

Table 3.1 Numbers, Crude Rates and Standardized Rates of Birth, Death, Natural Increase: 1873-2004

Year	Number (thousands)			Crude rates (‰)			Standardized vital rates (‰)		
	Birth	Death	Natural increase	Birth	Death	Natural increase	Birth	Death	Natural increase
1873	809	661	149	23.1	18.9	4.3	...	...	...
1880	884	603	281	24.1	16.5	7.7	...	...	...
1890	1,145	824	322	28.7	20.6	8.1	...	...	...
1900	1,421	911	510	32.4	20.8	11.6	...	...	...
1910	1,713	1,064	649	34.8	21.6	13.2	...	...	...
1920	2,026	1,422	603	36.2	25.4	10.8	...	...	...
1930	2,085	1,171	914	32.4	18.2	14.2	32.35	18.17	14.19
1940	2,116	1,187	929	29.4	16.5	12.9	27.74	16.96	10.78
1947	2,679	1,138	1,541	34.3	14.6	19.7	30.87	15.40	15.47
1950	2,338	905	1,433	28.1	10.9	17.2	25.47	11.02	14.45
1955	1,731	694	1,037	19.4	7.8	11.6	16.88	7.70	9.18
1960	1,606	707	899	17.2	7.6	9.6	14.69	7.01	7.69
1965	1,824	700	1,123	18.6	7.1	11.5	15.74	5.96	9.77
1966	1,361	670	691	13.7	6.8	6.9	11.80	5.54	6.27
1967	1,936	675	1,261	19.4	6.8	12.6	16.31	5.41	10.91
1968	1,872	687	1,185	18.6	6.8	11.8	15.37	5.33	10.03
1969	1,890	694	1,196	18.5	6.8	11.7	15.04	5.21	9.83
1970	1,934	713	1,221	18.8	6.9	11.9	15.26	5.18	10.08
1971	2,001	685	1,316	19.2	6.6	12.6	15.87	4.82	11.05
1972	2,039	684	1,355	19.3	6.5	12.8	15.96	4.66	11.31
1973	2,092	709	1,383	19.4	6.6	12.8	16.07	4.61	11.47
1974	2,030	711	1,319	18.6	6.5	12.1	15.47	4.45	11.02
1975	1,901	702	1,199	17.1	6.3	10.8	14.32	4.20	10.12
1976	1,833	703	1,129	16.3	6.3	10.0	13.65	4.05	9.60
1977	1,755	690	1,065	15.5	6.1	9.4	13.31	3.84	9.47
1978	1,709	696	1,013	14.9	6.1	8.8	13.25	3.73	9.52
1979	1,643	690	953	14.2	6.0	8.2	13.07	3.56	9.51
1980	1,577	723	854	13.6	6.2	7.4	12.76	3.57	9.19
1981	1,529	720	809	13.0	6.1	6.9	12.55	3.44	9.11
1982	1,515	712	804	12.8	6.0	6.8	12.75	3.28	9.47
1983	1,509	740	769	12.7	6.2	6.5	12.95	3.27	9.68
1984	1,490	740	750	12.5	6.2	6.3	12.96	3.15	9.80
1985	1,432	752	679	11.9	6.3	5.6	12.53	3.06	9.48
1986	1,383	751	632	11.4	6.2	5.2	12.26	2.94	9.32
1987	1,347	751	595	11.1	6.2	4.9	11.95	2.82	9.13
1988	1,314	793	521	10.8	6.5	4.3	11.66	2.84	8.82
1989	1,247	789	458	10.2	6.4	3.7	11.02	2.73	8.29
1990	1,222	820	401	10.0	6.7	3.3	10.74	2.72	8.02
1991	1,223	830	393	9.9	6.7	3.2	10.78	2.66	8.12
1992	1,209	857	352	9.8	6.9	2.9	10.48	2.65	7.82
1993	1,188	878	310	9.6	7.1	2.5	10.14	2.62	7.52
1994	1,238	876	362	10.0	7.1	2.9	10.42	2.53	7.89
1995	1,187	922	265	9.6	7.4	2.1	9.90	2.57	7.33
1996	1,207	896	310	9.7	7.2	2.5	9.89	2.41	7.48
1997	1,192	913	278	9.5	7.3	2.2	9.65	2.36	7.29
1998	1,203	936	267	9.6	7.5	2.1	9.63	2.36	7.27
1999	1,178	982	196	9.4	7.8	1.6	9.35	2.36	7.00
2000	1,191	962	229	9.5	7.7	1.8	9.51	2.35	7.16
2001	1,171	970	200	9.3	7.7	1.6	9.29	2.16	7.13
2002	1,154	982	171	9.2	7.8	1.4	9.21	2.11	7.10
2003	1,124	1,015	109	8.9	8.0	0.9	8.99	2.09	6.90
2004	1,111	1,029	82	8.8	8.2	0.7	8.95	2.06	6.89

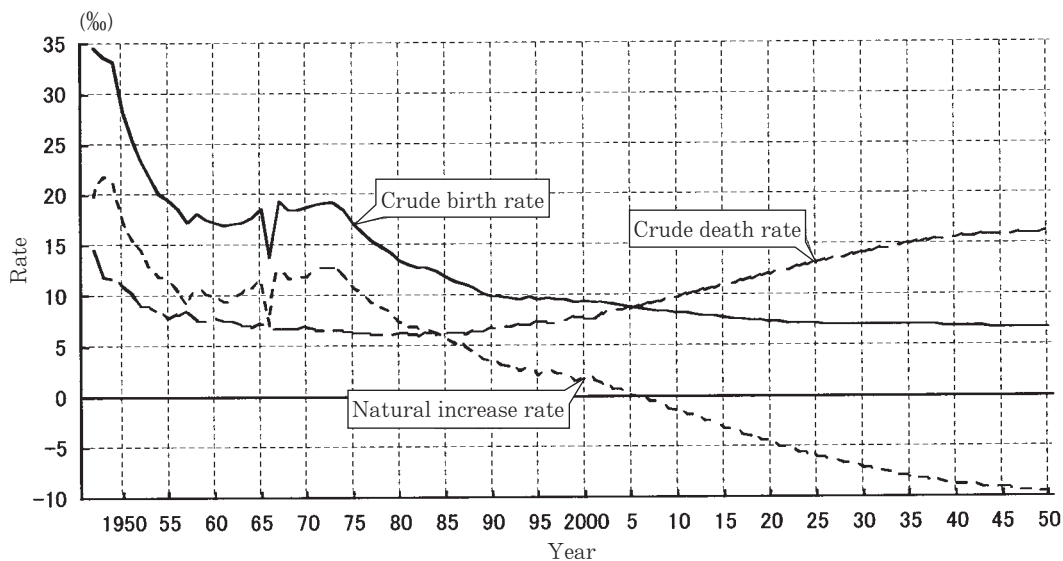
The number of births and the number of deaths are based on Cabinet Statistics Bureau, *Nihon Teikoku Toukei Nenkan* for 1873-90. The data from 1900 onwards are based on Statistics and Information Department, Ministry of Health, Labour and Welfare, *Vital Statistics of Japan*. The data for 1947-72 do not include Okinawa Prefecture. These statistics are on Japanese for events occurring in Japan. Standardized rates were computed based on age-specific fertility rates and mortality rates of each year in reference to the age-sex structure of total population in 1930 as standard population. However, the fertility rates are applied to the female population only. The populations used for the computation are, prior to 1940, the total population and, from 1947 onwards, the Japanese population.

Table 3.2 Future Numbers and Crude Rates of Birth, Death, and Natural Increase: 2001-2050

Year	Number (thousands)			Crude rates (‰)		
	Birth	Death	Natural increase	Birth	Death	Natural increase
2001	1,194	982	212	9.4	7.7	1.7
2002	1,183	1,033	150	9.3	8.1	1.2
2003	1,170	1,067	102	9.2	8.4	0.8
2004	1,154	1,092	62	9.0	8.6	0.5
2005	1,137	1,117	20	8.9	8.7	0.2
2006	1,119	1,142	-23	8.8	8.9	-0.2
2007	1,102	1,167	-66	8.6	9.1	-0.5
2008	1,085	1,193	-108	8.5	9.4	-0.8
2009	1,069	1,219	-150	8.4	9.6	-1.2
2010	1,055	1,245	-191	8.3	9.8	-1.5
2011	1,041	1,272	-231	8.2	10.0	-1.8
2012	1,027	1,298	-271	8.1	10.2	-2.1
2013	1,013	1,325	-312	8.0	10.5	-2.5
2014	999	1,351	-352	7.9	10.7	-2.8
2015	985	1,376	-392	7.8	10.9	-3.1
2016	971	1,401	-431	7.7	11.2	-3.4
2017	956	1,426	-470	7.6	11.4	-3.8
2018	941	1,449	-508	7.6	11.6	-4.1
2019	928	1,472	-544	7.5	11.9	-4.4
2020	914	1,493	-579	7.4	12.1	-4.7
2021	902	1,514	-612	7.3	12.3	-5.0
2022	891	1,533	-643	7.3	12.5	-5.3
2023	880	1,552	-671	7.2	12.7	-5.5
2024	871	1,569	-698	7.2	13.0	-5.8
2025	863	1,585	-723	7.2	13.2	-6.0
2026	855	1,601	-746	7.1	13.4	-6.2
2027	847	1,615	-768	7.1	13.6	-6.4
2028	840	1,628	-788	7.1	13.8	-6.7
2029	834	1,641	-807	7.1	14.0	-6.9
2030	828	1,652	-825	7.1	14.1	-7.1
2035	794	1,692	-899	7.0	15.0	-8.0
2040	753	1,697	-944	6.9	15.6	-8.7
2045	708	1,659	-951	6.8	15.9	-9.1
2050	667	1,617	-950	6.7	16.2	-9.5

Source: National Institute of Population and Social Security Research, *Population Projections for Japan: 2001-2050* (January 2002: medium variant). The total population includes foreigners.

Figure 3.1 Crude Birth Rates, Crude Death Rates and Natural Increase Rates: 1947-2050



The data for after 2001 are based on projection. See the notes for Table 3.1, 3.2.

Table 3.3 Vital Rates, Mean Length of Generation and Age Composition of Female Stable Population: 1925-2004

Year	Intrinsic vital rates (‰)			Mean length of a generation (Year)	Age composition of stable population (%)		
	Growth rate	Birth rate	Death rate		0-14 years old	15-64 years old	65 and over
1925	17.11	35.91	18.80	29.25	38.11	57.37	4.52
1930	14.25	32.78	18.53	29.59	35.78	58.74	5.48
1940	11.93	28.60	16.66	30.26	33.58	60.36	6.06
1947	17.34	31.46	14.12	29.91	36.05	58.60	5.34
1950	13.88	25.85	11.97	29.23	32.03	60.80	7.17
1955	1.90	15.84	13.94	28.77	22.20	64.07	13.73
1960	-3.01	12.68	15.69	27.86	18.74	64.45	16.81
1965	0.25	13.84	13.60	27.68	20.28	63.89	15.82
1966	-11.12	8.54	19.66	27.73	13.65	62.66	23.69
1967	1.83	14.49	12.66	27.72	21.05	63.33	15.62
1968	0.02	13.48	13.46	27.75	19.87	63.37	16.76
1969	0.01	13.42	13.41	27.76	19.79	63.20	17.00
1970	0.14	13.47	13.33	27.73	19.87	63.25	16.88
1971	0.65	13.59	12.94	27.72	19.98	62.76	17.26
1972	0.47	13.43	12.96	27.65	19.79	62.60	17.61
1973	0.52	13.41	12.90	27.62	19.77	62.52	17.71
1974	-1.06	12.54	13.60	27.54	18.72	62.38	18.90
1975	-3.54	11.25	14.79	27.47	17.13	61.95	20.93
1976	-4.58	10.70	15.28	27.50	16.43	61.62	21.95
1977	-5.53	10.19	15.72	27.60	15.77	61.14	23.09
1978	-5.66	10.08	15.74	27.67	15.62	60.90	23.48
1979	-6.09	9.82	15.91	27.73	15.27	60.48	24.25
1980	-6.50	9.62	16.12	27.79	15.02	60.35	24.62
1981	-6.54	9.55	16.09	27.88	14.92	60.08	25.00
1982	-5.83	9.78	15.61	27.98	15.20	59.83	24.96
1983	-5.22	10.03	15.25	28.06	15.53	59.91	24.56
1984	-4.94	10.09	15.04	28.17	15.60	59.67	24.72
1985	-5.86	9.64	15.50	28.32	15.02	59.25	25.73
1986	-6.69	9.22	15.91	28.45	14.46	58.69	26.85
1987	-7.28	8.91	16.19	28.60	14.03	58.17	27.80
1988	-7.92	8.66	16.58	28.76	13.71	58.08	28.21
1989	-9.68	7.90	17.59	28.92	12.68	57.06	30.25
1990	-10.26	7.67	17.93	29.03	12.36	56.76	30.88
1991	-10.44	7.57	18.02	29.10	12.23	56.52	31.26
1992	-11.19	7.28	18.48	29.20	11.83	56.11	32.06
1993	-12.07	6.93	19.00	29.32	11.34	55.45	33.22
1994	-11.07	7.22	18.30	29.41	11.73	55.45	32.82
1995	-12.80	6.63	19.44	29.51	10.91	54.72	34.36
1996	-12.69	6.58	19.27	29.63	10.82	54.13	35.05
1997	-13.49	6.28	19.77	29.70	10.40	53.50	36.10
1998	-13.62	6.22	19.83	29.75	10.30	53.19	36.50
1999	-14.62	5.90	20.52	29.80	9.86	52.76	37.38
2000	-14.23	5.95	20.18	29.81	9.91	52.35	37.74
2001	-14.78	5.74	20.52	29.82	9.61	51.77	38.62
2002	-15.17	5.59	20.76	29.87	9.38	51.25	39.37
2003	-15.80	5.39	21.19	29.99	9.09	50.79	40.11
2004	-15.74	5.37	21.12	30.08	9.07	50.58	40.35

Source: National Institute of Population and Social Security Research. Computed with the population based on the Population Census, or the estimated population based on it, the number of births based on Vital Statistics, and the number of survivors based on the Life Table. The populations used for the computation are, prior to 1940, the total population, and, from 1947 onwards, the Japanese population. The data for 1947-1972 do not include Okinawa Prefecture.

Table 3.4 Demographic Indicators based on the Assumption of the Stability of Fertility Rates and Mortality Rates in 2004

Year	Population	Vital rates (‰)			Proportion (%)				Sex ratio ¹⁾
		Growth rate	Birth rate	Death rate	0-14 years old	15-64 years old	65 and over	75 and over	
2004	127,686,608	0.37	8.86	8.49	13.89	66.63	19.48	8.67	95.26
2010	127,113,892	-2.44	7.87	10.30	13.31	63.96	22.73	10.93	94.81
2020	121,430,688	-6.89	6.58	13.47	11.75	60.26	27.99	14.13	93.83
2030	111,852,679	-9.64	6.44	16.08	10.49	59.89	29.62	17.39	92.83
2040	100,557,615	-11.74	6.18	17.93	10.36	56.26	33.38	17.59	92.30
2050	88,956,470	-13.20	5.72	18.92	9.97	53.91	36.12	20.90	91.76
2060	77,091,239	-15.57	5.80	21.37	9.59	54.14	36.27	22.54	90.94
2070	65,805,453	-15.69	5.87	21.56	9.80	53.86	36.34	21.51	91.03
2080	56,336,320	-15.43	5.70	21.13	9.80	53.30	36.91	21.90	91.14
2090	48,182,214	-15.90	5.77	21.66	9.63	53.81	36.56	22.49	90.92
2100	41,087,460	-15.83	5.83	21.66	9.76	53.77	36.47	21.80	90.98
2110	35,127,820	-15.57	5.73	21.30	9.78	53.43	36.79	21.93	91.07
2120	30,033,614	-15.82	5.76	21.58	9.67	53.72	36.61	22.32	90.96
2130	25,630,368	-15.81	5.81	21.62	9.74	53.74	36.52	21.93	90.98
2140	21,903,369	-15.64	5.75	21.39	9.76	53.52	36.72	21.96	91.04
2150	18,722,946	-15.78	5.76	21.54	9.70	53.67	36.63	22.21	90.98
2160	15,985,371	-15.79	5.80	21.59	9.73	53.71	36.56	22.00	90.98
2170	13,658,111	-15.68	5.76	21.45	9.75	53.57	36.68	21.98	91.03
2180	11,672,891	-15.76	5.77	21.52	9.71	53.65	36.64	22.15	90.99
2190	9,968,907	-15.78	5.79	21.56	9.73	53.69	36.58	22.03	90.99
2200	8,516,799	-15.71	5.77	21.48	9.74	53.61	36.65	22.00	91.01
2210	7,277,942	-15.75	5.77	21.51	9.72	53.64	36.64	22.11	90.99
2220	6,216,532	-15.77	5.78	21.55	9.73	53.67	36.60	22.05	90.99
2230	5,310,829	-15.72	5.77	21.50	9.74	53.62	36.64	22.02	91.01
2240	4,537,910	-15.74	5.77	21.51	9.72	53.64	36.63	22.08	91.00
2250	3,876,462	-15.76	5.78	21.54	9.73	53.66	36.61	22.05	90.99
2260	3,311,665	-15.73	5.77	21.51	9.73	53.63	36.63	22.03	91.00
2270	2,829,528	-15.74	5.77	21.51	9.73	53.64	36.63	22.07	91.00
2280	2,417,218	-15.75	5.78	21.53	9.73	53.66	36.62	22.06	90.99
2290	2,065,038	-15.74	5.77	21.51	9.73	53.64	36.63	22.04	91.00
2300	1,764,326	-15.74	5.77	21.51	9.73	53.64	36.63	22.06	91.00
2310	1,507,276	-15.75	5.77	21.52	9.73	53.65	36.62	22.06	91.00
2320	1,287,679	-15.74	5.77	21.51	9.73	53.64	36.63	22.04	91.00
2330	1,100,140	-15.74	5.77	21.51	9.73	53.64	36.63	22.06	91.00
2340	939,870	-15.75	5.77	21.52	9.73	53.65	36.62	22.06	91.00
2350	802,944	-15.74	5.77	21.52	9.73	53.64	36.63	22.05	91.00
2360	685,992	-15.74	5.77	21.51	9.73	53.64	36.63	22.06	91.00
2370	586,060	-15.75	5.77	21.52	9.73	53.65	36.62	22.06	91.00
2380	500,682	-15.74	5.77	21.52	9.73	53.65	36.63	22.05	91.00
2390	427,752	-15.74	5.77	21.51	9.73	53.64	36.63	22.05	91.00
2400	365,440	-15.74	5.77	21.52	9.73	53.65	36.62	22.05	91.00
2410	312,204	-15.74	5.77	21.52	9.73	53.65	36.63	22.05	91.00
2420	266,726	-15.74	5.77	21.52	9.73	53.64	36.63	22.05	91.00
2430	227,872	-15.74	5.77	21.52	9.73	53.65	36.63	22.05	91.00
2440	194,676	-15.74	5.77	21.52	9.73	53.65	36.63	22.05	91.00
2450	166,318	-15.74	5.77	21.52	9.73	53.65	36.63	22.05	91.00
2460	142,090	-15.74	5.77	21.52	9.73	53.65	36.63	22.05	91.00
2470	121,392	-15.74	5.77	21.52	9.73	53.65	36.63	22.05	91.00
2480	103,708	-15.74	5.77	21.52	9.73	53.65	36.63	22.05	91.00
2490	88,601	-15.74	5.77	21.52	9.73	53.65	36.63	22.05	91.00
2500	75,694	-15.74	5.77	21.52	9.73	53.65	36.63	22.05	91.00
2600	15,679	-15.74	5.77	21.52	9.73	53.65	36.63	22.05	91.00
2700	3,248	-15.74	5.77	21.52	9.73	53.65	36.63	22.05	91.00
2800	673	-15.74	5.77	21.52	9.73	53.65	36.63	22.05	91.00
2900	139	-15.74	5.77	21.52	9.73	53.65	36.63	22.05	91.00
3000	29	-15.74	5.77	21.52	9.73	53.65	36.63	22.05	91.00
3100	6	-15.74	5.77	21.52	9.73	53.65	36.63	22.05	91.00
3200	1	-15.74	5.77	21.52	9.73	53.65	36.63	22.05	91.00
3300	0	-15.74	5.77	21.52	9.73	53.65	36.63	22.05	91.00
3400	0	-15.74	5.77	21.52	9.73	53.65	36.63	22.05	91.00
3500	0	-15.74	5.77	21.52	9.73	53.65	36.63	22.05	91.00

Source: National Institute of Population and Social Security Research. The population index for the future under the condition that the total population by sex and age in 2004 is used as base population and that age-specific fertility rates for females in 2004 (corresponding to 1.29 for the total fertility rate), sex ratio at birth (105.2) and mortality rates based on the Life Table (corresponding to males: 78.64 years, females: 85.59 years for life expectancy at birth) are stable from now onwards. The index shows the process towards stable population and the situation of it. Vital rates are the rate from October through September of next year with the population at the beginning of the period as the denominator. Not assuming international migration.

1) The ratio of the male population to the female population (100 persons).

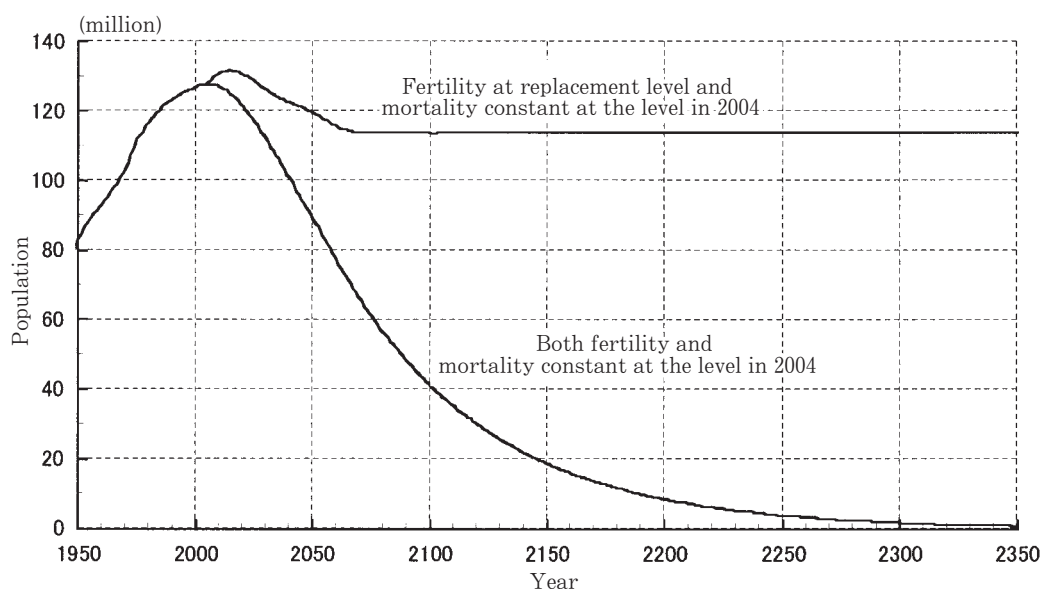
Table 3.5 Demographic Indicators based on the Assumption that Fertility Rates Are in the Replacement Level and Mortality Rates Are Stable after 2004

Year	Population	Vital rates (‰)			Proportion (%)				Sex ratio ¹⁾
		Growth rate	Birth rate	Death rate	0-14 years old	15-64 years old	65 and over	75 and over	
2004	127,686,608	5.71	14.19	8.47	13.89	66.63	19.48	8.67	95.26
2010	131,029,336	2.23	12.22	9.99	15.90	62.05	22.05	10.61	95.11
2020	130,756,897	-2.71	9.80	12.50	17.52	56.48	25.99	13.12	94.59
2030	126,133,181	-3.83	10.43	14.26	15.26	58.47	26.27	15.42	94.14
2040	122,457,392	-2.23	12.50	14.73	16.88	55.70	27.41	14.44	94.45
2050	119,491,733	-3.08	11.08	14.16	18.32	54.80	26.89	15.56	94.93
2060	115,687,747	-2.80	11.66	14.47	17.19	58.64	24.17	15.02	95.26
2070	113,895,677	-0.14	12.89	13.02	18.13	60.34	21.53	12.43	96.26
2080	114,050,031	0.09	11.87	11.78	18.78	58.04	23.18	11.27	96.86
2090	113,967,295	-0.14	11.95	12.10	17.79	59.37	22.84	13.26	96.62
2100	113,796,401	-0.01	12.60	12.61	18.15	59.78	22.06	12.32	96.55
2110	113,950,289	0.12	12.03	11.91	18.56	58.53	22.90	11.82	96.82
2120	113,948,997	-0.11	12.03	12.14	17.98	59.25	22.76	12.89	96.65
2130	113,848,662	-0.00	12.43	12.43	18.16	59.53	22.31	12.37	96.60
2140	113,926,066	0.08	12.11	12.03	18.42	58.81	22.76	12.05	96.76
2150	113,935,791	-0.07	12.09	12.15	18.09	59.19	22.72	12.67	96.66
2160	113,873,900	-0.00	12.33	12.33	18.17	59.39	22.44	12.40	96.63
2170	113,916,234	0.05	12.15	12.10	18.34	58.97	22.69	12.18	96.72
2180	113,925,906	-0.04	12.13	12.16	18.15	59.17	22.69	12.54	96.67
2190	113,888,469	-0.00	12.27	12.28	18.18	59.30	22.51	12.41	96.65
2200	113,911,669	0.03	12.17	12.14	18.29	59.05	22.66	12.26	96.70
2210	113,919,302	-0.02	12.15	12.17	18.18	59.16	22.66	12.47	96.68
2220	113,896,950	-0.00	12.24	12.24	18.19	59.25	22.56	12.41	96.66
2230	113,909,515	0.02	12.18	12.17	18.26	59.10	22.64	12.31	96.69
2240	113,915,083	-0.01	12.17	12.18	18.20	59.16	22.65	12.43	96.68
2250	113,901,839	-0.00	12.22	12.22	18.20	59.22	22.58	12.40	96.67
2260	113,908,551	0.01	12.19	12.18	18.24	59.13	22.63	12.34	96.68
2270	113,912,436	-0.01	12.18	12.18	18.21	59.16	22.64	12.41	96.68
2280	113,904,633	-0.00	12.21	12.21	18.21	59.20	22.60	12.40	96.67
2290	113,908,164	0.01	12.19	12.18	18.23	59.15	22.62	12.36	96.68
2300	113,910,792	-0.00	12.18	12.19	18.21	59.16	22.63	12.40	96.68

Source: National Institute of Population and Social Security Research. The population index for the future under the condition that the total population by sex and age in 2004 is used as base population and that age-specific fertility rates for females in 2004 (replacement level, that is, corresponding to 2.07 for the total fertility rate), sex ratio at birth (105.2) and mortality rates based on the Life Table (corresponding to males: 78.64 years, females: 85.59 years for life expectancy at birth) are stable from now onwards. The index shows the process towards stationary population and the situation of it. Vital rates were the rate from October through September of next year with the population at the beginning of the period as the denominator. Not assuming international migration.

1) The ratio of the male population to the female population (100 persons).

Figure 3.2 Total Population based on the Assumption that Fertility Rates and Mortality Rates are Stable after 2004



See the notes for Table 3.4 and 3.5.