

The KEI Exchange

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Is Korea Ready for the Demographic Revolution?

The World's Most Rapidly Aging Society
with the Most Rapidly Declining Fertility Rate

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The world is about to experience a demographic revolution. Throughout history, the elderly population (people aged 65 and over) never amounted to more than 2–3% in any country. Today, in developed countries, the elderly population accounts for 15% of the total population. The United Nations projected that by 2030 the elderly population will increase to 25% and nearly 30% by 2050. Soon, the elderly population will outnumber children under age 5 for the first time in human history.

Until recently, Korea had the youngest population among OECD nations. But a young Korea is about to grow old at a stunning rate. A country is considered an “aging society” when the number of people aged 65 or older reaches 7.0% of its total population. It becomes an “aged society” when the elderly population reaches 14% or more and a “super-aged society” when they ac-

count for 20%. Korea became an “aging society” in 2000. In 2018, Korea will become an “aged society” when 14.4% of its population will be comprised of the elderly, and a “super-aged society” by 2026. By 2050, Korea is expected to become one of the most aged nations in the world, with the elderly population reaching 38% of the total population.

The nation cannot avoid becoming an aged society. But Korea’s problem is the speed with which it is approaching. It will take Korea 19 years to move from an “aging” to “aged” society, much faster than that of other developed countries. Korea is becoming the most rapidly aging society in the world.

Underlying this speedy transition are its dramatic decline in birth rate and significant improvement in life expectancy. The rapid changes in demog-

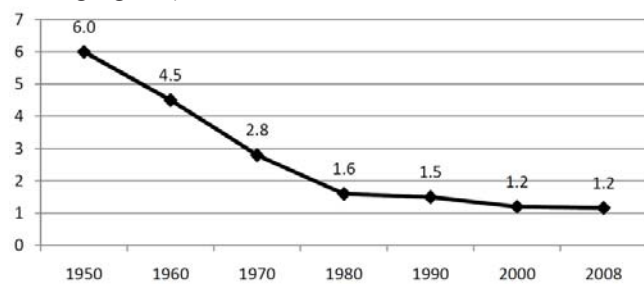
Country	Year			Years Taken	
	Aging	Aged	Super-Aged	Aging to Aged	Aged to Super-Aged
Korea	2000	2018	2026	18	8
Japan	1970	1994	2006	24	12
France	1864	1979	2018	115	39
Germany	1932	1972	2009	40	37
Italy	1927	1988	2006	61	18
U.S.	1942	2015	2036	73	21

Source: Korean National Statistical Office

raphy will bring about new and different challenges on the economic, social, and political fronts. Is Korea ready for the future?

Reasons for Rapid Demographic Changes: The most significant reason for Korea’s rapidly aging population is the low fertility rate. Korea’s demographic transition started in the beginning of the 1960s. During the five-year economic development plan (1962–1967), the nation’s GDP grew at an annual rate of 7%, and it continued to expand rapidly. Believing that increasing population was undermining economic prosperity, the Korean government actively campaigned for a family planning program. In 1973, abortion became legal, and, by 1983, the government suspended medical insurance and maternal care for women with three or more children. In the late 1980s, public and private agencies were involved in promoting and encouraging married couples to have fewer children. As a result of “extremely effective” government-led policies, Korea’s population declined too rapidly. According to a 2008 United Nation’s report, Korea has the second lowest birthrate in the world. Within a generation, Korea’s birth rate declined far below the replacement rate of 2.1, which was reached in 1983.

Figure 1: Fertility Rate (Birth per Woman of Child-bearing Age, %)



Source: Korean National Statistical Office

An inadequate social structure for supporting childbearing and childrearing, which discourages

women to have and raise children, also contributed to the decline to the fertility in Korea. With growing opportunities for higher education, careers, and economic independence, young Korean women are delaying motherhood. Moreover, for those who choose to have children, the average age of having the first child increased from 26.5 in 1995 to 29.1 years old in 2005. Today, many women are having the first child in their early 30s. Postponing the first birth often translates into fewer subsequent births. At the same time, the population of unmarried women in their 20s and 30s grew rapidly. The ratio of single women aged 25–29 reached 59.1% in 2005, up from 39.5% in 2000, while those aged 30–34 increased to 19% from 10.4% during the same period.

Another contributor to rapid demographic change is rising life expectancy. Koreans are living longer and healthier lives. The greater longevity represents the achievement of medical, social, and economic advances, but it also brings significant challenges. Life expectancy of Koreans has increased dramatically since 1960, and it will continue to rise as the result of better living conditions. The median age of Koreans was 19 in 1960, but it nearly doubled to 35.1 years in 2005. The median age is projected to rise to 56.7 years in 2050. By then, the number of people (3.4 million) over 85 years old will nearly equal the number of children under 15 (3.8 million).

Declining Workforce: One of the challenges for an aging society is a declining total population.

The nation’s population grew by an annual average of 1.1% during the period from 1949 to 1955. Growth accelerated to an annual average of 2.8% during the period from 1955 to 1966, then declined sharply to an annual average of 1.7% between 1966 and 1985. According to the International Monetary

Year	1960	1970	1980	1990	2000	2005	2006	2007	2050
Avg. Life Expectancy	52.4	63.2	68.5	71.7	75.8	78.6	79.1	79.6	86.0

Source: Korean National Statistical Office

Fund, Korea's total population was 47.0 million in 2000. This figure was 2.3 times higher than the population in 1949. The population will peak in 2018 at 49.4 million, and then will decline to 48.6 million in 2030 and 42.3 million in 2050. The decline seems less dramatic in the near future because the number of elderly will still be rising. But the pace will accelerate after mid-century, and, if the low fertility rate continues, Korea is likely to lose more than half of its current population by 2100.

(Unit: million)

Year	1949	1955	1966	1985	1990	1995	2000	2005	2018	2030	2050	2100
Total Population	20.1	21.2	29.2	40.8	42.9	45.1	47.0	48.5	49.4	48.6	42.3	16.2

Source: International Monetary Fund

Furthermore, the nation will suffer from the shortage of economically active people, i.e., between 15 and 64. After peaking at 36.2 million in 2016, the number will decline to 34.01 million in 2026 and 24.42 million in 2050. By 2050, Korea will have one-third fewer working-age people than there are today. At the same time, the elderly population will continue to rise, outpacing the 15 & younger age group for the first time in Korea's history by 2019. In 2026, one out of five Koreans will be aged 65 or older.

(Unit: million)

	1980	1990	2002	2019	2026	2050
65 & older	1.5	2.2	3.8	14.4	20.0	34.4
15 & younger	12.95	10.97	9.79	7.15	6.49	4.65
15-64	23.72	29.7	34.08	35.95	34.01	24.42

Source: Korean National Statistical Office

Challenges of Graying Nation: The rapidly graying of the nation will have a significant impact on Korea's future socio-economic environment. When the country has a high proportion of elderly population, a low proportion of working-age people, and a declining total population, it is certain to experience rising fiscal burdens, capital shortages, and a lower growth potential. When the country

grows old, the elderly people depend on younger people, not only for care and support, but also for the economic productivity that ensures that pension, health, and social costs are met. By 2030, it is projected that the average Korean worker would have to pay about 54.7% of his or her income in taxes, pension contributions, and other social welfare related payments to support the elderly, up from 39.3% in 2005. In addition, the "support ratio" will decline significantly (*Fig. 2*). The support

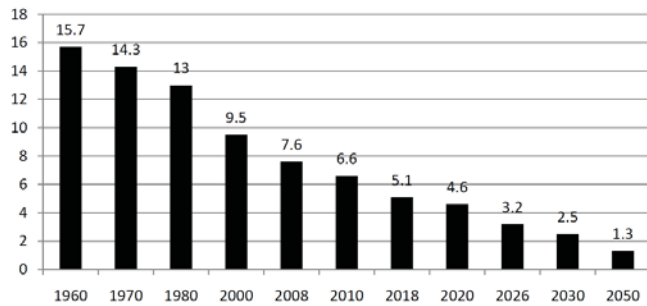
ratio measures the number of people of working age for each elderly person. In 1960, there were 15.7 workers to support one elderly person, but the number gradually declined to 7.6 by 2008. The ratio will continue to drop to 3.2 by 2026, and, by 2050, there will be barely one Korean worker to support each retired person.

Moreover, the nation's economic growth potential will be threatened by the declining working age population and the rising aged population. Workers aged 25–49 made up 58.8% of the population

in 2000, but the proportion will decline to 40% by 2030. The trend of declining working age population relative to the retired population will continue in the future, making it difficult to achieve Korea's goal of per capita income of \$20,000. Furthermore, the average age of the working population will rise, implying that labor costs will increase due to decreased productivity. The International Monetary Fund estimates that every 10% rise in the

elderly population translates into a 0.41% drop in GDP. According to the Korea Development Institute, if the birth rate remains unchanged, Korea's potential economic growth rate will decline from 4.21% in 2006-2010 to 3.41 in 2011-2020, 2.64% in 2021-2030, 1.6% in 2031-2040, and 0.74% in 2041-2050.

Figure 2: Aged Support Ratio



Source: Korean National Statistical Office

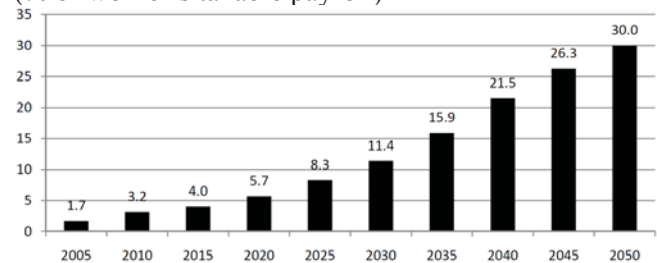
Supporting Tomorrow's Elderly: Traditionally, Korean elders relied on their adult children for care and financial support. Although a large number of them still live in extended families and receive care from their children, the number is waning rapidly. According to a report by the Center for Strategic and International Studies (CSIS), 81% of elders lived with their adult children in 1980, but the number decreased to 57% by 1995, 44% by 2004, and continues to fall. With the influence of the “modernization” and decreasing family size, the informal family network system is no longer the main family structure in Korea. The elderly know that it would be difficult for adult children to support their aged parents and their own children at the same time. The CSIS report cited the survey taken in 2006 of adults in their 50s: only 28% said they think their children will support them when they retire.

With the breakdown of traditional informal support for the elderly, the government has made an effort to broaden the existing National Pension System (NPS) by setting the income replacement rate high for those with a low income level and low for those with high income level so that those with a high income level can help to secure incomes of those

with low income. This plan is to provide all retirees guaranteed income upon retirement to maintain the standard of living regardless of their previous income level. The government first introduced NPS in 1988. At that time, the plan called for retirees to receive 70% of their average lifetime income by contribution of a mere 3% of their incomes. This plan was revised in 1998 to a 9% contribution and 60% income replacement rate. The current retirement eligible age is 60. But beginning the year 2013, the eligibility age will increase by one year each five years until 2033, when the retirement eligibility age will be 65.

As more people receive retirement benefits and as fewer young people are available to contribute, the NPS will become seriously under-funded and over-extended, according to economists and pension planners. The National Pension Development Committee (NPDC) reports that the total benefits paid by NPS in 2005 was 1.7% of workers' taxable earnings, or 1/5 of the current 9% contribution rate. But the cost is expected to be more than the contribution rate by 2025 and will continue to rise thereafter to 30% by 2050 (*Fig. 3*).

Figure 3: National Pension Expenditure
(% of worker's taxable payroll)



Source: NPDC

The graying of society is not only Korea's problem. Many advanced countries have similar worries, but many have adopted policies to deal with the challenges. The Korean government has implemented several policies to cope with the anticipated aging population. However, policy responses have been slower for the demographic transition. If Korea is to continue on its growth path, the nation must recognize the seriousness of an aging society. Caring for the elderly is no longer a family problem but a national issue.



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