

**The Eldercare Debate in East Asia:
Sustainable “Solutions” in Modern Aging Societies**

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June 20, 2023

Introduction:

Populations across the globe are aging at a rapid rate, creating an imminent need for improved social safety nets and eldercare policies. Through advances in healthcare, people continue to lead longer lives, all while birthrates are decreasing in many countries. As working populations shrink in comparison to the burgeoning retired population, countries seek to find new ways to fund social security measures that will help maintain a high quality of life at a low economic cost to the government.

This dilemma is especially pronounced in East Asian countries — many of which have been facing the issue of larger proportions of elderly citizens for decades. Developing countries undergo four demographic stages. In the pre-industrial stage, both mortality and fertility rates are high, resulting in a “balanced” population. Next, in the industrializing stage, mortality rates decrease due to better healthcare while fertility rates remain high, resulting in a population boom. The mature industrial stage involves a decline in fertility rates, once again resulting in a “balanced” population with a lower child dependency ratio. Finally, in the post-industrial stage, both fertility and mortality rates are low, resulting in fewer workers and more elders.¹ In 2010, Japan was considered to be in the final stage of demographic development, whereas South Korea was in the third, mature industrial stage.² However, South Korea has rapidly changed in the last decade, building a robust service-based economy and attempting to center itself as a cosmopolitan, post-industrial nation of innovation.³ This change in South Korea’s image has

¹ Seth Baum, “Demographic Transition,” Portland State University, accessed July 1, 2023, <https://www.e-education.psu.edu/geog30/book/export/html/205#:~:text=The%20demographic%20transition%20model%20was,industrial%2C%20and%20post%2Dindustrial>.

² Takatoshi Ito and Andrew K. Rose, *The Economic Consequences of Demographic Change in East Asia* (Chicago: The University of Chicago Press, 2010), 3.

³ Ryan Hyun-Joung Lee, “Design Politics: Consumerization of Post-Industrial South Korea,” accessed July 1, 2023, 5, <https://deepblue.lib.umich.edu/bitstream/handle/2027.42/98931/leeryan.pdf;sequence=1>.

been accompanied by a shift in demography, and one may argue that South Korea has joined Japan in the post-industrial stage of demographic transition.

East Asia is also a unique case due to the Confucian ideal of filial piety that is strongly ingrained in its cultures. In South Korea and Japan, concepts of respecting one's parents and following social order — determined predominantly by birth order — are the norm.⁴ This strong sense of loyalty and respect toward elders has shaped the way that East Asian countries approach elder care. For hundreds of years, multi-generational households have been extremely common in both Japan and Korea. Living with and caring for one's elderly family members was the norm, and straying from this norm could be perceived as disrespectful. However, recently, there has been a shift away from multi-generational households in favor of independent living and nursing homes. As the number of workers decreases while the number of elders increases, young people have become more valuable “assets” that cannot be “wasted” on care labor, especially when the care provided to elders will not lead to a “productive” outcome — a child who eventually grows into a worker rather than an elder who will pass away.

This paper aims to describe the economic and demographic roots of changes in eldercare and its sustainability in Japan and South Korea. Both nations are in periods of great changes in demography that in turn necessitate social and economic shifts to facilitate these developments. Though certain policies will be more sustainable than others, the seemingly impossible rate of demographic change in these countries present a significant challenge in finding a solution to the “problem” of eldercare.

⁴ Kyu-taik Sung, “Elder respect: exploration of ideals and forms in East Asia,” *Journal of Aging Studies* 15, no. 1 (2001): 13-26, accessed July 1, 2023, [https://doi.org/10.1016/S0890-4065\(00\)00014-1](https://doi.org/10.1016/S0890-4065(00)00014-1).

Data:

Demographic data help illustrate the situation of aging populations in Japan and South Korea (see Appendix A for a compilation of the demographic data discussed). Over time, Japan has experienced an increase in population. However, the size of the labor force peaked in 2019 and has been steadily decreasing since, indicating that though the population as a whole is larger, the composition of the population has changed to include fewer working-age citizens. This is corroborated by an extremely large number of elders as well as a high portion of the population that is elderly: 29.92 percent compared to the global portion of 9.81 percent.⁵ Despite this shrinking labor force, there is a high labor force participation rate, at 62.5 percent compared to the global average of 59.7 percent.⁶ Japan also has an extremely low fertility rate, which represents the average number of children that would be born to each woman in a population throughout her lifetime.⁷ Japan's fertility rate is 1.3 — slightly more than half the global rate of 2.3.⁸ This low fertility rate is coupled with a high median age of 48 years in 2020, when the global median age was 30.9 years.⁹ Japan's median age is one of the highest in the world, demonstrating just how extremely old the Japanese population is. The Japanese dependency ratio is also extremely high at 71.1, compared to the global average of 50.¹⁰ This is explained by the

⁵ The World Bank, "Population ages 65 and above (% of total population) - Japan," United Nations Population Division, The World Bank, 2022, <https://data.worldbank.org/indicator/SP.POP.65UP.TO.ZS?locations=JP>; The World Bank, "Population ages 65 and above (% of total population)," United Nations Population Division, The World Bank, 2022, <https://data.worldbank.org/indicator/SP.POP.65UP.TO.ZS>.

⁶ International Labour Organization, "ILO Modelled Estimates and Projections database (ILOEST)," ILOSTAT, accessed July 1, 2023, ilostat.ilo.org/data.

⁷ OECD Data, "Fertility rates," Organisation for Economic Co-operation and Development, accessed June 28, 2023, <https://data.oecd.org/pop/fertility-rates.htm>.

⁸ The World Bank, "Fertility rate, total (births per woman)," The World Bank, accessed June 28, 2023, <https://data.worldbank.org/indicator/SP.DYN.TFRT.IN>.

⁹ United Nations Department of Economic and Social Affairs, "Projected global median age from 1950 to 2100," UN DESA, June 17, 2019, <https://www.statista.com/statistics/672669/projected-global-median-age/>.

¹⁰ The World Bank, "Age dependency ratio (% of working-age population)," The World Bank, accessed June 28, 2023, <https://data.worldbank.org/indicator/SP.POP.DPND>.

high life expectancy: 84.4456098 years compared to the global average of 71 years.¹¹ In terms of labor, the employment rate has steadily increased while unemployment rates decreased, indicating greater engagement by workers.

Korea's demographic data is similar to the Japanese data, but some of the data clearly demonstrate that Korea is aging more slowly than Japan. This trend of "lagging behind" in terms of population aging can also be seen in the stages of population development assigned to each nation and the date of implementation of eldercare legislation. The total Korean population is slowly increasing with light fluctuations in recent years. This has come with a rise in the total number of elders as well as the percentage of the population that is elderly, which is above the global percentage but far below that of Japan.¹² Similarly, the size of the labor force is also slowly increasing, indicating that, unlike Japan, South Korea has younger people who are growing up and entering the workforce. This slight increase can be seen in Japan pre-2019, indicating that a decline in the workforce is likely imminent in South Korea's future. South Korea also has an extremely low fertility rate of 0.808. This fertility rate is even lower than that of Japan, further indicating that the steady growth in the workforce will soon be reversed as fewer new workers are produced than those who retire. Currently, however, there is a high labor force participation rate of 64.21 percent, which is over 4 percent higher than the global average.¹³ South Korea also has a very high median age of 42.8 years, but this is still significantly lower than Japan's median age, reflecting the fact that South Korea's population is younger than Japan's population. The Korean life expectancy is also very high, though lower than that of Japan, at 83.5268293 years. The employment rates are also steadily increasing as unemployment

¹¹ The World Bank, "Life expectancy at birth, total (years)," The World Bank, accessed June 28, 2023, <https://data.worldbank.org/indicator/SP.DYN.LE00.IN>.

¹² The World Bank, "Population ages 65 and above (% of total population) - Korea, Rep.," United Nations Population Division, The World Bank, 2022, <https://data.worldbank.org/indicator/SP.POP.65UP.TO.ZS?locations=KR>.

¹³ International Labour Organization, "ILO Modelled Estimates and Projections database (ILOEST)."

rates decrease. One interesting trend is that South Korea has a low total dependency ratio of 39.9, compared to the global average of 50.¹⁴ This indicates that though South Korea is rapidly aging, there is still time before it has an extremely old population like Japan, once again demonstrating the slight lag in aging in South Korea versus Japan.

A Turning Point in Eldercare Policy: Long-Term Care Insurance:

Japan and South Korea have both adopted state-operated long-term care insurance (LTCI) systems. Citizens contribute to this social health insurance structure by paying a premium decades before they become eligible to receive benefits. These premiums are then utilized to subsidize care solutions such as home visits, long-term hospital care, time in nursing homes, and other essential care for the elderly and disabled.

Japan:

Japan has had a LTCI system in place since 2000. Depending on the extent of their impairments, elders approved to receive LTCI-funded care can become eligible to utilize various care facilities, in-home services, and community services.¹⁵ Eligibility is determined by age — those 65 years or older and those 40-64 years with certain diseases qualify for coverage — as well as a 74-item questionnaire used to determine participants' disability and care need levels.¹⁶

The variety of different care options available via the LTCI demonstrates the three key goals of the program: (1) maintaining elder independence, (2) providing social insurance, and (3) offering a system focused on users.¹⁷ Fulfilling these goals allows the elderly to lead independent lives for as long as possible, helping lift the burden of caregiving often placed on families.

Furthermore, the LTCI offers the opportunity for elders to receive long-term care that evolves

¹⁴ The World Bank, "Age dependency ratio (% of working-age population)," The World Bank, accessed June 28, 2023, <https://data.worldbank.org/indicator/SP.POP.DPND>.

¹⁵ Minoru Yamada and Hidenori Arai, "Long-Term Care System in Japan," *Annals of Geriatric Medicine and Research* 24, no. 3 (2020): 174-180, accessed June 27, 2023, <https://doi.org/10.4235/agmr.20.0037>.

¹⁶ Ibid.

¹⁷ Ibid.

with their needs — an opportunity those with more modest financial means may not otherwise have received. Many eldercare services can be prohibitively expensive: in Japan, the average cost of long-term care per month is ¥313,700, or about \$2,185.90 in USD.¹⁸ LTCI allows those of modest means to utilize care services outside their families that would otherwise have been cost-prohibitive. It also provides elders with the opportunity to have supportive care services early on, even as they live independently, as the financial burden of having a care assistant is far lessened.

Japan has long been struggling with adjusting to its rapidly aging population, but previous efforts to address elder support such as the “Gold Plan” of 1989 proved to be financially unsustainable.¹⁹ Thus, Japan constructed its LTCI system with multiple funding strategies in mind — it is funded via taxes and copayments, which account for about half the budget each, as well as copayments of approximately 10% that elders pay for their LTCI-related services.²⁰ This system allows the budget to grow proportionally to the number of elders as Japanese citizens automatically begin paying a premium to contribute to the LTCI budget when they turn 40 years of age. Despite this scalable funding model, the population in Japan is aging so rapidly and elders live such long lives that the insurance program has faced many challenges. Individuals of the middle and upper classes have begun to pay higher copayments for LTCI services, and premiums to “buy into” the program have increased significantly since the enactment of the legislation.²¹ Despite these efforts to preserve the program, there are concerns that the budget

¹⁸ Ministry of Health, Labour and Welfare of Japan, “Average monthly expenses of long-term care per receiver in Japan in 2022, by service,” MHLW, September 2022, 6-7, <https://www.mhlw.go.jp/toukei/saikin/hw/kaigo/kyufu/21/dl/11.pdf>.

¹⁹ Yamada and Arai, “Long-Term Care System in Japan,” 174-180.

²⁰ Soonman Kwon and Soo-Jung Kim and Youn Jung, “Introduction of Long-term Care Insurance in South Korea,” Seoul National University School of Public Health, accessed June 28, 2023, https://cipe.umd.edu/conferences/policy_exchanges/conf_papers/Papers/1661.pdf.

²¹ Yamada and Arai, “Long-Term Care System in Japan,” 174-180.

will eventually run out, leading the government to pursue different venues of saving, such as making the qualifications for receiving care more stringent.

There are a variety of different benefits that elders have access to. These range from relatively unintrusive, including in-home visits and short-term care, to more care-intensive, including access to special nursing homes, long-term health facilities, and medical long-term care sanatoriums. Unlike South Korea, Japan's LTCI program does not offer cash payments to family caregivers. Care managers help elders select the option that best suits their needs, even as they change over time.²²

Beyond these options focused on those with special needs, elders without physical or mental ailments can receive preventative care to help them lead longer, more independent lives. Elders are often screened for frailty or prefrailty in order to help them avoid incidents that would force them into more dependent living situations.²³ These preventative care measures allow elders to remain within their communities for a longer portion of their lives and ultimately help reduce the cost of operating the program by minimizing the amount of costly care the LTCI must fund. To further independence, the Japanese government also encourages the establishment of community-based programs focused on decreasing isolation by increasing social participation and community engagement in elders.²⁴

Ultimately, Japan offers a comprehensive LTCI system aimed at both preventative and long-term care. Though the program faces financial challenges, it has a scalable funding source that makes it more sustainable than other systems such as the "pay-as-you-go" (PAYG) pension system that many developed countries utilize. Unlike the PAYG system, in which current working adults support elders, the LTCI system requires people to contribute to their own care

²² Ibid.

²³ Ibid.

²⁴ Ibid.

while they are still young.²⁵ The PAYG system is unsustainable in rapidly aging populations, and elders see less money for their pensions as the number of working adults who contribute to the pension pool decreases. Thus, even as the dependency ratio of Japan increases rapidly, the LTCI system has an equally rapid rise in the number of citizens who “buy into” the program.

Furthermore, the mandatory premium increases equality among older citizens by ensuring everyone, no matter their socioeconomic status, has access to care and high quality of life in old age.

South Korea:

South Korea’s LTCI system was established in 2008 and is largely based on the Japanese LTCI model.²⁶ In 2000, when Japan first implemented its LTCI system, South Korea first became defined as an “aging society” as over 7% of the population were elders.²⁷ As South Korea faced a sharp decline in birth rates and increased life expectancy, policymakers had to find a sustainable solution to funding eldercare.²⁸ This eight-year difference in Japan and South Korea’s implementation of this policy demonstrates the slight lag of Korea’s demographic changes as compared to Japan.

The South Korean LTCI program is funded through government subsidies, premium contributions, and copayments on services received. As the aging population continues to rapidly increase, citizens are being charged higher premium rates over time.²⁹ Despite these increasing

²⁵ *A Dictionary of Finance and Banking*, ed. Jonathan Law and John Smullen, 4th ed. (Oxford: Oxford University Press, 2008), s.v. “pay-as-you-go pension system,” <https://www.oxfordreference.com/display/10.1093/oi/authority.20110803100311871>.

²⁶ Kwon and Kim and Jung, “Introduction of Long-term Care Insurance in South Korea.”

²⁷ Statistics Korea, “Elderly population of South Korea from 2000 with projections to 2070, by age group (in millions),” Statista, September 29, 2022, <https://www.statista.com/statistics/1085252/south-korea-elderly-population-projections-by-age-group/>.

²⁸ Hyuk Ga, “Long-Term Care System in Korea,” *Annals of Geriatric Medicine and Research* 24, no. 3 (2020): 181-186, accessed June 28, 2023, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7533195/>.

²⁹ Organisation for Economic Co-operation and Development, “Korea,” in *Help Wanted? Providing and Paying for Long-Term Care* (Paris: OECD Publishing, 2011), <https://www.oecd.org/els/health-systems/47877789.pdf>.

rates, the program is a financial burden on the South Korean budget and is currently facing imminent default.³⁰ The LTCI will fund 80-100 percent of a participant's care, depending on financial necessity. To incentivize home care, which is slightly less costly than facility-based care, LTCI will cover 85-100 percent of home care visits.

Elders (65 years or older) and those with disabilities or chronic illnesses are potentially eligible for LTCI benefits. Unlike the system in Japan, South Korean LTCI offers both in-kind and cash benefits. The in-kind benefits can be viewed in two separate categories: home and institutional care. Home care includes visits by long-term care assistants, which can be used to ensure elder safety, help promote healthy cognition, carry out baths and other necessary hygiene, and to provide machines or other healthcare materials elders may require.³¹ Institutional care includes senior welfare centers, long-term care facilities, extended hospital stays, and other, more permanent and out-of-home care.

Eligibility to receive LTCI care is determined by a committee that includes physicians and other medical personnel. Elders (and those who are younger but have chronic conditions or disabilities) fill out questionnaires as part of their application to receive LTCI coverage. Based on these questionnaires and the overall applications, applicants are categorized into six different levels, with level 1 representing those with the most severe impairments.³² Levels 1 through 2 are granted access to nursing homes automatically, while those of other levels may be able to enter nursing homes at the committee's discretion.

Socialization is also highly regarded in South Korea. Though not directly operated via the LTCI program, senior centers and senior welfare centers are operated by the local and national

³⁰ Washington Bureau, "Government-Run Long-Term Care Insurance Program in South Korea Facing Financial Woes," LTC News, August 13, 2022, <https://www.ltcnews.com/articles/government-run-long-term-care-insurance-program-in-south-korea-facing-financial-woes>.

³¹ Ga, "Long-Term Care System in Korea," 181-186.

³² Ibid.

governments. These centers provide a space for older adults to socialize and build friendships through varied activities and hobbies.³³ This mental health and active lifestyle-focused preventative care is a common element in both Japanese and South Korean eldercare policy. As these countries face increasing numbers of elders — and thus increasing pressure on the eldercare systems in place — preventative care that encourages independent lifestyles has become more pressing than ever. People will continue to live longer lives due to improvements in health care. However, different lifestyles can affect one’s ability to remain independent and in good health for a greater portion of one’s life. Investing in good health — both mental and physical — when one is younger ensures that more severe and costlier treatments are not necessary until later in life. The focus on preventative care ensures a higher quality of life and keeps care costs as low as possible for as long as possible.

Economic Changes Over Time:

Both the South Korean and Japanese LTCI systems demonstrate a fundamental shift in policies regarding the economics of aging and eldercare. In the past, the pay-as-you-go pension system was sufficient in ensuring that elders had pensions they could use to secure care for themselves as they aged. Under a PAYG system, elders receive retirement benefits from contributions given by current workers.³⁴ PAYG pensions systems are very common across many developed nations and can be seen in Spain, Italy, and France.³⁵ Despite being so widespread, the PAYG system becomes less sustainable as the elder dependency ratio increases. Thus, South Korea and Japan implemented the LTCI systems with the goal of sustainable government support

³³ 안관옥, “전국 6만4568곳...외국엔 없는 한국만의 상호 돌봄공간,” 한겨레, December 27, 2016, <https://www.hani.co.kr/arti/society/area/775149.html>.

³⁴ Nicholas Barr, “The Truth About Pension Reform,” *Finance and Development* 38, no. 3 (2001), accessed June 29, 2023, <https://www.imf.org/external/pubs/ft/fandd/2001/09/barr.htm>.

³⁵ Organisation for Economic Co-operation and Development, “Pension system objectives and risks,” in *OECD Pensions Outlook 2018* (OECD Publishing, 2018), [https://www.oecd-ilibrary.org/sites/pens_outlook-2018-4-en/index.html?itemId=/content/component/pens_outlook-2018-4-en#:~:text=It%20can%20be%20achieved%20through,the%20Netherlands%20\(both%20DB\)](https://www.oecd-ilibrary.org/sites/pens_outlook-2018-4-en/index.html?itemId=/content/component/pens_outlook-2018-4-en#:~:text=It%20can%20be%20achieved%20through,the%20Netherlands%20(both%20DB).).

of eldercare in mind. The LTCI systems are funded in large part by the same people who will utilize the system in the future. Citizens begin paying premiums around age 40, then can begin receiving coverage for their care needs once they turn 65. This allows the LTCI system to grow with the burgeoning elder populations, allowing for relatively proportional funding and spending.

Despite being an improvement on the PAYG model, the LTCI systems in both South Korea and Japan are under strain. The proportion of elderly citizens is becoming too large for the current system. Funding for the programs comes in part from government reserves, which essentially match the premiums paid by citizens. Despite increased premium rates in South Korea, LTCI reserves are expected to dry out in 2026.³⁶ In Japan, the costs of the LTCI program incurred by the government had a significant impact on the budget due to rapidly increasing costs that did not have a corresponding increase in gross domestic product.³⁷ The insurance covers a significant portion — if not all — of the costs of care, which represent a greater challenge to fund as the proportion of the elderly population continues to increase exponentially in both countries.

Based on the financial challenges presented above, it is apparent that both nations must again enter a period of changing eldercare policy. The LTCI legislation represents a moment of change for both Japan and South Korea's policies regarding eldercare. While this change was able to establish a system of eldercare support that could grow with the burgeoning elder population, the current levels of demographic change will soon render the LTCI systems of both

³⁶ Washington Bureau, "Government-Run Long-Term Care Insurance Program in South Korea Facing Financial Woes."

³⁷ Naoki Ikegami, "Financing Long-term Care: Lessons From Japan," *International Journal of Health Policy and Management* 8, no. 8 (2019): 462-466, accessed June 30, 2023, <https://doi.org/10.15171%2Fijhpm.2019.35>.

nations insufficient. Another round of legislative action is necessary to find a truly sustainable approach to financing eldercare.

Beyond the evolving methods of financing eldercare initiatives, the Japanese and South Korean governments have both been encouraging elders to remain working for longer, demonstrating shifts in conceptions of productivity. Many seniors want to continue working for reasons ranging from financial troubles to a desire for social engagement or to maintain mental alertness.³⁸ However, older workers are often replaced by younger workers and forced into retirement or into more menial positions, greatly reducing the job prospects of elders. Both Japan and South Korea seek to ameliorate the stigma against older workers and provide opportunities for elders to choose to remain at work.

71 percent of adults aged 60 to 64 in Japan are employed.³⁹ Japan operates the Silver Human Resource Center (SHRC) program, also known as the Silver Jinzai program, which provides part-time employment opportunities for senior citizens.⁴⁰ Approximately 700,000 seniors were registered for the program in 2021 and were placed in positions ranging from tutoring to meal preparation and more.⁴¹ The Silver Jinzai program offers seniors the opportunity to bridge the gap between forced retirement — which frequently occurs around age 60 — and pension benefits, which begin at age 65. Furthermore, many seniors find themselves seeking socialization, mental stimulation, and physical exercise and view the part-time opportunities provided by the Silver Jinzai program as a kind of hobby or a form of community service. These

³⁸ Council on Aging of Central Oregon, “Older Adults Are Returning to Work in Drove. And Not for the Reasons You Think,” Council on Aging of Central Oregon, December 28, 2021, <https://www.councilonaging.org/blog/older-adults-returning-to-work/>.

³⁹ Organisation for Economic Co-operation and Development, “How Does Japan Compare?,” in *Pensions at a Glance 2021* (OECD Publishing, 2021), <https://www.oecd.org/japan/PAG2021-JPN.pdf>.

⁴⁰ Robert S Weiss et al., “Japan’s silver human resource centers and participant well-being,” *Journal of Cross-Cultural Gerontology* 20, no.1 (2005): 47-66, accessed June 30, 2023, <https://doi.org/10.1007/s10823-005-3797-4>.

⁴¹ Julian Ryall, “How Japan keeps its elderly employed and active,” DW News, October 15, 2021, <https://www.dw.com/en/how-japan-keeps-its-elderly-employed-and-active/a-59516633>.

employment opportunities also help fill critical vacancies in jobs such as eldercare, supporting the rapidly declining working portion of the population.

On the other hand, some elders are essentially forced to continue working in Japan. There is a strong social stigma against unemployment, and “younger” elders who had full careers before retirement feel ashamed for being jobless.⁴² Additionally, in Japan, surveys suggest that about half of all companies are experiencing full-time employee shortages, opening opportunities — and a corresponding social obligation to “do one’s part” — for elders in the workforce.⁴³ Elders also often face high rates of poverty. Female seniors disproportionately face poverty compared to their male counterparts. Elderly women face a poverty rate of about 25 percent, while only 10 percent of elderly men are expected to experience poverty. This figure becomes much higher for divorced or unmarried women, of whom 50 percent face poverty due to the pension system built on ideals of nuclear families with male breadwinners that rewards married couples.⁴⁴ Comparatively, in 2018, the poverty rate in Japan as a whole was 15.4 percent, with a downward trend.⁴⁵ The overall rate of poverty among elders in Japan is around 20 percent, which is much higher than the thirty-eight Organisation for Economic Co-operation and Development (OECD) countries’ average of 13.5 percent.⁴⁶

⁴² Miki Tanikawa, “Japan: Work makes the man: Working longer, whether you like it or not,” *The New York Times*, December 11, 2004, <https://www.nytimes.com/2004/12/11/business/worldbusiness/japan-work-makes-the-man-working-longer-whether-you.html>.

⁴³ Motoko Rich and Hikari Hida, “As Asian Societies Age, ‘Retirement’ Just Means More Work,” *The New York Times*, January 7, 2023, <https://www.nytimes.com/2023/01/07/world/asia/japan-workers-retirement.html>.

⁴⁴ Thisanka Siripala, “Surviving Old Age Is Getting Harder in Japan,” *The Diplomat*, January 19, 2023, <https://thediplomat.com/2023/01/surviving-old-age-is-getting-harder-in-japan/#:~:text=Japan%20boasts%20one%20of%20the,for%20divorced%20and%20unmarried%20women>.

⁴⁵ Ministry of Health, Labour and Welfare of Japan, “Poverty rate in Japan from 1991 to 2018,” Statista Research Department, May 22, 2023, <https://www.statista.com/statistics/1172622/japan-poverty-rate/#:~:text=In%202018%2C%20the%20poverty%20rate,the%20poverty%20rate%20in%20Japan>.

⁴⁶ Organisation for Economic Co-operation and Development, “How Does Japan Compare?.”

Similar to Japan, South Korea also has a high employment rate among elders. 60.6 percent of elders aged 60 to 64 were employed in 2017, which is over 10 percent greater than the OECD average.⁴⁷ South Korea has utilized numerous programs to encourage elders to remain in the workforce. There was a wage peak system in place until 2022, when it was struck down by the Supreme Court.⁴⁸ This system allowed older employees to accept reduced pay in exchange for being allowed to remain at their company beyond their contractually forced retirement age. While the wage peak system is no longer in use, it demonstrates the strong desire for elders to remain in the workforce, as well as the emphasis South Korea places on younger rather than older workers. Though senior workers are viewed as a necessity in South Korea, they are expected to sacrifice their wages for the sake of the economy and their company — a sacrifice younger people are not expected to make.

More recently, South Korea has been relying on a program similar to the Japanese Silver Jinzai program called the Senior Employment and Social Activity Support Program (SESAP). This program is housed under the Korea Labor Force Development Institute for the Ages (KORDI), established in December 2005, and it aims to partner with businesses to subsidize senior employees' wages, encourage senior job creation, and match elders with potential jobs.⁴⁹ Eldercare labor is often outsourced to senior citizens using SESAP, resulting in a system in which younger, more able-bodied senior citizens care for those who are older. The KORDI

⁴⁷ Organisation for Economic Co-operation and Development, "The exceptional labour market situation of older workers in Korea," in *Working Better With Age: Korea* (OECD Publishing, 2018), [https://www.oecd-ilibrary.org/sites/9789264208261-6-en/index.html?itemId=/content/component/9789264208261-6-en#:~:text=Korea%20employs%20more%20of%20its,%2D74%20\(Figure%202.1\)](https://www.oecd-ilibrary.org/sites/9789264208261-6-en/index.html?itemId=/content/component/9789264208261-6-en#:~:text=Korea%20employs%20more%20of%20its,%2D74%20(Figure%202.1)).

⁴⁸ Yonhap, "Supreme Court rules against peak wage system," *The Korea Herald*, May 26, 2022, <https://www.koreaherald.com/view.php?ud=20220526000400>.

⁴⁹ Korea Labor Force Development Institute for the Aged, "2022 SESAP Senior Employment and Social Activity Support Program," KORDI, 2022, accessed June 30, 2023, https://www.kordi.or.kr/upload/attach/74/437374_202205301349031710.pdf.

aimed to create and maintain 845,000 jobs for senior citizens in 2022, indicating a project slightly larger in scope than the Silver Jinzai program.

South Korea also faces very high senior poverty rates, contributing to calls for more workplace opportunities for older citizens. Korea's elderly poverty rate is the highest among the thirty-eight OECD countries, with rates in 2016 at 43.8 percent compared to the OECD average of 13.5 percent.⁵⁰ Older Korean employees are often pushed to leave their companies around age 50 due to fierce competition for a limited number of coveted executive positions, resulting in older people who simply have not accrued enough money to retire properly.⁵¹ Employers are also reluctant to hire older workers, so once they leave their original positions, older Koreans are forced to find alternate sources of employment in lower-paying jobs often in social work, community services, or retail.⁵² These high rates of elder poverty mirror the conditions in Japan, highlighting the widespread and critical nature of this issue in East Asia.

Though Japan and South Korea face many of the same problems and provide similar solutions to elderly workforce participation, the two nations differ slightly in their rationale for keeping people working for greater portions of their lives. In Japan, there is a stronger emphasis on the element of preventative care within work: jobs for the elderly are viewed not only as sources of income but also as ways to maintain physical and mental health. Alternately, Korea has a purely economic and productivity-focused perspective on elderly workers — older people work to fill unwanted, low-paying positions because they are pushed out of their more lucrative office positions.

⁵⁰ Jooyeon Kang and Jungmin Park and Jaemin Cho, "Inclusive Aging in Korea: Eradicating Senior Poverty," *International Journal of Environmental Research and Public Health* 19, no. 4 (2022): 2121, accessed June 30, 2023, <https://doi.org/10.3390/ijerph19042121>.

⁵¹ Cho Hyun-Suk and Sarah Chea, "Korea's seniors have jobs, and really need them," Korea JoonAng Daily, November 30, 2021, <https://koreajoongangdaily.joins.com/2021/11/30/business/economy/elderly-senior-oecd/20211130162630000.html>.

⁵² Korea Labor Force Development Institute for the Aged, "2022 SESAP Senior Employment and Social Activity Support Program."

One critical example of this difference is in eldercare positions. In both Japan and South Korea, it is common for younger, more able-bodied senior citizens to become social workers to care for the disabled and the old. Many Japanese people view this as an honorable way to give back to their communities while earning some extra money for their retirement. On the other hand, in Korea, government-sponsored eldercare labor is viewed as an undesirable, underpaid career that younger people simply do not want. This idea is highlighted in Article 24 of the Long-Term Care Insurance Act from 2022, which states that family members who provide eldercare services to their elderly family members are eligible to receive cash compensation for their work.⁵³ There is no such clause in the Japanese law, demonstrating the economization of eldercare that is unique to South Korea.⁵⁴ Eldercare is much more stigmatized in South Korea than in Japan, thus impacting the perception of senior workers and the programs implemented for senior labor force engagement.

Overall, helping elders maintain their careers provides both economic and personal benefits. Senior citizens experience poverty at disproportionate rates in both Japan and South Korea, indicating that there are fundamental flaws within the eldercare and senior security net systems of these nations. However, both countries seek to address these flaws, albeit with different motivations for senior employment in mind. Senior employment is a critical concept to explore in the coming decades, as the proportion of the elderly population continues to increase in both nations. It makes demographic sense for careers to last longer: if people are leading longer, healthier lives due to technological advances in healthcare, these same advances ought to help them have the opportunity to work for more years. Work can be viewed as a form of

⁵³ National Health Insurance Service, “2022 Long-Term Care Insurance Act” (Act, Gangwon-do, 2022), 14-15, <https://www.nhis.or.kr/english/wbheaa03500m01.do?mode=view&articleNo=10814170&title=2022+Long-Term+Care+Insurance+Act>.

⁵⁴ Japanese Law Translation, “Long-Term Care Insurance Act” (Act No. 123, Tokyo, 1997), <https://www.japaneselawtranslation.go.jp/en/laws/view/3807/en>.

preventative care, which is more necessary now than ever before in Japan and South Korea to reduce the burden of care placed on the already-strained systems in place.

Social Changes Over Time:

The LTCI insurance represents a critical juncture in the changing social perceptions of eldercare in Japan and South Korea. Until recently, multigenerational households were extremely common in both countries, and eldercare was viewed as a familial duty due to the ideal of filial piety. However, the LTCI policies demonstrate that eldercare is viewed less as a familial duty and rather one that must be undertaken by the state.

In Japan, the number of people who utilize LTCI services increased from 1.49 million in April 2000 to 5.11 million in April 2015.⁵⁵ This rapid increase in the number of users of state-operated eldercare services indicates growing acceptance of and reliance upon the state rather than family for senior citizens. There is a parallel decrease in the rate of family support in South Korea. In 1970, 18.8 percent of eldercare was provided by family members. This figure decreased to 9.1 percent in 1995, then 5.3 percent in 2015.⁵⁶ Demographic changes have necessitated working-age people to rely upon the state for the care of their elderly family members in a constantly modernizing, fast-paced economy. This highlights the value of state-operated programs such as long-term care insurance and the importance of building lasting frameworks to support elders.

Cultural Differences:

Death is considered a taboo subject in many cultures, and people often seek to ignore and distance themselves from the prospect of death. This avoidant perspective on death impacts

⁵⁵ Health and Welfare Bureau for the Elderly, “Long-Term Care Insurance System of Japan,” Ministry of Health, Labour and Welfare, November 2016, https://www.mhlw.go.jp/english/policy/care-welfare/care-welfare-elderly/dl/ltcisj_e.pdf.

⁵⁶ Ga, “Long-Term Care System in Korea.”

eldercare policies worldwide, making people view eldercare as a burden rather than a natural part of the life cycle. Japan stands out in its perceptions of death, and its unique position and acceptance of death can be seen in the nursing homes in Japan.

Nursing homes are places where elders are sent once they can no longer care for themselves. Entering a home represents the acceptance of one's inevitable death, and they are often seen as somber, hospital-like spaces where necessary care is distributed by medical personnel. Japan's nursing homes reject this model, focusing on social interaction and the emotional well-being of residents. It is a relatively common practice for Japanese nursing homes to hire "baby workers" — young children who spend time with elderly residents in exchange for diapers, formula, and more.⁵⁷ Though this may seem like a simple and fun program, it reveals the fundamentally death-accepting nature of Japanese society. Frail and ill older people are not stigmatized but rather encouraged to interact with young children just beginning their lives — thus demonstrating that death is so normalized that it is common to allow the youngest, most vulnerable, and most innocent portion of the population to face it every day. This social interaction helps decrease loneliness, address stress-related physical health issues, and staves off mental decline.⁵⁸ Thus, the death-positive nature of Japanese interactions is ultimately a form of preventative care, which is critical in societies with limited resources to support elders.

Another clear example of the Japanese attitude toward death can be seen in the intergenerational living system that has been adopted by a nursing home called Share Kanazawa. Senior citizens, youths with special needs, and university students live together on the Share Kanazawa grounds.⁵⁹ This system was built on the concept of *ikigai*, which involves a sense of

⁵⁷ Hikari Hida and John Yoon, "In a Japanese Nursing Home, Some Workers Are Babies," *The New York Times*, September 1, 2001, <https://www.nytimes.com/2022/09/01/world/asia/japan-nursing-home-babies.html>.

⁵⁸ *Ibid.*

⁵⁹ Margaret Young, "Intergenerational Living at Share Kanazawa, Japan," *Age Knowble*, October 4, 2019, <https://www.ageknowble.com/2019/10/04/intergenerational-living-at-share-kanazawa-japan-2/>.

purpose, home, and belonging. Each of these groups has something to offer the others; for example, college students receive discounted housing in exchange for developing personal relationships and living with the seniors. Everyone at Share Kanazawa participates in community outreach and service, and the goal is to help older adults and disabled youths — both groups that are often ignored — the opportunity to give back and live fulfilling lives. This case demonstrates the willingness of Japanese people to accept the elderly into their communities and their perspective that even those who can no longer live independently ought to be normalized and treated with dignity.

The conduct of nursing home employees also demonstrates the Japanese normalization of death. These employees develop personal, casual relationships with the elders they care for. While they demonstrate deep respect for their residents per Japanese tradition, they also engage in casual conversation about topics like favorite television shows and regularly initiate intimate acts such as hand-holding and patting.⁶⁰ Elders are not ostracized or treated as beings awaiting death, but rather normalized and offered opportunities to interact more personally with the staff at nursing homes.

This normalized perspective of death is unique to Japan. In South Korea, there is a culture that builds barriers between the elderly — those seen to represent impending death — and the rest of “normal” society. Research conducted in South Korea revealed significant differences in the measured levels of happiness of elders based on their living situation. The study also showed a positive correlation between interaction with friends and family and happiness levels for elders.⁶¹ The statistics clearly demonstrate that personalized care within the

⁶⁰ Ruth Campbell, “Nursing Homes and Long-term Care in Japan,” *Pacific Affairs* 57, no. 1 (1984): 87, accessed June 28, 2023, <https://doi.org/10.2307/2758388>.

⁶¹ Eun Jeong Hwang and In Ok Sim, “Association of living arrangements with happiness attributes among older adults,” *BMC Geriatrics* 21, no. 100 (2021), accessed June 29, 2023, <https://doi.org/10.1186/s12877-021-02017-z>.

community is best for elders, yet despite this, the amount of family support given to South Korean elders has rapidly decreased over time.⁶² The number of welfare facilities for senior citizens in South Korea increased from 66,850 facilities in 2009 to 85,230 facilities in 2021, indicating that eldercare has increasingly become facility, not family-based.⁶³ While this growth in the number of facilities can partially be attributed to the growing elderly population in South Korea, it still indicates the growing economization and depersonalization of eldercare in Korea. This perspective that elders must be hidden away or shunned ultimately places greater burdens on the government, which is responsible for its elderly citizens even when families and communities choose to ignore senior citizens.

Further dehumanization of eldercare labor can be seen in the technologies implemented in eldercare. SK Telecom, a large telecommunications company in South Korea, began distributing the NUGU opal product to seniors for free in 2022.⁶⁴ The device, paired with artificial intelligence (AI), cares for seniors through a variety of functions such as exercise and medication notifications, as well as voice-activated SOS signals for medical emergencies.⁶⁵ Another commonly utilized technology is Naver's Clova CareCall, which utilizes AI that helps simulate phone conversations to alleviate loneliness in senior citizens.⁶⁶ Senior citizens with busy family members frequently utilize this service to simulate human interaction.⁶⁷ These two technologies demonstrate a trend away from human-based eldercare. Both these innovations seek

⁶² Ga, "Long-Term Care System in Korea."

⁶³ Statistics Korea, "Number of welfare facilities for senior citizens in South Korea from 2009 to 2021 (in 1,000s)," Statista, September 29, 2022, accessed June 28, 2023, <https://www.statista.com/statistics/1086401/south-korea-number-of-welfare-facilities-for-senior-citizens/>.

⁶⁴ Lee Jun-sung, "SKT provides seniors AI service for free," Korea Industry & Technology Times, March 21, 2022, https://www.koreaittimes.com/news/articleView.html?idxno=111835&replyAll=&reply_sc_order_by=C.

⁶⁵ Ibid.

⁶⁶ Byun Hye-jin, "Naver launches AI call service aimed at seniors," The Korea Herald, May 30, 2022, <https://www.koreaherald.com/view.php?ud=20220530000643>.

⁶⁷ David D. Lee, "South Korea senior care industry gets smart boost," Nikkei Asia, March 27, 2022, <https://asia.nikkei.com/Business/Health-Care/South-Korea-senior-care-industry-gets-smart-boost>.

to replace human caretakers with AI, creating yet another barrier between senior citizens and the rest of Korean society. This again highlights the death-shunning nature of Korean culture in which people attempt to avoid interacting with senior citizens as much as possible. Ultimately, AI cannot fully replace the value of real human interaction, resulting in more elders seeking costlier treatments earlier in their lives due to declining health due to loneliness and a desire for social contact, whether that be through a caretaker or in a nursing home.

While Japan also utilizes technology in eldercare, these technologies are supplemented with human interaction and focus on healthy living for elders who choose to lead independent lives. One instance of this marriage between eldercare and humanized technology was the Otsuki project. Otsuki City implemented this project to promote e-Agriculture, e-Health, and e-Tourism.⁶⁸ Part of this project involved distributing technology that allowed the significant senior population of Otsuki City to connect with people in Tokyo who could rent out plots of land that the elderly farmers maintained. This aspect of the project helped senior citizens gain a new source of income, remain physically active, and build connections with people they otherwise would not have had the chance to meet.⁶⁹

Another instance of technology-integrated eldercare in Japan was the Japan Post Group's project dedicated to home visits and distributing free technology to elders. For a low monthly fee, Japanese elders can sign up to have a postal worker visit them during their regular mail distribution routes.⁷⁰ These visits are supplemented by free iPads with IBM-developed apps that help connect older people with healthcare, home maintenance services, and their communities and families through scheduling and travel-coordination software.⁷¹ During their visits, postal

⁶⁸ Peter A. Tatian, "Improving seniors' lives with new technology," Urban Institute, April 10, 2014, <https://www.urban.org/urban-wire/improving-seniors-lives-new-technology>.

⁶⁹ FP Analytics, "Japan," AARP International, accessed June 29, 2023, <https://www.aarpinternational.org/initiatives/aging-readiness-competitiveness-arc/japan>.

⁷⁰ Ibid.

⁷¹ Ibid.

employees chat with elders and help them address any issues they may be having with their devices. Both of these cases of technology integrated into eldercare show that technology is viewed as a tool to help facilitate safe, healthy, and independent living for senior citizens — not as a replacement for human care and interaction like many of the Korean technologies.

Furthermore, unlike in Japan, family-based elder care is financially compensated by the government in South Korea. Though both countries have been facing shortages in eldercare workers, only South Korea pays families for replacing the duties of an eldercare worker.⁷² This highlights a significant cultural difference between the two nations: in Japan, caring for one's elderly family member is viewed as a given social norm, whereas in South Korea, it is viewed as a heroic gesture deserving of some kind of reward. People in South Korea are rewarded for eldercare because the elderly are ostracized from society and frequently ignored due to the inevitable future they represent. This stands in stark contrast with the more humanistic approach to and acceptance of death in Japanese society. Both countries have embraced alternate forms of eldercare outside of the traditional multigenerational household model as the demography and economies of their societies have rapidly changed over the last few decades. However, the cultural perspectives on death have strongly impacted the approaches to eldercare that are utilized in the nations and will ultimately affect the effectiveness and sustainability of government-based care programs in the long run.

Conclusion:

The “problem” of eldercare is one of the most pressing topics across the world today. Advancements in healthcare and technology have helped people lead increasingly longer lives, altering elder dependency ratios and necessitating the creation of sustainable frameworks for care labor in countries across the globe. Japan, South Korea, and other Asian countries represent case

⁷² National Health Insurance Service, “2022 Long-Term Care Insurance Act,” 14-15.

studies on the impacts of aging on economies and populations that will occur in other nations in the near future. Now, more than ever, it is critical to understand the sociological and economic differences between nations that will ultimately determine their approaches to eldercare and the success each of these policy-based “solutions” will have. This paper explored East Asian cultural ideals and demographic trends, then provided a comparative analysis of the economic, social, and cultural similarities and differences between Japan and South Korea. The Confucian ideal of filial piety has been challenged by massive shifts in demography and the implications of these shifts in these rapidly aging populations.

The adoption of Long-Term Care Insurance represents a turning point in Japanese and South Korean eldercare policy. It represents a legal acknowledgment of the changing needs of the aging populations, and the nuances found within the two countries’ LTCI legislation illuminate larger differences between the two nations. Furthermore, cases such as the increasing mobilization of the elderly in the workforce demonstrate changes in the economy that occurred simultaneously with the implementation of LTCI policies. The social changes that have come with shifts in the perception of eldercare and senior citizens reveal that even fundamental ideals such as filial piety can be altered to fit the needs of rapidly changing societies. This raises questions about culturally mindful eldercare “solutions” and the implications for change brought about by the changing needs of demographically evolving nations. Lastly, this paper explored the cultural differences evident between Japan and South Korea fundamental to the way both societies approach death and care labor. It is clear that despite similar demographic trends and legislative efforts, there are significant differences in the Japanese and South Korean eldercare cultures that can affect the effectiveness and sustainability of state-operated eldercare programs due to the varied lifestyles they promote.

In discussing the potential solutions to the eldercare “problem,” one reaches a fundamental roadblock: there is seemingly no solution — whether economic or social — to this “problem.” This dilemma can be explained by the capitalistic mindset, which hyper-fixates upon the concepts of productivity and value. Care labor is an incredibly intimate and personal concept, rendering it incompatible with the economic solutions frequently sought by governments. By definition, elders require care because they are no longer able to care for themselves. As such, they are unable to produce any value from a capitalist perspective. Furthermore, as people leave their “productive” jobs to care for their aging family members, elders are again viewed as a hindrance to productivity. The concept of eldercare itself is also unproductive. While caring for children will ultimately produce effective, working members of society, caring for elders inevitably ends in death, which fails to produce anything of value to the economy.

This threefold label of unproductivity creates an air of shame around elders and eldercare labor, effectively closing the door to finding a proper solution to address the severe dearth of attention and money spent on care. As unproductivity is equated with shame, society and the government chooses to ignore the issue or address it passively with ineffective programs. Ultimately, one thing is clear: the issue is not a lack of money, but rather a lack of willingness to prioritize care labor over other forms of spending. By focusing exclusively on saving money when building eldercare plans, governments have closed the door on the solution of simply reallocating more funds to better suit the needs of their changing populations.

These budget-tightening tactics raise another question: what is the government saving the money for? The fundamental purpose of government is to safeguard the lives of its citizens, yet the sustainability mindset we apply to eldercare policies is incompatible with this goal. As populations grow older, the government must also evolve to better serve the needs of its

changing citizenry. The elderly demographic is not going away any time soon; people are leading longer lives and governments cannot simply sweep older people under the rug and focus on the younger population as they have been. If the government is not spending more money on eldercare, what is it spending it on? More citizens are becoming elderly, yet government policies and budgets simply do not acknowledge this fundamental fact.

Ultimately, this comparative study demonstrates a critical aspect of eldercare: there is not one “solution” to this form of care labor because it is not a problem in the first place. Many societies view eldercare and senior citizens as a burden — while society is indebted to the older generation in many ways and thus must remain respectful when regarding elders, senior citizens still represent an unproductive sector of society. As these people have experienced corporate death — the concept that they have been “used up” and no longer represent any economic value — and are at an age that reminds people of impending physical death, elders are often viewed as grave reminders of the inevitable future. However, becoming old is a fact of life and something that almost everybody will experience. Calling aging a problem is equivalent to calling a growing child a problem, and this is simply not the case. As Japan demonstrates, shifts in perspectives on elders can result in long, yet fruitful, lives and the promise of independence and freedom even as one ages. One cannot find a “solution” to the “problem” of eldercare by simply throwing money at temporary band-aids to maintain the status quo. There are demographic shifts occurring worldwide that are inevitable, and once people begin accepting this new reality, they can begin to view eldercare not as a problem that requires a solution, but rather as a new fact of life into which people ought to invest new infrastructure.

Appendix A

Japan:  East Asia Demographic Data

	Total Population	Percent of Population That is Elderly	Total Elderly Population	Labor Force	GDP Per Capita (in USD)	Labor Force Participation Rate (in %)	Fertility Rate	Median Age	Life Expectancy	Employment Rate (in %)	Unemployment Rate (in %)		Dependency Ratio (2021)
1990	123,478,000	12.40%	15,310,853	64,191,084	25371.4642	63.39	1.54	36.9	78.8370732	61.9	2.1	Total	71.1
1991	123,964,000	12.90%	15,989,095	65,411,460	28915.0082	63.79	1.53	-	79.0368293	62.4	2.06	Elderly	51
1992	124,425,000	13.41%	16,688,227	66,263,736	31414.9846	63.99	1.5	-	79.0802439	62.6	2.16	Youth	20.1
1993	124,829,000	13.92%	17,380,100	66,635,449	35681.9639	63.81	1.46	-	79.3036585	62.2	2.54		
1994	125,178,000	14.44%	18,076,140	66,928,603	39933.5151	63.61	1.5	-	79.4968293	61.8	2.89		
1995	125,472,000	14.96%	18,774,576	67,146,852	44197.6191	63.42	1.42	39	79.5360976	61.4	3.15		
1996	125,757,000	15.51%	19,503,381	67,637,962	39150.0396	63.49	1.43	-	80.2197561	61.4	3.38		
1997	126,057,000	16.08%	20,271,583	68,212,473	35638.232	63.07	1.39	-	80.4241463	61.5	3.37		
1998	126,400,000	16.66%	21,084,517	68,159,607	32423.7556	63.33	1.38	-	80.3014634	60.7	4.08		
1999	126,631,000	17.22%	21,810,613	68,037,464	36610.1683	62.85	1.34	-	80.4609756	59.9	4.68		
2000	126,843,000	17.80%	22,584,255	67,817,652	39169.3596	62.44	1.36	40.7	81.0760976	59.5	4.75		
2001	127,149,000	18.42%	23,420,079	67,626,063	34406.1825	61.99	1.33	-	81.4163415	58.9	5.02		
2002	127,445,000	19.02%	24,245,889	67,075,751	32820.7936	61.23	1.32	-	81.6907317	57.9	5.39		
2003	127,718,000	19.57%	24,992,848	66,836,856	35387.0374	60.77	1.29	-	81.76	57.6	5.25		
2004	127,761,000	20.06%	25,630,222	66,578,272	38298.9802	60.42	1.29	-	82.0302439	57.6	4.73		
2005	127,773,000	20.60%	26,326,876	66,666,567	37812.895	60.42	1.26	42.4	81.955122	57.7	4.45		
2006	127,854,000	21.26%	27,178,297	66,782,268	35991.546	60.42	1.32	-	82.3219512	57.9	4.19		
2007	128,001,000	21.94%	28,084,356	66,892,223	35779.0245	60.39	1.34	-	82.5070732	58.1	3.89		
2008	128,063,000	22.58%	28,918,875	66,726,949	30876.304	60.16	1.37	-	82.587561	57.8	4		
2009	128,047,000	23.17%	29,683,227	66,456,031	41308.9968	59.86	1.37	-	82.9114634	56.9	5.07		
2010	128,070,000	23.60%	30,225,206	66,231,664	44968.1562	59.58	1.39	44.2	82.8426829	56.6	5.1		
2011	127,833,000	23.98%	30,651,515	65,813,075	48760.0789	59.25	1.39	-	82.5912195	56.5	4.55		
2012	127,629,000	24.65%	31,457,297	65,518,909	49145.2804	59.01	1.41	-	83.0960976	56.5	4.36		
2013	127,445,000	25.58%	32,602,328	65,768,575	40898.6479	59.25	1.43	-	83.3319512	56.9	4.04		
2014	127,276,000	26.53%	33,762,485	65,973,877	38475.3952	59.44	1.42	-	83.5878049	57.3	3.59		
2015	127,141,000	27.33%	34,745,347	66,061,546	34960.6394	59.5	1.45	45.9	83.7939024	57.6	3.39		
2016	127,076,000	27.95%	35,512,557	66,669,411	39375.4732	59.99	1.44	-	83.984878	58.1	3.13		
2017	126,972,000	28.46%	36,181,802	67,225,084	38834.0529	60.44	1.43	-	84.0997561	58.8	2.82		
2018	126,811,000	28.90%	36,650,477	68,386,819	39277.1166	61.45	1.42	-	84.2109756	60	2.47		
2019	126,633,000	29.28%	37,077,906	69,045,531	40458.0019	62.01	1.36	-	84.3563415	60.6	2.35		
2020	126,261,000	29.58%	37,352,017	68,953,988	39918.1676	61.95	1.33	48	84.56	60.3	2.81		
2021	125,681,593	29.79%	37,436,889	68,858,892	39312.6604	62.12	1.3	-	84.456098	60.4	2.83		
2022	123,951,692	29.92%	37,092,000	68,843,092	-	62.5	-	-	-	60.9	2.6		

South Korea:  East Asia Demographic Data

	Total Population	Percent of Population That is Elderly	Total Elderly Population	Labor Force	GDP Per Capita (in USD)	Labor Force Participation Rate (in %)	Fertility Rate	Median Age	Life Expectancy	Employment Rate (in %)	Unemployment Rate (in %)		Dependency Ratio (2021)
1991	42,295,704	4.90%	2,099,486	19,599,952	6610.0651	60.02	1.57	25.8	71.597561	-	2.45	Total	39.9
1992	43,747,962	5.22%	2,284,254	20,042,803	8126.67039	60.89	1.76	-	72.497561	-	2.51	Elderly	23.3
1993	44,194,628	5.40%	2,385,778	20,378,898	8884.92832	60.89	1.654	-	72.997561	-	2.88	Youth	16.6
1994	44,641,540	5.59%	2,496,912	20,965,034	10385.3362	61.6	1.656	-	73.397561	-	2.48		
1995	45,092,991	5.79%	2,612,720	21,459,939	12564.7781	61.94	1.634	28.3	73.7	-	2.06		
1996	45,524,681	6.00%	2,732,364	21,896,543	13403.0496	62.11	1.574	-	74.1512195	-	2.05		
1997	45,953,580	6.25%	2,870,936	22,397,570	12398.48	62.5	1.537	-	74.602439	-	2.61		
1998	46,286,503	6.51%	3,014,044	22,907,668	8281.69998	60.62	1.464	-	75.004878	-	6.96		
1999	46,616,677	6.80%	3,170,604	22,254,963	10672.4179	60.6	1.425	-	75.4097561	-	6.34		
2000	47,008,111	7.13%	3,353,550	22,887,804	12256.9936	61.57	1.48	30.7	75.9097561	-	4.06		
2001	47,370,164	7.49%	3,548,716	23,226,360	11561.2484	61.88	1.309	-	76.4121951	-	3.7		
2002	47,644,736	7.87%	3,749,902	23,664,352	13165.0657	62.45	1.178	-	76.7658537	-	3.05		
2003	47,892,330	8.26%	3,956,369	23,675,016	14072.8575	61.89	1.191	-	77.2146341	-	3.35		
2004	48,082,519	8.66%	4,164,400	24,194,814	16496.1201	62.69	1.164	-	77.6658537	-	3.42		
2005	48,184,561	9.06%	4,363,900	24,332,457	19402.5026	62.55	1.085	33.6	78.1682927	-	3.48		
2006	48,438,292	9.47%	4,589,185	24,612,208	21743.4775	62.52	1.132	-	78.6682927	-	3.25		
2007	48,683,638	9.91%	4,825,056	24,884,098	24086.4104	62.44	1.259	-	79.1195122	-	3.01		
2008	49,054,708	10.30%	5,053,487	25,067,295	21350.428	61.97	1.192	-	79.5170732	-	2.96		
2009	49,307,835	10.67%	5,259,533	25,091,241	19143.8516	61.28	1.149	-	79.9682927	-	3.36		
2010	49,554,112	11.05%	5,473,792	25,419,751	23087.2256	61.36	1.226	36.6	80.1170732	-	3.33		
2011	49,936,638	11.40%	5,691,117	25,870,939	25096.2639	61.53	1.244	-	80.5682927	63.9	2.99		
2012	50,199,853	11.74%	5,891,279	26,269,374	25466.7605	61.71	1.297	-	80.8195122	64.3	2.81		
2013	50,428,893	12.12%	6,110,977	26,634,430	27182.7343	61.9	1.187	-	81.2707317	64.6	2.75		
2014	50,746,659	12.54%	6,361,571	27,387,622	29249.5752	62.91	1.205	-	81.7219512	65.6	3.08		
2015	51,014,947	12.96%	6,610,311	27,788,180	28732.2311	63.17	1.239	39.9	82.0243902	65.9	3.55		
2016	51,217,803	13.36%	6,844,554	28,041,851	29288.8704	63.2	1.172	-	82.2756098	66.1	3.65		
2017	51,361,911	13.87%	7,125,615	28,349,693	31616.8434	63.48	1.052	-	82.6268293	66.6	3.65		
2018	51,585,058	14.48%	7,455,735	28,513,895	33436.0231	63.36	0.977	-	82.6268293	66.6	3.82		
2019	51,764,822	15.07%	7,798,729	28,808,833	31902.4169	63.57	0.918	-	83.2368293	66.8	3.75		
2020	51,836,239	15.83%	8,205,194	28,597,159	31721.2989	62.81	0.837	42.8	83.2368293	65.9	3.93		
2021	51,744,876	16.65%	8,615,918	28,758,924	34997.7816	63.08	0.808	-	83.2368293	66.5	3.64		
2022	51,815,810	17.49%	9,063,174	29,238,031	-	64.21	-	-	-	-	2.8		

Data Definitions:

Total population⁷³ – total population of the country, annually

Percent of population that is elderly – the portion of the population that is over the age of 65, expressed as a percentage

⁷³ The World Bank, “Population, total - Japan,” The World Bank, accessed June 30, 2023, <https://data.worldbank.org/indicator/SP.POP.TOTL?locations=JP>; The World Bank, “Population, total - Korea, Rep.,” The World Bank, accessed June 30, 2023, <https://data.worldbank.org/indicator/SP.POP.TOTL?locations=KR>; Macrotrends, “Japan Population 1950-2023,” Macrotrends, accessed June 30, 2023, <https://www.macrotrends.net/countries/JPN/japan/population>; Macrotrends, “South Korea Population 1950-2023,” Macrotrends, accessed June 30, 2023, <https://www.macrotrends.net/countries/KOR/south-korea/population>.

Total elderly population – the total number of people over the age of 65, calculated by multiplying the proportion of the population that is elderly by the total population

Labor force⁷⁴ – the portion of the population who is either employed or unemployed

GDP per capita (in USD)⁷⁵ – the gross domestic product (economic output) of the nation per person

Labor force participation rate⁷⁶ – the proportion of people in the labor force of each country

Fertility rate⁷⁷ – the average number of children that would be born to each woman by the end of her reproductive cycle

Median age⁷⁸ – the age which half the population is older and the other half is younger than

Life expectancy⁷⁹ – the estimated lifespan of a citizen of that country

⁷⁴ The World Bank, “Labor Force, total - Japan,” The World Bank, accessed June 30, 2023, <https://data.worldbank.org/indicator/SL.TLF.TOTL.IN?end=2022&locations=KR&start=1990&view=chart>; The World Bank, “Labor Force, total - Korea, Rep.,” The World Bank, accessed June 30, 2023, <https://data.worldbank.org/indicator/SL.TLF.TOTL.IN?end=2022&locations=KR&start=1990&view=chart>.

⁷⁵ The World Bank, “GDP per capita (current US\$) - Japan,” The World Bank, accessed June 30, 2023, <https://data.worldbank.org/indicator/NY.GDP.PCAP.CD?locations=JP>; The World Bank, “GDP per capita (current US\$) - Korea, Rep.,” The World Bank, accessed June 30, 2023, <https://data.worldbank.org/indicator/NY.GDP.PCAP.CD?locations=KR>.

⁷⁶ The World Bank, “Labor force participation rate, total (% of total population ages 15+) (national estimate) - Japan,” The World Bank, accessed June 30, 2023, <https://data.worldbank.org/indicator/SL.TLF.CACT.NE.ZS?locations=JP>; The World Bank, “Labor force participation rate, total (% of total population ages 15+) (national estimate) - Korea, Rep.,” The World Bank, accessed June 30, 2023, <https://data.worldbank.org/indicator/SL.TLF.CACT.NE.ZS?locations=KR>.

⁷⁷ The World Bank, “Fertility rate, total (births per woman) - Japan,” The World Bank, accessed June 30, 2023, <https://data.worldbank.org/indicator/SP.DYN.TFRT.IN?locations=JP>; The World Bank, “Fertility rate, total (births per woman) - Korea, Rep.,” The World Bank, accessed June 30, 2023, <https://data.worldbank.org/indicator/SP.DYN.TFRT.IN?locations=KR>.

⁷⁸ United Nations, “Japan: Median age of the population from 1950 to 2100* (in years),” Statista, July 18, 2019, accessed June 30, 2023, <https://www.statista.com/statistics/604424/median-age-of-the-population-in-japan/>; United Nations, “South Korea: Median age of the population from 1950 to 2100* (in years),” Statista, July 18, 2019, accessed June 30, 2023, <https://www.statista.com/statistics/604689/median-age-of-the-population-in-south-korea/>.

⁷⁹ The World Bank, “Life expectancy at birth, total (years) - Japan,” The World Bank, accessed June 30, 2023, <https://data.worldbank.org/indicator/SP.DYN.LE00.IN?locations=JP>; The World Bank, “Life expectancy at birth, total (years) - Korea, Rep.,” The World Bank, accessed June 30, 2023, <https://data.worldbank.org/indicator/SP.DYN.LE00.IN?locations=KR>.

Employment rate⁸⁰ – the proportion of people who are employed from the pool of people who are eligible to be employed

Unemployment rate⁸¹ – the proportion of people who are not employed, but are actively seeking employment, within the labor force

Dependency ratio⁸² – ratio of those who are not in the labor force to those who are; can be measured by the proportion of elderly, youth, or a total of both to the labor force

Elderly population⁸³ – the number of people in each country who are over the age of 65

⁸⁰ Statistics Bureau of Japan and Ministry of Internal Affairs and Communications (Japan), "Employment rate in Japan from 1973 to 2022," Statista, February 1, 2023, accessed June 30, 2023, <https://www.statista.com/statistics/643211/japan-employment-rate/>; Statistics Korea, "Employment rate in South Korea from 2011 to 2021," Statista, April 15, 2022, accessed June 30, 2023, <https://www.statista.com/statistics/1229082/south-korea-employment-rate/>.

⁸¹ International Labour Organization, "Unemployment, total (% of total labor force) (national estimate) - Japan," The World Bank, ILOSTAT, accessed June 30, 2023, <https://data.worldbank.org/indicator/SL.UEM.TOTL.NE.ZS?locations=JP>; International Labour Organization, "Unemployment, total (% of total labor force) (national estimate) - Korea, Rep.," The World Bank, ILOSTAT, accessed June 30, 2023, <https://data.worldbank.org/indicator/SL.UEM.TOTL.NE.ZS?locations=KR>.

⁸² United Nations Department of Economic and Social Affairs (DESA), "Dependency Ratio," United Nations, June 15, 2007, accessed June 30, 2023, https://www.un.org/esa/sustdev/natlinfo/indicators/methodology_sheets/demographics/dependency_ratio.pdf; Central Intelligence Agency, "Korea, South," The World Factbook, CIA, June 26, 2023, accessed June 30, 2023, <https://www.cia.gov/the-world-factbook/countries/korea-south/#people-and-society>; Central Intelligence Agency, "Japan," The World Factbook, CIA, June 26, 2023, accessed June 30, 2023, <https://www.cia.gov/the-world-factbook/countries/japan/#people-and-society>.

⁸³ Ibid.

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