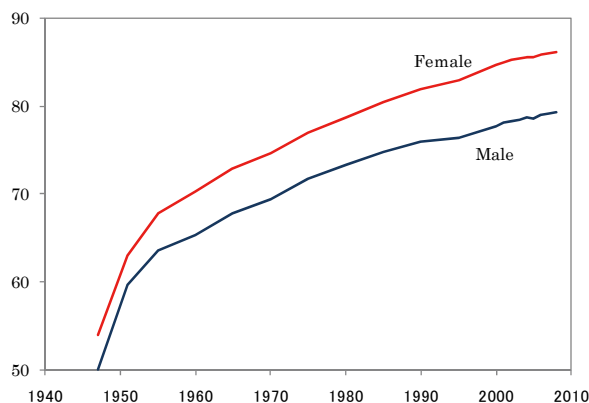
The Vital Statistics also show that there were 2,798 infant deaths in 2008. Dividing this number by the number of births, the Infant Mortality Rate (IMR) was 2.56 per thousand. The figure was a slight improvement from 2.59 per thousand in 2007.

The Abridged Life Table for 2008 by the Ministry of Health, Labour and Welfare shows that Japanese male and female life expectancies at births were 79.29 and 86.05, respectively. Both figures were improvements from 79.19 and 85.99 in 2007, respectively. These improvements in IMR and life expectancy imply that the increase in CDR was due to the population aging and that the net mortality declined between 2007 and 2008.

Figure 6 shows the trend of life expectancy by sex in Japan. It is well known that the Japanese have one of the longest life expectancies in the world. According to news papers, the Japanese female’s life expectancy of 86.05 in 2008 was the longest in the world and the male life expectancy of 79.29 was the fourth longest after Iceland, Switzerland and Hong-Kong. Still, there is no sign that the life expectancy in Japan is approaching a limit. The gender gap in life expectancy narrowed from to 6.80 years in 2007 to 6.76 years in 2008, although the long term trend is the widening gender gap.

According to the preliminary estimate of the Vital Statistics, there were 1,144,000 deaths in

Figure 6 Life Expectancy at Birth (years)



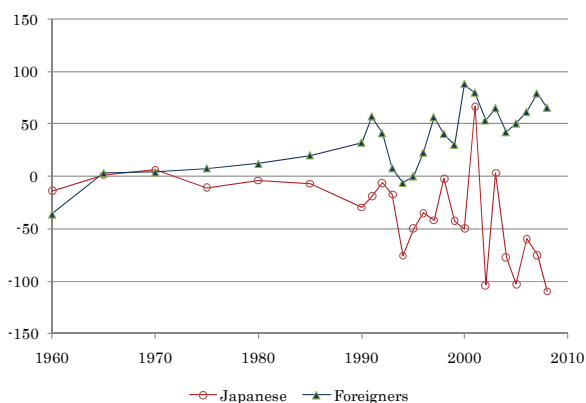
2009, compared with 1,142,407 deaths in 2008. Thus, there will be a slight increase in the CDR between 2008 and 2009.

International Migration

According to the Statistics Bureau, the foreign population on October 1, 2008 was 1,745,127. This accounts for 1.37% of the total population. There was an increase from 1,685,930 (1.32%) in 2007. During the one-year period since October 1, 2007, 1,266,118 Japanese exited Japan while 1,156,361 returned. Thus, the amount of net return was -109,757 or -0.09% of the total population. This net out-flow was partially offset by foreign immigrants. While 1,707,444 foreigners entered, 1,642,313 exited from Japan. The amount of net immigrants was 65,131 or 0.05% of the total population. When the Japanese and foreigners are combined, there were 44,626 net immigrants, as mentioned above.

Figure 7 shows the trend of net immigration by nationality. Although there have been considerable fluctuations, both the net emigration of the Japanese and net immigration of the foreign population have been increasing. In specific years, after events such as the 9/11 terrorist attack in 2001 and the SARS pandemic in 2003, the number of Japanese who returned home overcame the number of those who exited. As a result, the net immigration made a significant contribution to

Figure 7 Net Immigration by Nationality (1,000)



the annual population growth in such years. In 2008, however, the net immigration of foreigners decreased than the previous year. It is possible that the world-wide financial crisis and the rise in foreign exchange rate of Japanese yen affected. As a result, the in-flow of foreigners could not compensate out-flow of the Japanese.

According to the Ministry of Justice, the population of registered foreigners at the end of 2008 was 2,217,426. This was an increase of 64,453 from the end of 2007. The largest group was the Chinese population of 655,377, which accounted for 29.6% of the foreign population in Japan. The second largest group was the Korean groups of 589,239 (26.6%), followed by Brazilians (312,582, or 14.1%), Filipinos (210,617, or 9.5%) and Peruvians (59,723, or 2.7%). While the population of Chinese, Filipinos and Peruvians increased than the previous year, that of Koreans and Brazilians decreased.

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