

발 간 등 록 번 호

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100 Years of the Korean Census

The Population of Korea



Statistics Korea

Foreword

The Village Registers of the Silla Dynasty and the household surveys of the Joseon Dynasty demonstrate that efforts to record population, households, and housing have been a longstanding tradition in Korea for over a thousand years. This year is particularly significant, as it marks the 100th anniversary of Korea's first modern Census, conducted in 1925 under the name National Census.

As the nation's first basic statistics, the census has periodically enumerated the entire population, households, and housing across the nation, documenting structural changes in Korean society over time. Data are produced not only at the levels of *si* and *do* (cities and provinces), *si*, *gun*, and *gu* (cities and districts), and *eup*, *myeon*, and *dong* (submunicipal units), but also for smaller units such as enumeration districts and grid cells. These data are widely used in planning, policymaking, research, and education across the public and private sectors. They also serve as the foundation for producing derived statistics—such as population and household projections, and the housing supply ratio—and for providing sampling frames and population parameters necessary for designing sample surveys and generating survey estimates.

To commemorate the 100th anniversary of the census, we are publishing *100 Years of the Korean Census: The Population of Korea* and *100 Years of the Korean Census: The Housing of Korea* in both Korean and English. These volumes document the evolution of

Korea's Population and Housing Census and provide a comprehensive analysis of the social changes that have taken place over the past century.

100 Years of the Korean Census: The Population of Korea explores in depth key demographic topics, including births and deaths, migration, foreign residents, family composition, economic activity, education, and religion. In particular, it provides statistical insights into urgent social challenges such as population decline, aging, low fertility, and multicultural dynamics, highlighting their broader social and policy implications.

100 Years of the Korean Census: The Housing of Korea covers changes in occupancy patterns, housing types, housing conditions, and issues related to housing poverty and housing welfare. It offers a broad perspective on the evolving housing landscape, covering housing supply, vacant housing, changes in household composition, and regional disparities in living conditions.

These volumes go beyond presenting statistics; they serve as guidebooks for reflecting on the past and preparing for the future through the lens of population and housing. We hope these publications will serve as valuable resources for citizens, stakeholders in both the public and private sectors, and academic researchers, helping to deepen their understanding and to foster meaningful dialogue on Korea's sustainable societal development.

The future of population and housing in Korea will differ greatly from the past 100 years. As we prepare to face future challenges, Statistics Korea remains committed to providing accurate and timely statistics to support informed decision-making and proactive responses.

Finally, I would like to express my deepest gratitude to all the researchers, contributors, and staff who were involved in the planning, writing, and editing of these publications.

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안형준

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100 Years of Population, Household, and Housing of Korea

2025
Census
100th anniversary



1. Introduction

In the Republic of Korea, the first modern census was conducted in 1925 during the Japanese colonial period, and in 2025, it will mark its 21st occurrence, completing a century of census history. Over the past 100 years, Korea has experienced a tumultuous history including colonial rule, liberation, the Korean War, industrialization, and democratization (Figure 1-1). The direction of population policy has rapidly shifted due to rapid changes in population structure.

A population census refers to the enumeration of the entire population within a specific geographical area, usually a country. The United Nations' *Principles and Recommendations for Population and Housing Censuses* define a census as “the total process of planning, collecting, compiling, evaluating, disseminating, and analyzing demographic, economic and social data” (UN DESA, 2017). The census is both a statistic and a historical process of knowledge production shaped by decisions about what to ask, whom to include, and how to collect the data.

The Population and Housing Census captures the era in data, with numbers arranged in rows and columns containing information on population, households, and housing. Modern censuses are primarily conducted and managed at the national level, and reflect the sociopolitical context and historical conditions of the country in which they are implemented. Census data serve as a foundation for various derived statistics such as

population and household projections, housing supply ratios, and aging indices. They become basic data when setting the direction of policies such as public pensions or housing supply.

Since liberation, Korea's population and the number of households have steadily increased, and the number of houses has also continuously increased since the housing census began. None of the three numbers had ever decreased in each five-year interval until 2020. However, the following That year marked the beginning of the national population decline. Some regions had already been experiencing population decline for an extended long time, and concerns about local extinction had emerged as a social problem.

다산글방

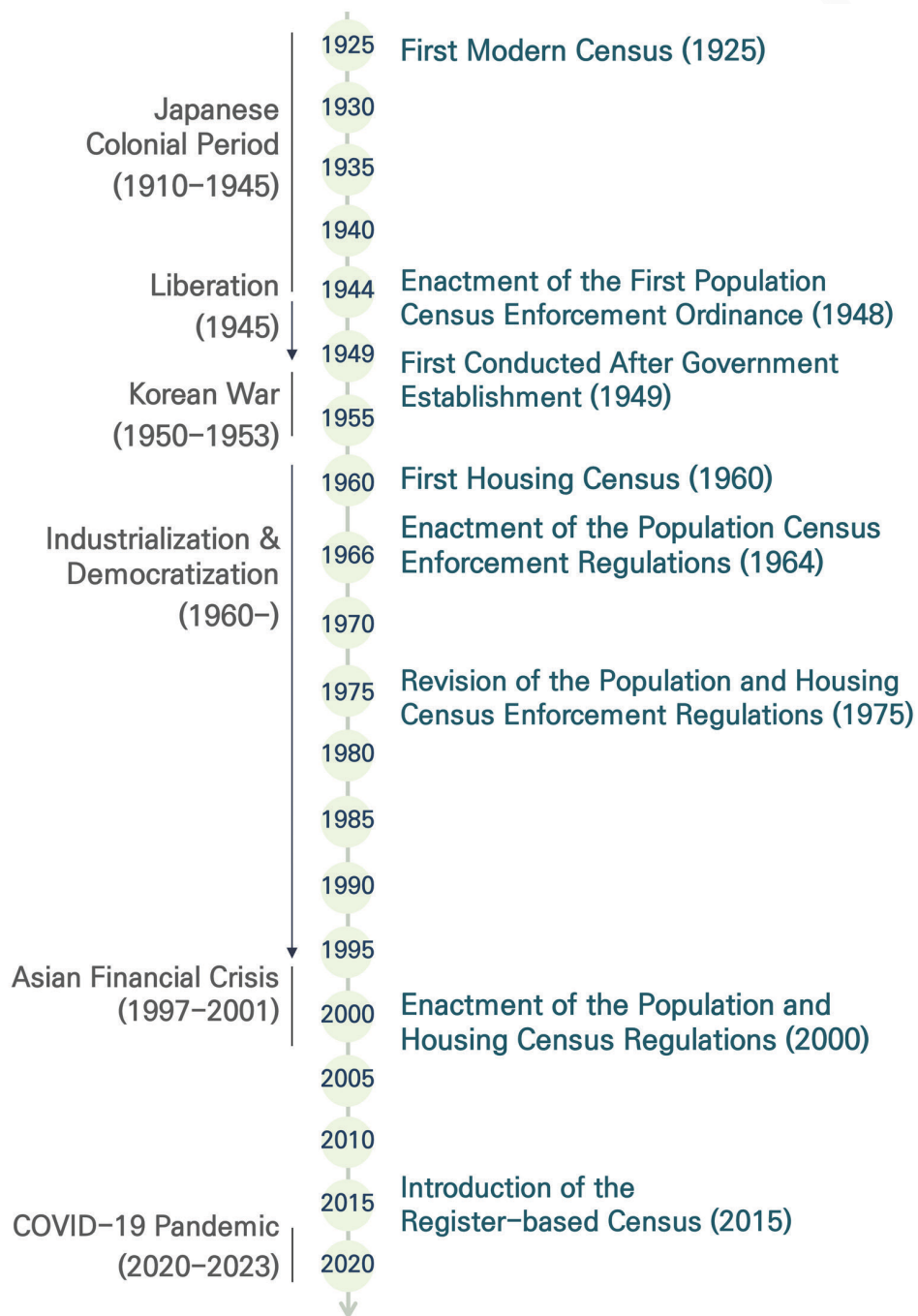


Figure 1-1. Korea's Modern and Contemporary History and the Population and Housing Census

The 100 years of census history, spanning Korea's modern and contemporary history, serve as vital evidence for reflecting on the past and diagnosing the present. This book analyzes the results of the Population and Housing Census, which has generally been conducted every five years, to examine how population, households, and housing have changed concerning socioeconomic phenomena over the past century. In this chapter, we will look back on the past 100 years and analyze the Population and Housing Census in conjunction with historical trends.

2. A Century of the Population and Housing Census in Korea

1) The Beginning of the Population and Housing Census

Korea's Population and Housing Census will celebrate its 100th anniversary in 2025, but the census 100 years ago differed significantly from today's in terms of coverage and organization for statistics. Currently, the Population and Housing Census is conducted in South Korea, but 100 years ago, it covered the entire Korean Peninsula. Although the Provisional Government of the Republic of Korea had been established in Shanghai, China, at the time, the census was planned and carried out executed by the Imperial Diet of Japan and the Government-General of Korea, the Japanese colonial ruling body in the Korean Peninsula.

During the Joseon Dynasty and the Korean Empire, the primary population record was the household register (*hojeok*). The household register was a base document regarding population and households. The Joseon Dynasty compiled the total number of households and individuals every three years by region and used it for governance and taxation.

The modern population census in the Korean Peninsula originated from the National Census conducted by Japan in 1925. Japan enacted a law concerning the National Census in 1902 and planned to conduct it in mainland Japan and its colonies in 1920. However, in the Korean Peninsula, the plan was disrupted due to difficulties in recruiting surveyors following of the *March 1st Independence Movement* in 1919, and the first census was conducted in 1925.

The National Census was conducted every five years from 1925 until 1940. The National Census was not conducted in 1945 due to the impact of the Pacific War, and a simplified

census was conducted in 1944, preparing for the impending total war. The units of the National Census were individuals and households, and the target was the *de facto* population based on October 1st of the census year as the reference date (with 1940 being an exception, using May 1 instead).¹⁾ This enumeration differs from the current Population and Housing Census, which targets the *de jure* population.

The survey items of the National Census were almost the same as those used in Japan (Table 1-1). The 1930 census enumerated place of birth, considering the migration due to industrialization and urbanization. From 1935 onwards, it added a question on usual place of residence. In 1940, questions related to World War II wartime mobilization significantly increased, including military service status, industry, and occupation. The 1944 census was not properly compiled due to Japan’s defeat in the war, and remains only as a simplified report.

Table 1-1. National Census Survey Items (1925–1940)

Year	Survey Items
1925	Name, Sex, Year and Month of Birth, Marital Status, Registered Domicile or Nationality
1930	Name, Sex, Year, Month, and Day of Birth, Marital Status, Registered Domicile or Nationality, Status in Household, Place of Birth, Occupation, Literacy
1935	Name, Sex, Year and Month of Birth, Marital Status, Registered Domicile or Nationality, Usual Place of Residence
1940	Name, Sex, Year, Month, and Day of Birth, Marital Status, Registered Domicile or Nationality, Status in Household, Industry and Occupation, Designated Talent, Military Service Status, Place of Birth, Registered Domicile

Source: Compiled from Park and Seo (2003), Yang (2023).

1) *De facto* population refers to the resident population at the census reference date, while *de jure* population is based on the usual resident population.

2) Establishment of the Republic of Korea and the Census

Japan's defeat in World War II and Korea's liberation brought significant changes to the census. Immediately after the end of the war, the U.S. military government was established in the Korean Peninsula, and a large-scale international migration took place as Koreans returned from Japan, Manchuria, and other regions, while Japanese residing in Korea were repatriated. During this process, confusion persisted regarding the boundaries of the nation, and the coverage of the census.

The U.S. military government and the transitional assembly in South Korea sought to abolish the Japanese-style household registers and establish Korean nationality between 1946 and 1948. Furthermore, they made efforts to ascertain resident information for general elections and the establishment of government through a registration certificate system. Administrative work related to statistics was gradually transferred from the U.S. military government to Korean government officials.

About five months after the establishment of the Korean government, on January 27, 1949, the *Census Act* (the first law dealing with statistics in Korea) was enacted. The act stipulated that a Population Census would be conducted every 10 years starting in 1950, and a simplified census every 5 years in the intermediate years, however, the first census was to be conducted in 1949. Labeling this census as *the first* signified that the legislature intended to mark a break between the pre-liberation National Census and Korea's census (Cho, 2014).

The first census after the liberation was conducted by the Korean government. In the *1948 Constitution of the Republic of Korea*, the territory of Korea was defined as *the Korean Peninsula and its adjacent islands*, and the *Census Act* defined the coverage as *the total population within the territory of the Republic of Korea*. However, the actual coverage

did not align with the Constitution and laws. This gap between constitutional definitions and statistical practice persists today.²⁾ A preliminary report was published in September 1949, but other data were lost during the Korean War (1950-1953).

Preparations for a census began after the Korean War and the Armistice Agreement. The 1955 census was more systematic than its predecessor, introducing specified statistical details such as enumeration districts. The reference date was set as September 1, 1955, and the results were published as reports in 1956-1957.

The survey items were more numerous than in 1949, such as name, status in the household, date of birth, sex, marital status, occupation, educational attainment, disability, previous residence, nationality, housing situation, and whether the household engaged in farming. Questions related to disability and previous residence reflected the injuries and migration caused by forced labor and conscription during the Japanese colonial period and the Korean War. It is also noteworthy that the housing item was included for the first time.

3) Population Statistics and Economic Growth

Industrialization and urbanization in the 1960s and 1970s promoted the systematization of statistical data collection and use, and strengthened the social role of statistics. During this period, a system for producing and managing statistical data across various fields was established through the enactment of the *Statistics Act* and related measures.

The 1960 census was advanced by incorporating many international census standards and techniques. Consequently, the 1960 Population and Housing Census has been referred to in the literature as the *first contemporary Population and Housing Census*. The census,

2) The current *Population and Housing Census Regulations* define the geographical scope as “the territory of the Republic of Korea”, and constitutionally “the territory of the Republic of Korea” encompasses the entire Korean Peninsula. But, in practice, the census only covers South Korea.

which was postponed by one year to 1966 due to financial issues, was regularized again from 1970.

Preparations for the 1960 census began soon after the 1955 census. Reviews of the *Statistics Act* bill began in 1956, and the need for reorganizing statistical administration was discussed at the State Council in 1958. The Statistical Advisory Group in South Korea,³⁾ which worked in Korea from 1958 to 1963, greatly influenced the systematization of statistics. The concept of *de jure* population was introduced, the number of survey items increased, and labor market participation and fertility were collected from 20% household samples. The modernization and computerization of statistical equipment also played a significant role in the advancement of data collection and analysis.

Survey items increased significantly in 1960 (Table 1-2). Items added in 1960 included school enrollment status, years of schooling, literacy, total number of children ever born, labor market participation, and employment status. The housing census was established, and it was conducted together with the population census. The 1960 housing census items were categorized into *Housing or Residence* and *Building*. The *Housing or Residence* items included housing tenure, years of residence, number of rooms, floor space, and type of facilities, while the *Building* items included the number of living quarters within the building, building type, wall and roof materials, building condition, and year of construction.

The 1960 and 1966 censuses are also important in that they were first used to support developmental strategies, such as population projections and family planning policies. The results of the 1960 and 1966 censuses were used to prepare for population projections published in 1964 and 1970, respectively. The Park Chung-hee administration promoted the family planning program as part of the *1st Five-Year Economic Development Plan* (1962–

3) The Statistical Advisory Group in South Korea was formed through collaboration among the Korean government, the U.S. International Cooperation Administration, and *Surveys & Research Corporation*. It greatly influenced the introduction of sample survey techniques and the enactment of the *Statistics Act* in 1962 (Yoo and Kim, 2008; Cho, 2016).

1966) to manage the population at an appropriate level, and census data were utilized in this process.

Table 1-2. Changes in Number of Population and Housing Census Items (1925-2020)

(Unit: number)

Year	Complete Enumeration			Sample Survey		
	Total	Population	Household/ Housing	Total	Population	Household/ Housing
1925	5	5	-	-	-	-
1930	9	9	-	-	-	-
1935	6	6	-	-	-	-
1940	11	11	-	-	-	-
1944	10	10	-	-	-	-
1949	11	11	-	-	-	-
1955	12	10	2	-	-	-
1960	35	17	18	-	-	-
1966	7	7	-	6	6	-
1970	14	7	7	16	9	7
1975	11	6	5	16	16	-
1980	22	6	16	18	18	-
1985	28	16	12	-	-	-
1990	33	11	22	10	8	2
1995	17	7	10	11	9	2
2000	20	8	12	30	21	9
2005	21	8	13	23(3)	16	4
2010	19	8	11	31(3)	20	8
2015	12(1)**	7(1)**	5	52	34	18
2020	16(1)**	8(1)**	8	55	33	22

Note: * The number in parentheses () is the number of items specific to provinces (do) and is included in the total number of items.⁶

** The number in parentheses () is an item only included in the register-based census. This includes family origin (*bon-gwan*) in 2015 and year of obtaining nationality in 2020.

Source: Compiled from Statistics Korea (2015) and Statistics Korea (2020) and supplemented by the authors.

The census reference date has been set as November 1 since 1980. In the 1990s, Statistics Korea became an independent agency responsible for statistical affairs. In the 2000 census, the overall framework of the 1990-1995 censuses was maintained, with only minor changes. In line with the information society, items on communication devices were added to the sample survey, and items regarding car ownership or parking facilities were added due to the increased number of automobiles. Additionally, items for the older population were added such as source of living expenses, caregivers, and mobility difficulties.

With the spread of awareness regarding personal information protection in the 2000s, the burden of face-to-face field surveys gradually increased. In response, a mixed-mode enumeration using both online and in-person interviews was introduced in 2010, and a register-based census method was introduced in 2015, which uses administrative data to derive information for complete enumeration items. Recently, the launch of the KOSIS (Korean Statistical Information Service) and the MDIS (Microdata Integrated Service) has dramatically improved public access to statistical data, allowing users to directly download and analyze microdata.

3. Changes in Population, Households, and Housing of Contemporary Korea

1) Population Change

Since liberation, Korea's population rapidly increased from 21.5 million in 1955 to 25.0 million in 1960, and 31.5 million in 1970 (Table 1-3). Population growth between 1960 and 1966 was particularly high, exceeding 15%. After exceeding 30 million in 1970, the population exceeded 40 million in 1985 and 50 million in 2015.

Population growth was prominent in urban areas during the 1960s and 1970s, which was a result of rural areas being transformed into cities and migration from rural areas to cities due to industrialization. In 1960, the proportion of the population residing in urban areas (*si*—currently *dong*) was 28.0%, but it rose to 41.2% in 1970 and exceeded 50% from 1980.

Table 1-3. Trends in Total Population and Proportion by Area (1955–2020)

(Unit: thousand persons, %)

Year	Nationwide						
		<i>Dong</i>		<i>Eup</i>		<i>Myeon</i>	
1955	21,526	5,281	24.5	-	-	16,245	75.5
1960	24,989	6,997	28.0	2,259	9.0	15,734	63.0
1966	29,192	-	-	-	-	-	-
1970	31,466	12,953	41.2	2,854	9.1	15,656	49.8
1975	34,707	16,793	48.4	3,723	10.7	14,187	40.9
1980	37,436	21,434	57.3	4,540	12.1	11,463	30.6
1985	40,448	26,443	65.4	4,817	11.9	9,188	22.7
1990	43,411	32,309	74.4	3,604	8.3	7,498	17.3
1995	44,609	35,036	78.5	3,484	7.8	6,088	13.6
2000	46,136	36,755	79.7	3,756	8.1	5,625	12.2
2005	47,279	38,515	81.5	3,944	8.3	4,820	10.2
2010	48,580	39,823	82.0	4,200	8.6	4,558	9.4
2015	51,069	41,678	81.6	4,775	9.3	4,617	9.0
2020	51,829	42,065	81.2	4,651	9.0	5,113	9.9

Note: 1) Up to 1990, it was *si*, not *dong*.2) In 1955, it was divided into *si* and *gun*.

Source: Statistics Korea, Population and Housing Census (KOSIS).

Following the *1st Five-Year Economic Development Plan* (1962-1966), industrial facilities and infrastructure were expanded across cities, prompting a rapid migration from rural areas to cities. In particular, the population of the capital city, Seoul, rapidly increased, and the proportion of it also continued to rise, reaching about 20% in 1975. As the concentration of population in Seoul intensified, the government announced various measures to alleviate overcrowding in the *Seoul metropolitan area*. This became the basis of

Korea's national land-use planning system today.

Concentration in the *Seoul metropolitan area*—*Seoul, Gyeonggi and Incheon*—became more prominent from the 1980s. In 1975, 8.9% of the nationwide population resided in Gyeonggi, but this proportion nearly doubled to 17.1% in 1995. The population share of Incheon also increased from 2.8% in 1975 to 5.2% in 1995. Although concentration in Seoul slowed down, as the population of Gyeonggi rapidly increased, over 50% of the total population resided in the Seoul metropolitan area in 2020. In contrast, rural populations rapidly decreased.

Since the 1980s, changes in the population began to deviate from the past increasing trend. While the total population had increased, the number of births significantly decreased (Table 1-4). The total fertility rate, which was 4.5 births per woman in 1970, decreased to 2.82 in 1980, and 1.66 in 1985. The annual number of births decreased from 1.0 million in 1970 to 0.66 million in 1985. Although the number of births decreased, the total population steadily increased as life expectancy rapidly grew. Life expectancy, which was 62.3 years in 1970, increased to 71.7 in 1990, and has continued to rise to 80.2 in 2010, and 83.5 in 2020.

The total fertility rate continued to decline until 2005, falling to 1.09. The total fertility rate briefly rose after 2005, recording 1.30 in 2012 and 1.24 in 2015, but then reverted to a decreasing trend, plummeting below 1.00 in 2018, and further to 0.84 in 2020 and 0.72 in 2023.

Korea entered a phase of population decline in the 2020s. The total population dropped by approximately 90,000 (-0.2%) from 51.8 million in 2020 to 51.7 million in 2021. Although the total fertility rate has consistently been below 1.5 births per woman since the early 2000s, the total population did not decrease until before 2020 as life expectancy increased. However, the population began to decrease for the first time in 2021, and again in 2022. Given the recent birth and death trend, the scale of natural decrease would grow larger.

Table 1-4. Key Population Trends (1970–2020)

(Unit: thousand persons, person, year)

Category	1970	1975	1980	1985	1990	1995	2000	2005	2010	2015	2020
Number of Births	1,006.6	874.0	862.8	655.5	649.7	715.0	640.1	438.7	470.2	438.4	272.3
Number of Deaths	258.6	270.7	277.3	240.4	241.6	242.8	248.7	245.9	255.4	275.9	304.9
Natural Increase	748.1	603.4	585.6	415.1	408.1	472.2	391.3	192.8	214.8	162.5	-32.6
Total Fertility Rate	4.53	3.43	2.82	1.66	1.57	1.63	1.48	1.09	1.23	1.24	0.84
Life Expectancy	62.3	64.2	66.1	68.9	71.7	73.8	76.0	78.2	80.2	82.1	83.5

Source: Statistics Korea, Vital Statistics (KOSIS).

The government, which had pursued population control policies before 2000, changed direction and began addressing the low fertility rate and aging society. The *Framework Act on Low Fertility and Aging Society* was enacted in 2005, and since 2006, the government has been establishing five-year basic plans for low fertility and aging society.

2) Household Change

Over the past 50 years, the number of households increased faster than the population (Table 1-5). The nationwide number of households increased more than threefold from 6.6 million in 1975 to 20.9 million in 2020. The number of households first exceeded 10 million in 1990 and exceeded 20 million in 2020. Unlike the population increase, which slowed down after 1995, the number of households has continued to increase steadily since then.

Table 1-5. Changes in Households by Size (1975–2020)

(Unit: thousand households, %)

Category	1975	1980	1985	1990	1995	2000	2005	2010	2015	2020
Total	6,648	7,969	9,571	11,355	12,958	14,312	15,887	17,339	19,111	20,927
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1 Person	281	383	661	1,021	1,642	2,224	3,171	4,142	5,203	6,643
	4.2	4.8	6.9	9.0	12.7	15.5	20.0	23.9	27.2	31.7
2 Persons	553	840	1,176	1,566	2,185	2,731	3,521	4,205	4,994	5,865
	8.3	10.5	12.3	13.8	16.9	19.1	22.2	24.3	26.1	28.0
3 Persons	815	1,153	1,580	2,163	2,636	2,987	3,325	3,696	4,101	4,201
	12.3	14.5	16.5	19.1	20.3	20.9	20.9	21.3	21.5	20.1
4 Persons	1,073	1,620	2,422	3,351	4,110	4,447	4,289	3,898	3,589	3,271
	16.1	20.3	25.3	29.5	31.7	31.1	27.0	22.5	18.8	15.6
5 Persons	1,218	1,597	1,863	2,140	1,667	1,443	1,222	1,078	940	761
	18.3	20.0	19.5	18.8	12.9	10.1	7.7	6.2	4.9	3.6
6 Persons or More	2,708	2,377	1,871	1,113	718	479	360	320	283	185
	40.7	29.8	19.5	9.8	5.5	3.3	2.3	1.8	1.5	0.9

Note: Based on general households.

Source: Statistics Korea, Population and Housing Census (KOSIS).

A key driver of this growth was the rise in one and two-person households. In 1975, the proportion of households with six or more persons was high at 40.7%, but it rapidly decreased to 29.8% in 1980, 9.8% in 1990, 3.3% in 2000, and 0.9% in 2020. Conversely, the proportion of one and two-person households consistently increased. The proportion of one-person households, which was less than 5% until 1980, first exceeded 10% in 1995 at 12.7%, reached 20.0% in 2005, and then exceeded 30% in 2020 at 31.7%. The proportion of four-person households increased from 16.1% in 1975 to a peak of 31.7% in 1995. It has

since continuously decreased, falling back to the 1975 level of 15.6% in 2020.

Until 2023, the increasing trend in the number of households has been sustained at an annual rate of 1.5% to 2.5%. Unlike the population, which has been declining since the 2020s, the number of households continues to grow and even saw an anomalous surge around 2020. Even with the population stagnant, approximately 300,000 to 600,000 households increased annually solely due to household formation.

3) Housing Change

Rapid industrialization, urbanization, and economic growth dramatically transformed housing in Korea. Through the high economic growth in the 1970s, national income and consumption levels improved, and cities rapidly changed. The replacement of hillside shantytowns and low-rise dwellings with high-rise apartment complexes occurred in most cities, but the change was particularly prominent in Seoul. Large-scale *New Towns* began to be developed on lands adjacent to the capital.

The number of houses rapidly increased from 4.4 million in 1970 to 7.4 million in 1990 and 14.7 million in 2010 (Table 1-6). Looking at the increase rate compared to five years prior, it was less than 10% between 1970 and 1975, but increased by more than 10% every five years thereafter. The increase was particularly large between 1990 and 1995, when the *Two Million Housing Units Construction Plan* was in place.

The increase in the number of houses, like population and households, proceeded faster in urban areas. The number of houses in urban areas⁴⁾ constantly increased from 1.8 million in 1975, exceeding 10 million in 2010 and reaching 14.4 million in 2020.

4) Here, urban areas refer to *dong*. In South Korea's administrative divisions, *eup-myeon-dong* are basic local administrative units, and *dong* refers to urban areas in usual.

Table 1-6. Changes in Housing Stock (1960-2020)

(Unit: thousands, %)

Category	1960	1970	1975	1980	1985	1990	1995	2000	2005	2010	2015	2020
Total Stock	4,465	4,434	4,816	5,434	6,271	7,357	9,570	11,472	13,223	14,677	16,367	18,526
	-	-0.7	8.6	12.8	15.4	17.3	30.1	19.9	15.3	11.0	11.5	13.2
Houses Used	4,378	4,360	4,734	5,319	6,104	7,160	9,205	10,959	12,495	13,884	15,298	17,015
	-	-0.4	8.6	12.4	14.8	17.3	28.6	19.1	14.0	11.1	10.2	11.2
Vacant Houses	87	74	82	115	167	197	365	513	728	794	1,069	1,511
	-	-14.9	10.8	40.2	45.2	18.0	85.3	40.5	41.9	9.1	34.6	41.3

Note: 1) Housing units in multi-family houses are not counted.

2) The 1960 figure is the number of living quarters. Caution is needed as the housing statistics at the time included many inadequate housing units such as shacks, tents, and dugouts.

Source: Statistics Korea, Population and Housing Census (KOSIS); Number of vacant houses before 1995 cited from Statistics Korea (2002).

Between 1970 and 2020, the dominant housing type changed from detached houses to apartments (Table 1-7). In 1970, the proportion of detached houses among all housing units was significantly high at 93.7%, but the proportion has since dramatically decreased. On the contrary, the proportion of apartments was less than 1% in 1970 but rapidly increased to 22.1% in 1990, 47.7% in 2000, and 62.9% in 2020—surpassing two-thirds of the housing stock. Since the mid-1980s, the proportion of row and multiplex houses has also significantly increased.

Table 1-7. Changes in Housing Stock by Type (1970-2020)

(Unit: thousands, %)

Year	Housing Stock								
		Detached Houses		Apartments		Row/Multiplex Houses		Houses in Commercial Buildings	
1970	4,434	4,155	93.7	33	0.7	146	3.3	25	0.6
1975	4,816	4,382	91.0	89	1.8	165	3.4	98	2.0
1980	5,434	4,652	85.6	374	6.9	162	3.0	131	2.4
1985	6,271	4,719	75.3	822	13.1	350	5.6	213	3.4
1990	7,357	4,727	64.3	1,628	22.1	603	8.2	202	2.7
1995	9,570	4,490	46.9	3,610	37.7	1,122	11.7	348	3.6
2000	11,472	4,269	37.2	5,480	47.8	1,322	11.5	401	3.5
2005	13,223	4,264	32.2	6,963	52.7	1,788	13.5	209	1.6
2010	14,677	4,089	27.9	8,576	58.4	1,851	12.6	161	1.1
2015	16,367	3,974	24.3	9,806	59.9	2,383	14.6	204	1.2
2020	18,526	3,898	21.0	11,662	62.9	2,752	14.9	214	1.2

Note: Housing stock from 1970 to 1990 does not include vacant stock due to data limitations.

Source: Statistics Korea, Population and Housing Census (KOSIS).

Although the population rapidly concentrated in Seoul in the 1960s and 1970s, housing supply lagged far behind. People who flocked to Seoul in search of jobs and opportunities often lived in informal settlements such as shanty towns in the city center. The government demolished the towns and forced residents to relocate. As displaced people located on the outskirts of Seoul or Gyeonggi, intense conflicts sometimes erupted between the government and residents. In the 1970s and 1980s, the development of *Gangnam*, located south of the *Han River* in Seoul, began.

In the 1980s and 1990s, redevelopment and reconstruction projects in residential areas and large-scale land development projects in suburban areas were carried out. As land development in *Gangnam* neared the final stage, the government expanded redevelopment plans to relocate displaced people on Seoul's outskirts. The political will to reorganize the urban landscape ahead of the 1986 Asian Games and the 1988 Seoul Olympics accelerated large-scale redevelopment. Tenants who could not afford the rapidly rising housing costs were forced out.

In the late 1980s, the Roh Tae-woo administration announced the *Two Million Housing Units Construction Plan* (1988-1992). This plan included the creation of first-generation *New Towns* around the Seoul metropolitan area and the supply of permanent rental housing.⁵⁾ The 1st phase of *New Towns* were all located in Gyeonggi, somewhat distant from the center of Seoul. As subways and urban expressways were expanded to strengthen connectivity between the *New Towns* and Seoul, the population of Gyeonggi rapidly increased, and the population commuting to distant regions also grew.

Redevelopment and land development, along with the boom in apartment construction and rapid increase in the number of households, fueled the rapid growth of the urban housing market. Development coincides with a process where houses affordable for low-income groups disappear along with the improvement of the physical environment. Amidst rapidly rising housing prices, new types of inadequate housing such as semi-basement units, rooftops, and cubicle dwellings (*gosiwon*) proliferated.

Since 2015, the number of houses has continued to grow at a moderate pace of 1.5% to 3.0% annually, similar to the household growth trend. With the onset of natural population decline, housing policies that once focused predominantly on expanding supply must now

5) Permanent rental housing, built to guarantee the housing rights of low-income groups, became the beginning of Korea's public rental housing policy, reflecting the demands of tenant and displaced community movements.

adapt to demographic transformation. Particularly, as population concentration in the Seoul metropolitan area perseveres, the issue of vacant and aging houses is emerging notably in rural areas. As the number of elderly and one- or two-person households increase, the necessity of a customized housing supply policy that carefully considers the size, facilities, and type of housing is being emphasized.

4. Conclusion

Over the past century, Korea's population, households, and housing have undergone several historical upheavals. Statistics, centered on the Population and Housing Census, were a broad process through which the state formed, governed, and communicated with society.

Korean society has rapidly transformed into its current state through urbanization, industrialization, and democratization. During the era of industrialization and urbanization, population growth control policies were devised, but as the fertility rate rapidly fell and the population structure changed, policies shifted to address the low fertility rate and aging society.

The Population and Housing Census reflects societal changes not only in its results but also in its process and implementation. Changes in items and data collection methods reveal not just technical shifts but also administrative priorities, people's lifestyles, and societal perceptions. Population change is not merely an increase or decrease in numbers, but a sign of what living conditions society is creating. The Population and Housing Census is a public record that has continuously observed and accumulated these changes.

Demographic statistics play a pivotal role in understanding and shaping modern Korean

society. In the future, changes in the number of households following population decline, the gap between the Seoul metropolitan area and non-capital areas, and the rising dependency ratio are difficult problems to solve. Demographic imbalances will place pressures on the healthcare and pension systems, and lead to labor force shortages. For the past 100 years, the Population and Housing Census has provided important base data for formulating strategies to address such challenges, and it will continue to do so in the future.

Changes in the Methodology of the Population and Housing Census

2025
Census
100th anniversary



1. Introduction

Currently, the Population and Housing Census in Korea uses a combined census method that mixes register-based census and field survey sampling methods. Around the early 2000s, statistical methods utilizing administrative data began to gain attention, and some Nordic countries had implemented administrative data-based censuses earlier. In most countries, a census is not only one of the most important types of national basic statistics but is also widely used for international comparisons. The United Nations provides guidelines for conducting a population and housing census to streamline the process.

The essential requirements for a census, as outlined by the UN DESA (2017), include individual enumeration, universality, simultaneity, periodicity, and the capacity to produce small-area statistics. A census that meets these five requirements plays a crucial role in monitoring social changes at both national and small-area levels.¹⁾ It is the primary national basic statistics most frequently used by central and local governments in planning various initiatives.

The Population and Housing Census plays a significant role due to its characteristic of being a complete enumeration. First, it provides a sampling frame for various population and household sample surveys. Second, it serves as a benchmark or parameter necessary for estimating and verifying other survey statistics, as well as basic data for derived statistics

1) Korea's population census is the only statistic capable of compiling demographic information at the level of small administrative districts (*eup, myeon, dong*) or below.

such as population and household projections. Third, the definitions of concepts and survey items, as well as data collection, field survey, and data processing methods used in the census influence other statistical surveys.

As the Population and Housing Census approaches its 100th anniversary in 2025, there have been many changes in the entire statistical process over the past century, including survey design, items, data collection, processing, publication of results, and data provision. The changes and developments in Korean society have significantly influenced the census, which reflects the socio-demographic transformations of society. Reflecting on changes in the methodology of Korea's Population and Housing Census over the past 100 years from the perspective that the past and present are pathways to the future can help promote further development.

2. Changes in Survey Methods

The modern Population Census in Korea, which encompasses all populations regardless of sex or social status, was first conducted in 1925 as the National Census (Table 2-1). After that, the Population and Housing Census was conducted every 5 years, with exceptions in 1944, 1949, and 1966. Since 1980, the reference date for the census has been changed to November 1st to better accommodate the seasonal conditions of fieldwork.

The census in Korea adopted its current form in 1960. This was when the first housing census was conducted, applying a sampling theory (20%) in the statistical process, using the concept of the *de jure* population instead of the *de facto* population, and conducting a post-enumeration survey to evaluate the accuracy of the census, thus becoming a more scientific survey. Until 2020, Korea primarily employed the dependent method for its post-enumeration surveys, in which existing survey results were provided in advance and

checked against actual data for consistency.

Table 2-1. History of the Population and Housing Census

Reference Date	Name	Characteristics
10. 01. 1925	National Census	First Population Census
10. 01. 1930	Joseon National Census	First survey of occupational items, conducted via self-reporting
10. 01. 1935	Joseon National Census	Surveyed using the de facto concept
10. 01. 1940	National Census	Results were unpublished
05. 01. 1944	Simple National Census	Conducted one year earlier for mobilizing labor during the wartime period of Japanese colonial rule; results were unpublished
05. 01. 1949	Population Census	Conducted one year earlier due to the establishment of the government in 1948 and the schedule for the National Assembly elections in 1950; all data except preliminary data were lost due to the Korean War
09. 01. 1955	Simple Population Census	Conducted with local administrative agencies under the Ministry of Home Affairs
12. 01. 1960	National Population and Housing Census	First housing Census, 20% sampling on labor force and fertility matters
10. 01. 1966	Population Census	Surveyed only the population sector, introduced a 10% sample survey for the first time
10. 01. 1970	Population and Housing Census	10% sample survey conducted simultaneously
10. 01. 1975	Population and Housing Census	5% sample survey conducted simultaneously
11. 01. 1980	Population and Housing Census	15% sample survey conducted simultaneously
11. 01. 1985	Population and Housing Census	Full field enumeration for all items
11. 01. 1990	Population and Housing Census	10% sample survey conducted simultaneously, introduction of OMR input method
11. 01. 1995	Population and Housing Census	10% sample survey conducted simultaneously, use of raster maps , first vacant housing survey
11. 01. 2000	Population and Housing Census	10% sample survey conducted simultaneously, use of numerical maps, PC local input and editing
11. 01. 2005	Population and Housing Census	Introduction of internet survey
11. 01. 2010	Population and Housing Census	-
11. 01. 2015	Population and Housing Census	First introduction of register-based census in complete enumeration (conducted annually thereafter), expanded sample survey to 20%
11. 01. 2020	Population and Housing Census	-

Source: Based on Statistics Korea (2002), supplemented by the authors.

It was not until 1966 that a sampling method was used in the survey design process, where a 10% sample enumeration district²⁾ was extracted for the sample survey. All households included in the sample enumeration districts were asked many survey items, while only basic items were collected from the remaining 90% of households in other areas. This approach enabled the simultaneous implementation of both a complete enumeration and a sample survey at the national level. The sample size varied slightly by year: 10% in 1970, 5% in 1975, and 15% in 1980. In 1985, all items were fully enumerated without a sample survey. From 1990 to 2010, the sample size was maintained at 10%. Starting in 2015, the sample size was expanded to 20% to produce statistics at a smaller level of administrative districts (*eup, myeon, dong*).

The 2015 Population and Housing Census marked a paradigm shift. The traditional complete enumeration, previously conducted through field surveys, was entirely transformed into a register-based census utilizing administrative data. This shift enabled the compilation of census results annually—rather than every five years—thereby improving both the timeliness and accuracy of the statistics. For sample survey items where administrative data were insufficient or unavailable, a field survey is still conducted every five years.

Survey methods can be classified into self-administered and interviewer-administered. The former refers to questionnaires completed by the respondents themselves, while the latter refers to questionnaires filled out by interviewers based on the respondents' answers. The 1925 census, the first modern census in Korea, was conducted through the interviewer-administered method, carried out with civil servants and other designated personnel. From the 1930 census, surveys during the Japanese colonial period (1910-1945) were self-administered. After Korea's liberation, the method of face-to-face interviews, where

2) An enumeration district refers to a designated section defined by geographic boundaries that includes a certain number of households (40 to 80 households).

interviewers visited households, was implemented.

The introduction of the internet survey method in the 2005 Population and Housing Census brought significant changes to data collection methods. As awareness of privacy protection spread during the 2000s, an increasing number of households became reluctant to face interviewers for statistical surveys. To overcome this, Statistics Korea decided to apply internet surveys as a non-face-to-face data collection method.

In the 2010 Population and Housing Census, the government encouraged people to participate in the online survey based on the experiences and advanced technology from 2005. Before interviewers visited households, anyone wishing to do so could respond online during the pre-interview period, allowing for a sequential and complementary combination of online surveys and face-to-face interviews. Nearly half of the households nationwide participated in the census through Internet surveys.

In the 2015 census, respondents could fill out the forms using personal computers, while face-to-face interviews were conducted by interviewers who visited households and completed paper forms. In the 2020 internet surveys, both personal computers and mobile phones were used, while tablets were primarily employed for face-to-face interviews instead of paper questionnaires.

3. Changes in Survey Items

The Population and Housing Census fundamentally includes survey items essential for understanding the size, distribution, structure, and characteristics of the population. Various socio-demographic variables, such as region, sex, and age, have become key survey items.

Items that are socially relevant or in high demand have been newly added, while those that are no longer necessary or have declined in significance may be removed.

In the evolution of items for Korea's Population and Housing Census, the survey cycle has also played an important role in shaping the items included (Table 2-2). The census conducted in years ending in zero were considered regular censuses and included a more comprehensive set of survey items. In contrast, years ending in five followed a simplified version with relatively fewer items. Since 2015, the introduction of the register-based census has replaced complete enumeration items with administrative data, leading to an overall increase in the number of items compared to the 2010 Population and Housing Census.

In the 1925 census, five items were surveyed: name, sex, date of birth, marital status, and place of origin (or nationality) (Table 2-3). In 1930, four additional items were introduced: relationship to the head of household, occupation, place of birth, and literacy. In 1935, one more item, place of residence, was added to the five from 1925, resulting in a total of six items. In 1940 and 1944, items related to Japan's war mobilization were included. In 1940, the census covered eleven items, such as place of origin, occupation, military service status, and place of birth. In 1944, the items for the relationship to the head of household, designated talent, and birthplace were removed from the list, while special talent and employment status were added, resulting in a total of ten items surveyed.

Table 2-2. Changes in Census Items

(Unit: number of items)

Category	1925	1930	1935	1940	1944	1949	1955	1960	1966	1970	1975	1980	1985	1990	1995	2000	2005	2010	2015	2020
Items	5	9	6	11	10	11	12	36	14	31	32	42	28	45	28	50	44	50	53	56
Full Field	5	9	6	11	10	11	12	36	8	15	12	24	28	33	17	20	21	19	12*	16*
Sample	-	-	-	-	-	-	-	-	6	16	20	18	-	12	11	30	23	31	52	55

Note: * Registration-based census.

Source: Statistics Korea.

Table 2-3. Changes in Census Items Since 1960

Census Item (First Enumeration)	1960	1966	1970	1975	1980	1985	1990	1995	2000	2005	2010	2015	2020
Name (1925)												*	*
Sex (1925)												*	*
Relationship to Head of Household (1930)												*	*
Date of Birth (1925)												*	*
Education (1949)													
Marital Status (1925)													
Labor Force Participation (1960)													
Industry (1960)													
Occupation (1930)													
Employment Status (1944)													
Total Number of Births (1960)													
Place of Birth (1935)													
Employment Before Marriage (2015)													
Women's Career Interruption (2015)													
Year and Month of Immigration (2010)												*	*
Year and Month of Nationality Acquisition (2017)													
Planned Number of Children (2005)													
Workplace (2005)													
(Elderly) Source of Living Expenses (2000)													
Social Activities (2010)													

Census Item (First Enumeration)	1960	1966	1970	1975	1980	1985	1990	1995	2000	2005	2010	2015	2020
Childcare (2000)													
Residence One Year Ago (1980)													
Residence Five Years Ago (1970)													
Commuting Status (1980)													
Commuting Location (1980)													
Modes of Transportation (1980)													
Commuting Time (1990)													
Age at First Marriage (1975)													
Years of Employment in Current Occupation (2000)													
Activity Limitations (1980)													
Religion (1985)													
Family Name (1985)													
Major/Field of Education (1980)													
Divided Families from North and South (2005)													
Personal Income (1975)													
Duration of Activity Limitations (2020)													
Care for Activity Limitations (2020)													
Household Classification (1955)													
Occupancy Type (1955)													

Census Item (First Enumeration)	1960	1966	1970	1975	1980	1985	1990	1995	2000	2005	2010	2015	2020
Type of Residence (1960)													
Total Number of Rooms (1970)													
Type of Housing Facility (1960)													
Year of Construction (1960)													
Duration of Residence (1960)													
Number of Co- resident Households (1960)													
Roof Material (1960)													
Exterior Wall Material (1960)													
Cultural Facilities and Appliances (1970)													
Cooking Fuel (1970)													
Heating Facilities (1980)													
Land Area (1980)													
Total Floor Area (1970)													
Rent (1985)													
Number of Rooms Used (1980)													
Number of Cars (2000)													
Parking Facilities (2000)													
Ownership of Housing in Other Regions (2005)													
Building and Floor of Residence (2005)													
Facilities (1985)													

Census Item (First Enumeration)	1960	1966	1970	1975	1980	1985	1990	1995	2000	2005	2010	2015	2020
Type of Drinking Water (1980)													
Child Residence Location (2000)													
Computer Usage Status (2000)													
Internet Usage Status (2000)													
Personal Portable Communication Device (2000)													
Heating Fuel (1980)													
Lighting Facilities (1970)													
Household Income (1990)													
Number of Households for Residence (1985)													
Reasons for One-Person Households (2020)													
Duration of Living Alone (2020)													
Pets (2020)													
Firefighting Facilities (2020)													

Note: 1) The year in parentheses indicates the first year of the enumeration.

2) Items marked with * indicate simultaneous compilation of administrative and survey data.

3) Items highlighted in orange are register-based census items.

Source: Based on Kim et al. (2021), supplemented by the authors.

In the 1949 census, 11 items were surveyed, including the place of residence at the time of liberation, military experience, and conscription experience, to figure out the situation of returnees at the time of liberation and the scale of conscription during the Japanese colonial

rule. In 1955, the census sought to better understand the circumstances after the Korean War by expanding to 12 survey items, which included disability status, date of registration and previous residence, housing situation, and whether the household was engaged in farming. This was the first time that items related to households were included.

In the 1960 census, a housing census that included a wide range of housing-related items was implemented for the first time. New items regarding labor force participation and fertility were also introduced, bring the census closer to its modern form. In 1966, due to budget constraints, housing items were excluded, and only the population sector was enumerated.

In the 1970 Population and Housing Census, housing-related items were reinstated, and for the first time, information on place of residence five years earlier was collected. The 1985 census included new items such as surnames, places of origin, and religion. In 1995, a vacant housing survey form was used to inquire about the presence of vacant houses and the reasons for vacancies.

The number of complete enumeration items was 19 in 2010. However, following the transition to a register-based census in 2015, items were reduced to 12: 7 related to the population, 1 to households, and 4 to housing. In 2020, 7 sample items were replaced with register-based items.

4. Changes in Data Processing and Dissemination

The Population and Housing Census contains a complete enumeration that collects data on the entire population, households, and housing. Due to the vast amount of data processing involved, it has sometimes taken several years to compile the statistics. To address this need, the introduction of computing technology and equipment was essential. From 1930 to 1955, data for the census was processed using the Punched Card System (PCS). In April 1967, the IBM 1401, the first mainframe computer in Korea, was introduced for handling census data. This marked a milestone not only in the development of the Population and Housing Census, but also in the history of computing (Statistics Korea, 2002).

In data processing, advancements in information and communication technologies—such as OMR (Optical Marker Recognition), OCR (Optical Character Recognition), and the internet—have modernized the data entry methods for the Population and Housing Census. After 2005, improvements in information and communication technology enabled the development of a survey management system that allowed real-time operation management, thereby enhancing the efficient management of human and material resources.

In processing data for the census, steps such as content review, data coding, and handling of non-responses are as crucial as data entry. In traditional field surveys, the content review stage is divided into manual and machine editing. Data collected in the field is manually verified at each levels of administrative districts before the survey forms are submitted to Statistics Korea, where they are digitized and reviewed according to pre-established rules.

The first detailed records of content review or data entry date back to the 1970 census, during which approximately 230 people carried out these tasks over a year (Kim, 2018). In

the 2005 census, an automatic coding system was developed and applied for the first time for the industry and occupation items. The automatic coding system was further expanded to include administrative divisions in the 2010 census.

The imputation technique for handling item non-responses was first introduced in the 1995 census. At that time, the *hot deck* method³⁾ was used to impute non-responses for key variables such as age, education level, marital status, and total number of household members. In 2010, a *hierarchical hot deck* method was introduced to reduce non-response errors. Since 2015, the imputation method has been automated through a developed system to enhance the accuracy and efficiency of data processing.

The most common method for disseminating results to users is through reports. Reports are categorized into preliminary reports, national reports, regional reports, and thematic reports (such as labor force participation, migration, and fertility). The data included in these reports have also been made available through the *Korean Statistical Information Service* (KOSIS). For in-depth analysis, microdata has also been provided. In 1993, 2% sample data from the 1990 Population and Housing Census was made available for the first time. Beginning in 2007, both 1% and 5% sample data became available. In 2013, 1% sample data from the 1960-2010 census results was made available free of charge, and since 2016, all 1% and 2% sample data have been provided free of charge.

3) It is a statistical method for handling missing values, which involves forming a replacement group using related variables and then replacing missing values within the group. The *hierarchical hot deck* method finds replacement values in the most similar group, and if none are found, it moves down to the next group in sequence.

5. Paradigm Shift in Census Methodology

Since the 2000s, the register-based census has gained attention in Korea as an effective alternative to reduce the response burden and the human and material resources required for field surveys. In 2008, Statistics Korea officially announced its plan to transition to a new census methodology. Following this decision, research was undertaken to explore how core items—such as population, households, and housing, which had previously been collected through full-field enumeration—could be replaced with administrative data sources.

The transition from the conventional field survey-based census to a register-based census methodology required extensive preparation. First, it was essential to establish the legal basis for the statistical use of administrative data, along with the relevant regulations and provisions for the protection of privacy. Second, constructing a comprehensive and integrated database from multiple sources of administrative data, the use of an appropriate linkage key was indispensable. Third, a system for the integrated management of various administrative data has been established to support the implementation of the register-based census. Fourth, Statistics Korea currently utilizes 25 types of administrative data obtained from 12 institutions and more than 100 universities to compile its register-based census. Key data include resident registration data and building registration data, which contain addresses for individuals and buildings, respectively. Therefore, Statistics Korea conducts quality checks on the acquired data each year to ensure the completeness of the linkage keys, to identify any changes in the content of the administrative data, and to verify the stability of the time-series data.

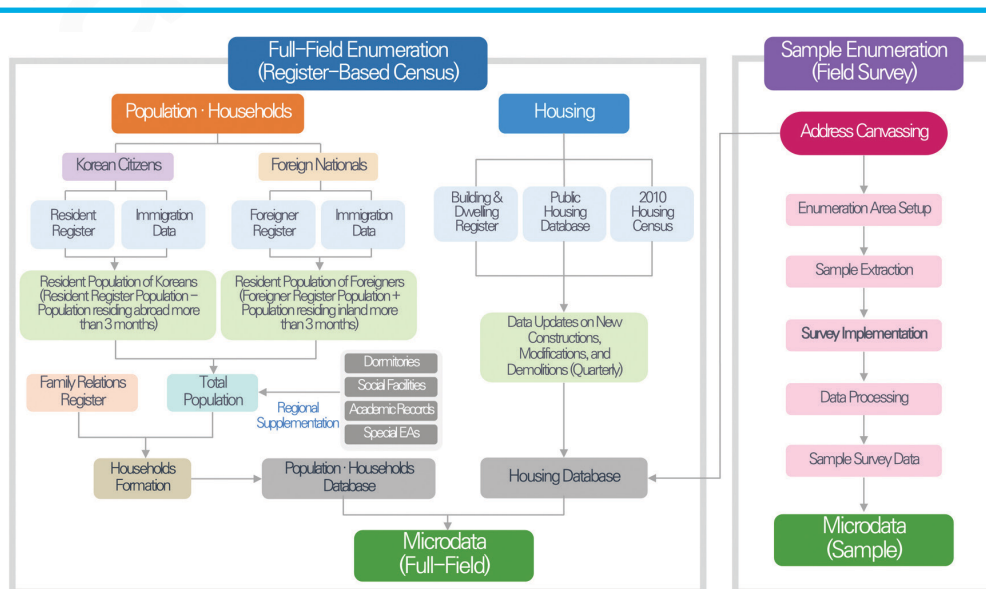
In the 2015 Population and Housing Census, most complete enumeration items were replaced with administrative data, while sample survey items were collected through field

surveys, as in previous censuses. However, at that time certain items education and marital status, which were previously included in the full field enumeration, were difficult to replace with administrative data and were therefore surveyed through the sample survey. Until 2010, statistics on the two items, which were part of the full field enumeration, were available down to the small administrative district level (*eup, myeon, dong*). However, following their transition to sample survey items, it became difficult to provide data at such a detailed level. Therefore, the sample survey size was expanded from 10% to 20% to provide statistics on these two items at the administrative district level on a five-year basis. Moreover, the 20% sample expansion also aimed to verify that the administrative data—particularly those related to housing—accurately reflected the actual situation in the field, as administrative data were used for the first time in 2015.

The register-based census method significantly reduces the costs compared to traditional field surveys, while also enabling the production of a broader range of statistics through the utilization of various administrative data. In 2020, new items on multicultural and single-parent families were produced using administrative data to enhance their applicability for policy-making. In the 2023 register-based census, there were more extensive changes in the range of statistics released to the public. Some population items, which were previously available only every five years, can now be provided annually. In this way, conducting the Population and Housing Census using administrative data allows for the possibility of further expanding the scope of published statistics through the acquisition of additional data.

The administrative data should undergo data processing procedures to be utilized in statistical production. The structure for constructing register-based census data is illustrated in Figure 2-1. First, using population-related administrative data such as the *Resident Registration*, the population is categorized into Korean citizens and foreign nationals. Based on immigration records, Korean or foreign nationals who have not resided in the country for more than three months are excluded from the census coverage. The compiled data on

The basic database for compiling housing statistics is created using *Building and Dwelling Registration* data and public housing price data, and is further supplemented with administrative data on newly constructed, reconstructed and demolished buildings. Finally, the *Address Canvassing*, conducted every five years, is used to verify registered information in the field. The results of this verification are reflected in the housing database, which serves as the basis for producing housing census statistics.



Source: Statistics Korea.

6. Conclusion

The population censuses conducted during the Japanese colonial rule are valuable statistical sources as they represent a complete enumeration of all residents within the territory. However, at that time, it was primarily utilized for colonial governance and war mobilization.

After liberation, the census became foundational data for government establishment and as the nation's primary basic statistics, providing essential information to support economic development plans and family planning during the 1960s. From the 1970s to the 1990s, it played a key role in providing fundamental information on social infrastructure, particularly concerning concentration in the Seoul metropolitan area, migration, and transportation. It also provided the target population and sampling framework for household sample surveys. In the 2000s, it served as foundational data for addressing emerging issues such as informatization, globalization, multi culturalism, and population ageing. Since the 2010 census, advancements in information and communication technology have enabled the adoption of internet-based survey methods. In 2015, the method for collecting complete enumeration items of the census shifted from face-to-face surveys to a register-based enumeration using administrative data, reducing the response burden and enabling the annual production of timely data.

Over the past 100 years, the Population and Housing Census has undergone many changes in response to shifts in society and the environment. Moving forward, both statistical producers and users should continuously review and improve the entire process—including survey design, data collection, processing, dissemination, and utilization—to ensure that the census can effectively fulfill its unique roles and functions.

Chapter 3

Population and Housing Census and GIS

2025
Census
100th anniversary



1. Introduction

The Population and Housing Census is the process of enumerating the total population across a defined geographic area at a specific point in time. It requires a range of strategic considerations to identify not only the total population but also the patterns of its geographic distribution. The geographical dimension must be thoroughly examined in its implementation, particularly the spatial framework used for the investigation which is a critical factor in the collection, publication, analysis, and visualization of data. In other words, *census geography*, which refers to the system of geographic subdivisions or entities in the implementation and publication of census results, must be importantly considered. Therefore, census geography has been adopted in major countries, including the United States and the United Kingdom, as well as South Korea.

Since the 1990s, rapid informatization and digitalization have changed census geography. Notably, GIS (Geographic Information Systems) has emerged as one of the most powerful tools. GIS integrates and manages both spatial and attribute data about geographic entities. Consequently, GIS has been increasingly utilized across all types of public and private sectors. Since the introduction of the National GIS (NGIS) in 1995, Korea has actively utilized GIS and applied it to the census.

In the early stages, the primary use of GIS was to create enumeration district maps for the efficient administration of the census. Over time, its application has gradually

expanded to the publication and dissemination of the collected data. Thus, GIS not only enhances the efficiency of census operations but also serves as a vital information infrastructure, generating significant benefits across various fields that utilize geo-spatial census data. Consequently, the application of GIS is transforming census geography into a spatial platform that supports the entire Population and Housing Census. This chapter examines trends and applications of GIS in census operations in Korea.

2. Trends in GIS Utilization in Censuses

The United States has been a pioneer in proactively utilizing GIS in census operations. The United Kingdom is also one of the countries actively utilizing census geography, characterized by the use of automated methods for delineating census units.

Laaribi and Peters (2019) outline the potential applications of GIS across three stages of the census process: pre-enumeration, enumeration, and post-enumeration (Figure 3-1). GIS supports survey planning and field operations, enhances the efficiency and accuracy of data collection, and contributes to diverse analyses and data dissemination.

The goals of GIS-based Census:

- Support for the planning process of the census
- Field survey implementation and management
- Enhancing the efficiency and accuracy of data collection
- Support for data analysis
- Contribution to data dissemination
- Data analysis and evidence-based decision-making
- Integration of attribute information and geographic information for future census and survey support
- Basis for defining survey boundaries

Utilization of Maps

- Support for data collection and monitoring
- Facilitate analysis, visualization, and dissemination of data, as well as support processes during the preparation period for future censuses

Pre-Enumeration

Updates of Geodatabase and enumeration area maps
Optimization and editing of enumeration areas
Optimization of enumeration area assignments
Planning and preliminary survey

Enumeration

Human resource management, implementation
Monitoring and operational management

Post-Enumeration

Data dissemination
Thematic and online maps
Maps drawn from results
Others

Figure 3-1. Utilization of GIS by Census Stage

Source: Laaribi and Peters (2019).

In the census preparation stage (pre-enumeration), GIS can be utilized for updating base data and maps, editing and delineating (and optimizing) enumeration districts, mapping, and optimal assignment of survey tasks. Particularly during the establishment of enumeration districts and output areas, GIS zoning procedures play a crucial role by enabling consideration of various factors such as ease of boundary identification, consistency with administrative hierarchies, population size, and privacy protection. Additionally, by integrating reference information for each assigned enumeration district (e.g., boundary, roads, buildings, major landmarks) with address information, GIS can facilitate the efficient production of field maps to support the enumeration process.

During the enumeration stage, GIS is applied to manage enumerators' tasks, support field survey operations, and monitor survey progress and results. With recent advancements in mobile GIS, enumerators can now use mobile devices such as tablets to visit sites and input

data.

In the post-enumeration stage of the census, GIS can be utilized for data dissemination, thematic mapping, and response rate analysis. It is also applicable to the process of organizing and aggregating data by defined spatial units for publication. Data aggregation process begins with the most detailed enumeration districts and involves merging contiguous areas into higher-level spatial units for analysis or publication. This process can be efficiently managed through GIS operations.

Data aggregated by specific spatial units can be visualized through various types of thematic maps and graphs. GIS enables the production of interactive, web-based thematic mapping tools, as well as the publication of visualized results across various media platforms.

3. Planning and Implementation Process of Census in Korea and GIS

1) Delineation of Enumeration Districts and Production of Maps

Since the 1990s, research in Korea has explored the integration of maps and GIS into census operations. In the census planning stage, GIS primarily supports the delineation of enumeration district and the production of enumeration district maps. In the early 2000s, the introduction of new address system led to the creation of road name address maps, which were used alongside existing digital maps.

The 2000 and 2005 censuses saw increased adoption of GIS in the planning phase, particularly for delineating enumeration districts and producing field enumeration maps.

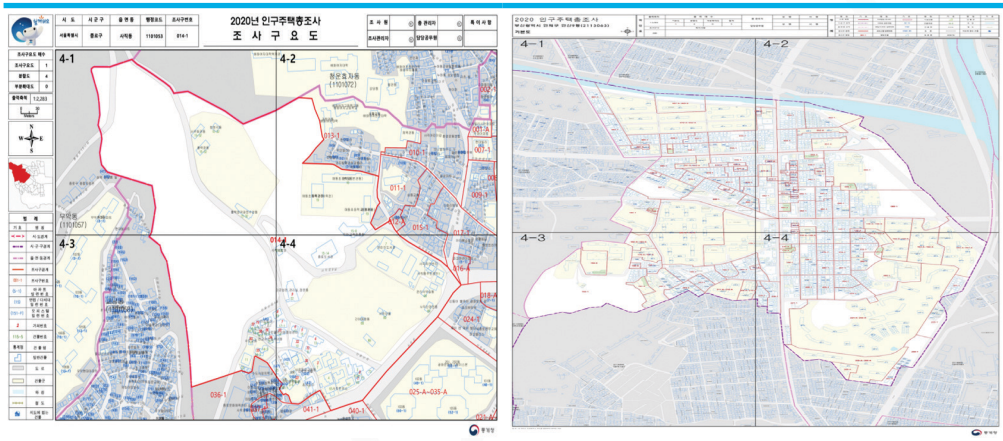


Figure 3-2. Enumeration Map for the 2020 Population and Housing Census

Source: Statistics Korea (2021).

By the 2020 census, Statistics Korea introduced Computer-Assisted Personal Interviewing (CAPI) using tablet PCs, supported by GIS-based system for establishing enumeration districts and creating field enumeration maps (Figure 3-2).

2) Setting Output Areas and Various Statistical Areas

In the past, Korea used administrative units of *eup/myeon/dong* as the smallest spatial unit for publishing statistical data. However, growing demands for small-area statistics highlighted the need for a new spatial unit for data publication (Figure 3-3). In many advanced countries, enumeration and publication units were initially aligned but have increasingly diverged with advancements in GIS technology.

Consequently, research on output areas began in the 2000s in Korea. These output areas, which are larger than enumeration districts (used for data collection) and basic unit districts (semi-permanent statistical units) but smaller than administrative units, were established as the smallest units for statistical publication.

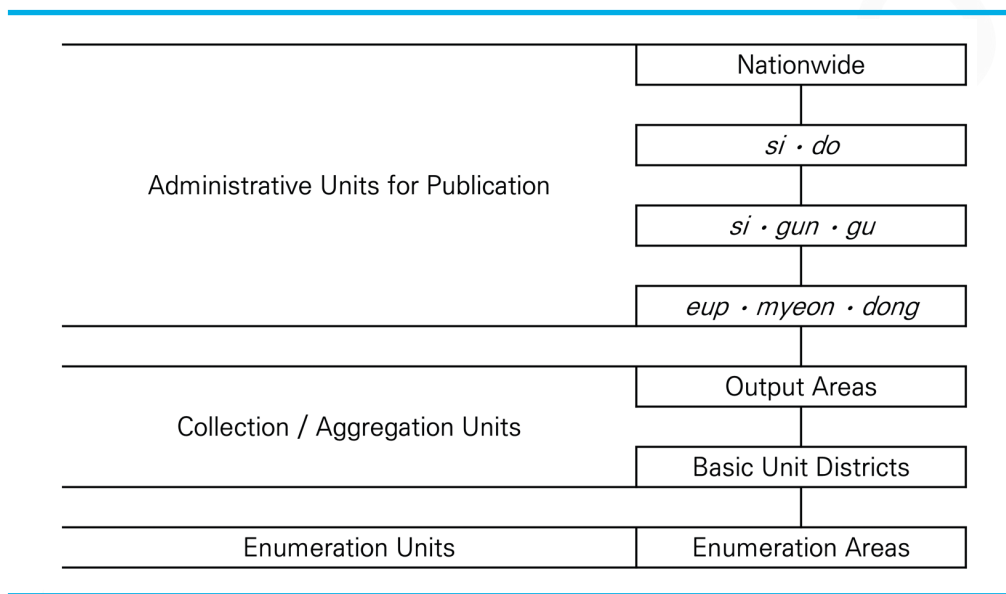


Figure 3-3. The Statistical Regional Classification System of Korea

Source: Statistics Korea (2017).

In addition to administrative units and output areas, various spatial units have been established for statistical publication in Korea, with GIS playing a key role in their delineation and data provision. As of 2023, Statistics Korea provides core statistical data at the levels of administrative units, output areas, and grids (minimum 100m×100m).

Recently, Statistics Korea began providing grid-based statistics independent of administrative or output area boundaries. Unlike administrative units or output areas, which may change over time, the grid system uses fixed spatial units, facilitating the analysis of time-series trends. The grid cells are available in multiple resolutions: 100m, 500m, 1km, 10km, and 100km. The Statistical Geographic Information Service (SGIS) provides downloadable GIS data for administrative units and other statistical boundaries.

3) GIS in the Implementation of Census

Traditionally, GIS applications in Korea's census have focused on planning, preparation, and data dissemination, with relatively limited application during field operations. Recently, GIS has been increasingly integrated into field operations, enabling real-time updates of new information to databases for enumeration districts and field enumeration maps.

Even after the introduction of the register-based census in 2015, sample surveys have persistently relied on in-person field visits. For the 2020 census sample surveys, GIS-based maps integrated with GPS on tablet devices enabled not only the identification of the enumerators' and survey locations' positions, but also the immediate entry of survey results in the field (Statistics Korea, 2021). These advancements brought significant changes to the field survey system, including the ability to manage field operations in real time.

4. Aggregation and Dissemination of Census Data

1) Data Aggregation and Spatial Database Construction

The census enumerates the population within a designated area based on the residences of respondents. Since the introduction of the register-based census in 2015, addresses of households have been collected by integrating multiple administrative records, including resident registration data. If these addresses are linked to output

areas, GIS can efficiently identify the corresponding areas. GIS is also effective when updates to the linkage between addresses and output areas are needed due to changes in boundaries.

Table 3-1. Procedures for Building a Spatial Database in the Census

Procedure	Description
Raw Data Collection	Statistical enumeration maps, road name address maps, cadastral maps, etc.
	
Boundary Modification	Modification of administrative units, basic unit district, and enumeration district boundaries
	
Geocoding	Extracting coordinates using the latest road name addresses, register-based census data, national business survey coordinates, building management numbers, etc.
	
Confirmation of Statistical Boundaries	Updating basic unit district attribute information using register-based census population and housing type, and cadastral land characteristic information Utilizing programs to delineate enumeration and urbanization boundaries
	
Census Data Individual Spatial Database Construction	Constructing individual spatial databases for population, households, housing, agriculture, forestry, fisheries, and businesses Constructing basic data (enumeration districts, etc.) and linking statistical items and service data marts
	
Map Production	Producing service maps and national enumeration maps

Source: Statistics Korea (2023).

GIS has been actively utilized in the process of constructing databases from census aggregation results and delivering related services. Statistics Korea maintains and manages not only enumeration districts but also boundaries for data aggregation and dissemination, such as statistical output areas and administrative divisions. By linking aggregated statistical results to these spatial boundaries, a GIS-based census database is established (Table 3-1). Since 2000, SGIS has been continuously developing and maintaining GIS databases related to the census.

2) Online Services for the Census

Providing statistical data alongside maps through GIS is the most effective and efficient approach. In Korea, SGIS provides census and other national statistics in a GIS-based platform. Since its pilot launch in 2006, SGIS has continued to evolve, expanding into more interactive and customized services.

Among the core services provided by SGIS, the most important is web GIS, which presents map-based statistics across various spatial levels. The two flagship tools are *Thematic Statistical Maps* and *Interactive Statistical Maps*, both offering access to a wide range of census items.

Thematic Statistical Maps display pre-defined variables for administrative units in formats like choropleth or symbol maps. *Interactive Statistical Maps* allow users to select detailed indicators from the census (e.g., population by age, single-person households) and visualize them at various spatial units, including output areas and grids.

SGIS provides a data download service. While census data in tabular format can be accessed and downloaded by administrative units via the *Korean Statistical Information Service* (KOSIS), SGIS also allows users to download spatial boundary data, including output areas and grids, so that attribute data and spatial data can be linked.

5. Conclusion

During the census process, GIS has been actively utilized in the stages of planning, preparation, and data dissemination. However, its role in census implementation remains limited to maintaining map-based information and references for enumeration districts. For effective GIS-based census operations, a clear design of the logical relationships among survey subjects (population, households, and housing) is essential, and these must be integrated within a GIS environment.

The following improvements are necessary to build a more integrated GIS environment. First, the current location data for individuals and households are managed primarily based on address registries, which limits their spatial linkage to map(geographic location)-based dwelling. Therefore, it is necessary to integrate and link actual locations (coordinates) associated with addresses and the buildings (detailed housing information) connected to them.

Furthermore, survey subjects should be systematically connected with enumeration districts and output areas to facilitate effective management of boundary changes. When individual survey targets, enumeration districts, output areas, and administrative units are consistently linked within a GIS environment, it becomes possible to promptly reflect boundary changes—such as those in output areas—during the register-based census process.

In addition, incorporating geographic coordinates with address data during face-to-face surveys for field verification and data entry can significantly enhance aggregation efficiency. The system should also enable immediate input of field observations via mobile devices and support the use of up-to-date aerial imagery to monitor the creation or demolition of

dwellings. Lastly, integrating this system with a task management platform would enable real-time, map-based monitoring of census operations, allowing for timely data review and minimizing errors.

Population Growth and Demographic Transitions

2025
Census
100th anniversary



1. Introduction

Since the 1960s, Korea has experienced a rapid decline in fertility and mortality rates due to government-led economic development plans and the implementation of family planning programs, and by the mid-1980s, both rates had dropped to levels comparable to European countries. In the late 1990s and early 21st century, Korea faced socioeconomic instability due to events such as the *Asian Financial Crisis* (1997-1998) and the *Global Financial Crisis* (2007-2008), entering an era of ultra-low fertility with total fertility rates (TFR) below 1.3. By 2023, the TFR had plummeted to 0.72. With an extremely low TFR and a decreasing number of newborns, a sense of crisis over population decline has begun to intensify.

Population growth refers to the difference in population size between two specified time points, while demographic change encompasses changes in demographic and socioeconomic structures alongside the total population. This chapter analyzes the process of demographic transition in Korea over the past century based on the results of the Population and Housing Census, dividing it into five stages: traditional growth period (before 1910), early transition period (1910-1945), demographic turbulence period (1945-1960), late transition period (1960-1985), and post-transition period (after 1985). For each stage, the main characteristics are examined by considering indicators of fertility, mortality, and migration, as well as political, economic, and social characteristics.

This classification address some issues. In particular, it is difficult to clearly distinguish between the traditional growth era and the early transition period during the Japanese colonial rule. The continuity of population estimates between the traditional surveys of the Joseon Dynasty and the 1925 census (National Census) is hard to measure, and estimates from earlier times are often inaccurate.

While most European countries completed their demographic transitions over 150 to 200 years, Korea experienced a rapid and compressed trajectory. Korea entered a period of ultra-low fertility without having sustained its total fertility rate (TFR) at the replacement level for long. The post-transition period, often referred to as the *Second Demographic Transition*, has led to population decline. Korean society now faces the challenge of low fertility and aging populations (Table 4-1).

Table 4-1. Key Characteristics of Demographic Transitions in Korea

Category		Traditional Growth	Early Transition	Demographic Turbulence	Late Transition	Post-Transition
Period		Before 1910	1910-1945	1945-1960	1960-1985	After 1985
Total Growth		Repeated increases and decreases, nearly stagnant growth	Rapid growth with mortality improvements	Rapid growth except for the Korean War period	Continuous decline in growth rate	The growth rate approaches zero, transitions to population decline, and an accelerated population decline
Population Change Factor	Fertility	High fertility, emergence of fluctuations	High fertility	High fertility, fluctuations	Sharp decline to replacement level	Fertility below 1.0, sharp decrease in births
	Mortality	High mortality, emergence of fluctuations	Start of overall decline	Continued decline, return to high mortality from 1945-1955	Continued decline in mortality rate	Increased life expectancy; however, rising crude death rate
	International Migration	Negligible	Movement to Japan and Northeast China (Manchuria)	Return from Japan/China, influx of refugees after the Korean War	Slight increase in overseas migration of Koreans since the 1970s	Gradual increase in immigration of foreigners
Political and Socioeconomic Context		Agricultural society; periodic occurrences of war, disease, famine	Japanese colonial rule, exploitation policies, introduction of vaccinations and healthcare facilities	Liberation, the division of Korea, Korean War, economic aid and uncertainty	High economic growth, urbanization, family planning projects	Stable growth, <i>Asian Financial Crisis</i> , <i>Global Financial Crisis</i> , social development, educational expansion, COVID-19 pandemic, economic instability due to job shortages and rising housing costs

2. Population Changes Before Liberation

1) Traditional Growth Period

Before the Demographic Transition (Before 1910)

While accurate data on population growth or population size in traditional society is not available, it is possible to estimate the population changes of that time through historical records that remain prior to the implementation of modern population and housing censuses. The earliest record relevant to the population of the Korean Peninsula appears in a Chinese historical text written in the 1st century, which states that around 108 BC, there were approximately 63 thousand households and 407 thousand people living in the northern region of Korea. During the Three Kingdoms period (*Goguryeo*, *Baekje*, and *Silla*), frequent wars, disasters, and especially famines caused significant population changes.

Household surveys during the Joseon Dynasty were first conducted in 1392, when the Joseon Dynasty was founded, and were carried out intermittently until the Japanese colonial period in 1910. However, the concept of *households* in those surveys significantly differs from modern definitions, and the accuracy and completeness of the surveys were severely limited. Only rough estimates of population size and growth during the Joseon Dynasty can be made.

2) Early Transition Period (1910-1945)

With the onset of Japanese colonial rule, the census was conducted in 1925 under the

name of the National Census. Western healthcare and public health system (such as disease control and smallpox vaccination), which began to be introduced in the late Joseon Dynasty, spread nationwide as part of Japanese colonial rule, resulting in a gradual decline in the crude death rate starting around 1920. In contrast, the crude birth rate remained high with little change, showing a slight increase until the early 1920s.

As a result, the population during the early transition period increased sharply. According to the census conducted in 1944, near the end of colonial rule, the population reached approximately 25.9 million, representing a 32.7% increase compared to 1925 (Table 4-2, Figure 4-1).

The rapid natural increase in population resulting from declining mortality rates during the early transition period heightened population pressure on land, leading to serious problems, especially in rural areas. As the rural economy deteriorated under colonial economic policies, large-scale outmigration from rural areas ensued. However, most cities on the Korean Peninsula at that time had a low level of industrialization and lacked the capacity to absorb the displaced rural population.

Table 4-2. Population Growth in Korea (1925-2020)

(Unit: thousand persons, %)

Year	Reference Date	Total Population	Annual Average Growth Rate
Japanese Colonial Period (1910-1945) : South and North Korea			
1925	Oct 1	19,523	-
1930	Oct 1	21,058	1.5
1935	Oct 1	22,899	1.7
1940	Oct 1	24,326	1.2
1944	May 1	25,900	1.6
Post-Liberation : South Korea			
1949	May 1	20,189	-4.9
1955	Sep 1	21,526	1.1
1960	Dec 1	24,989	3.0
1966	Oct 1	29,160	2.6
1970	Oct 1	30,882	1.4
1975	Oct 1	34,707	2.4
1980	Nov 1	37,436	1.5
1985	Nov 1	40,448	1.6
1990	Nov 1	43,411	1.4
1995	Nov 1	44,609	0.5
2000	Nov 1	46,136	0.7
2005	Nov 1	47,279	0.5
2010	Nov 1	48,580	0.5
2015	Nov 1	51,069	1.0
2020	Nov 1	51,829	0.3

Source: Statistics Korea, Population and Housing Census (KOSIS).

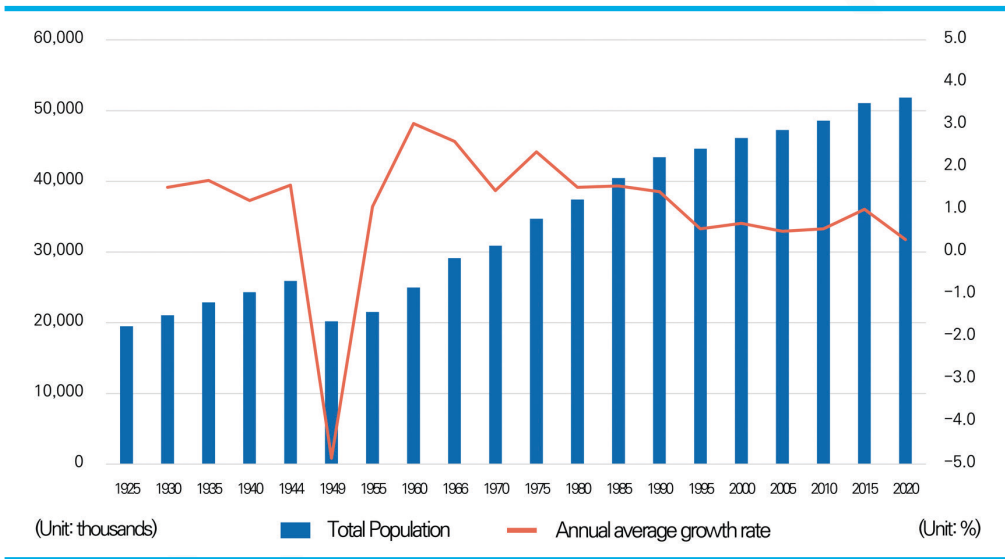


Figure 4-1. Population Growth in Korea (1925-2020)

Note: The left axis represents total population (thousands),
and the right axis represents the annual average growth rate (%).

Source: Statistics Korea, Population and Housing Census (KOSIS).

Consequently, emigration during this period was directed primarily toward Manchuria and Japan. The largest overseas migration occurred between 1935 and 1940, with a net outflow of 0.5 million people to Manchuria (Kim, 1999). In the 1940s, overseas migration primarily took place in the context of Japan's wartime mobilization, particularly through conscription and forced labor following the outbreak of the Pacific War. This large-scale overseas migration was a major determinant of the level and trends of the population along with the decline in mortality rates.

3. Population Changes After Liberation

1) Demographic Turbulence Period (1945-1960)

During the 15 years following liberation from Japanese colonial rule, Korea experienced significant political and social turmoil due to the US military administration (1945-1948), the Korean War (1950-1953), the April 19 Revolution (1960), and the May 16 Military Coup (1961). This period was also the most chaotic in modern Korean demographic history. At the time of liberation in 1945, the population of South Korea was estimated to be around 16 million. However, between 1945 and 1949, a large number of people returned from Japan and Manchuria, along with substantial migration between North and South Korea, making it difficult to estimate an accurate population figure.

Despite the social disruption and economic difficulties, the population of South Korea increased substantially during this period of demographic turbulence. During the Korean War, there was a large influx of antibiotics and other medical supplies. The distribution of pharmaceuticals in the postwar period contributed to a sharp decline in mortality rates, particularly infant mortality. The crude death rate from 1955 to 1960 was 16.1 per thousand, a 51.2% decrease compared to the 1950-1955 period.

Fertility rates remained relatively high throughout this period. Despite the separation of couples, delays in marriage, and a significant increase in widows during the Korean War, fertility did not show a marked decline. As delayed marriages and births resumed after the war, the birth rate surged during the post-war baby boom from the late 1950s to the early 1960s.

The demographic turbulence from 1945 to 1960 had a significant impact on subsequent

population growth, domestic migration, and socioeconomic changes after 1960. The average age of first marriage rose sharply between 1940 and 1960: from 17.8 years to 21.5 years for women, and from 21.8 years to 25.4 years for men.

2) Late Transition Period (1960-1985)

Starting in the 1960s, Korea experienced rapid economic growth accompanied by accelerated urbanization and a significant concentration of the population in metropolitan areas. This marked a transition into the late phase of the demographic transition, characterized by a sharp rise in population. The early 1980s is often noted as a time at which Korea completed the classical demographic transition.

A key feature of the demographic phenomena during this period was the decisive impact of state-led population policies, which prioritized economic growth as the most important goal. In the early 1960s, the high fertility rates due to the baby boom and the sharply declining mortality rates created significant population pressure. In response, the government incorporated population control policies into its national economic development strategy, launching a large-scale state-managed family planning program in 1962. This initiative was aggressively promoted by the state and played a crucial role in reducing fertility. The crude birth rate and total fertility rate were recorded at 31.2 and 4.53, respectively, in 1970, but decreased to 16.1 and 1.66 by 1985.

The decreasing pace of the mortality rate began to slow in the late 1970s. Life expectancy for both men and women rose from 48.5 years and 55.9 years in 1960-1965 to 65.9 years and 72.7 years by 1985 (Kwon, 1977; Statistics Korea, 2002). These improvements were driven by rising living standards resulting from economic growth, expansion of healthcare facilities, and the introduction of systems such as the National Health Insurance Service (NHIS).

During the late transition period, international migration was limited, and natural increase accounted for most of the population growth. The proportion of women of reproductive age (15-49 years) in the population reached its lowest point at 22.6% (6.6 million) in 1966 from 23.6% (5.9 million) in 1960, but continued to increase to 23.6% (7.3 million) in 1970, 24.8% (8.6 million) in 1975, 26.4% (9.9 million) in 1980, and 27.5% (11.1 million) in 1985.

3) Post-Transition Period (Since 1985)

In the late 1980s, Korea's total fertility rate fell below 2.0. After 1985, the late transition period came to an end and a new demographic turning point of continued ultra-low birth rates was reached. Beginning around 1910 under Japanese colonial rule, Korea underwent the stages of classical demographic transition. By the late 1980s, it exhibited fertility and mortality rates comparable to those of advanced industrial countries. However, the demographic changes in Korea during the post-transition period have followed such a unique trajectory—particularly intensifying in the 21st century—that comparable cases are virtually nonexistent.

Since 1985, the level of fertility in Korea has shown a sharp decline. Improvements in living standards, rising aspirations for upward social mobility, and the significant increase in the cost of raising children have led to the widespread adoption of low-fertility preferences. Following the *Asian Financial Crisis*, the TFR fell to 1.48 in 2000, and the crude birth rate to 13.5.

Having completed all phases of demographic transition by the late 1980s, Korea appeared to be approaching a stable demographic trend typical of developed countries. However, in the 21st century, the population has entered a period of significant instability. In 2001, the crude birth rate and TFR dropped to 11.7 and 1.31, respectively. Since that time, the TFR has remained below 1.3, reaching an all-time low of 0.72 in 2023. Korea's post-

transition period has moved from a low birth rate just below the replacement level (TFR 2.1) to persistent ultra-low fertility (below 1.3), and since 2018, it has remained under 1.0 (Figure 4-2). These trends have been shaped by a range of socio-economic factors including COVID-19, employment insecurity among young adults, and housing unaffordability. Furthermore, as the number of women of reproductive age continues to shrink, the number of births has fallen sharply, driving the onset of natural population decline.

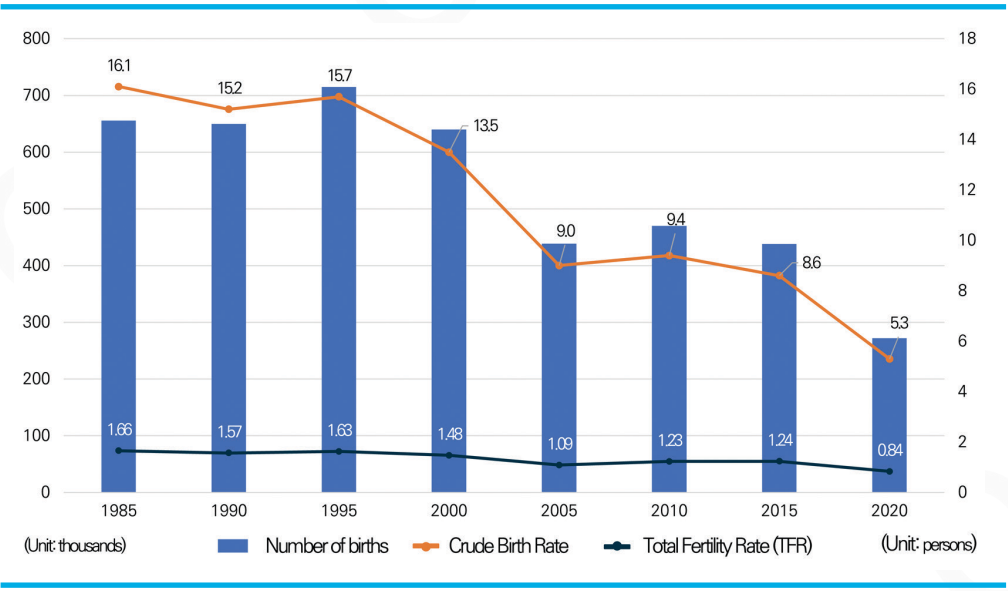


Figure 4-2. Changes in Births in the Post-Transition Period (1985-2020)

Note: The left axis represents the number of births (thousands) and the right axis represents the crude birth rate (persons per 1,000) and total fertility rate.
 Source: Statistics Korea, Vital Statistics (KOSIS).

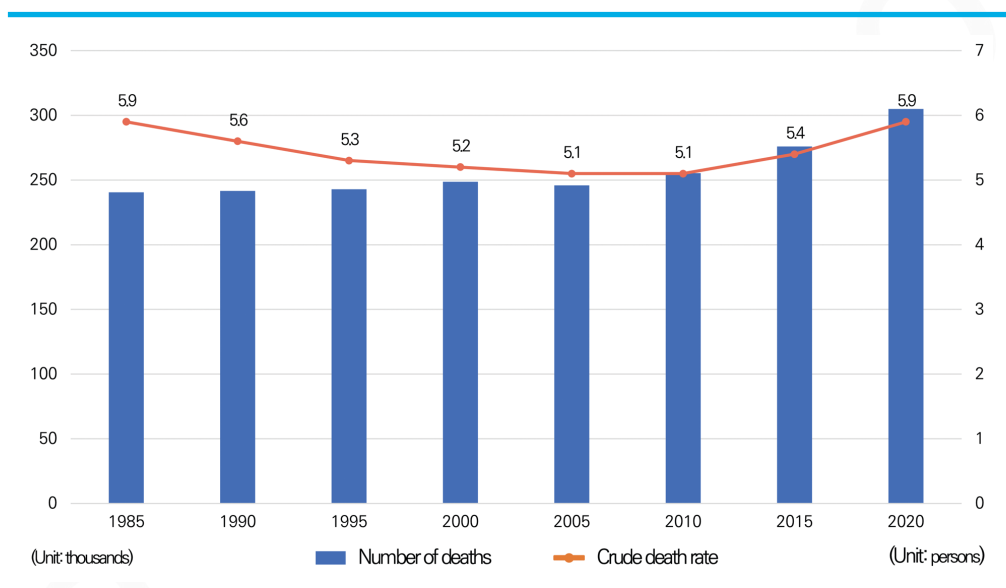


Figure 4-3. Changes in Deaths in the Post-Transition Period (1985-2020)

Note: The left axis represents the number of deaths (thousands) and the right axis represents the crude death rate (persons per 1,000).

Source: Statistics Korea, Vital Statistics (KOSIS).

Although the mortality rate has continued to decline since 1985, there has been an upward trend since 2010 (Figure 4-3). This is partially due to changes in the age structure of the population, with a higher proportion of elderly population. Meanwhile, life expectancy for Koreans has continued to rise and now ranks among the highest globally. According to Statistics Korea, life expectancy for men and women has risen from 64.6 years and 73.2 years in 1985, to 72.3 years and 79.7 years in 2000, and further to 80.5 years and 86.5 years in 2020.

In the context of persistently ultra-low fertility rates, the population of women aged 15 to 49 is shrinking, while the aging population is increasing, leading to a demographic structure characterized by a larger proportion of the elderly population. Consequently, the number of deaths and the crude death rate have risen, resulting in a natural population decline. This will hasten the overall population decline in combination with declining births.

4. The Future of Korea in the World

As of 2020, the total population of Korea, including both Korean citizens and foreign nationals, was 51.8 million, ranking 26th among 223 countries. Among 30 OECD major member states, it is the ninth most populous country, following the United States, Japan, Mexico, Germany, Turkey, France, the United Kingdom, and Italy (Statistics Korea, 2022). As of 2020, Korea accounts for 0.7% of the world's population.

Table 4-3 shows long-term trends in global and Korean population growth. Korea experienced a historically high population growth rate during the postwar baby boom in the late 1950s. However, since the early 1960s, there has been a continuous decline in the growth rate. Consequently, the proportion of Korea's population in the global context has also been steadily decreasing.

Table 4-3. Global and Korean Population Projections (1950-2070)

(Unit: millions, %)

Category	1950	1975	2000	2020	2045	2070
Global	2,499	4,069	6,149	7,841	9,468	10,297
	100.0	100.0	100.0	100.0	100.0	100.0
Developed Countries	806	1,041	1,190	1,276	1,275	1,215
	32.3	25.6	19.4	16.3	13.5	11.8
Developing Countries	1,693	3,029	4,959	6,565	8,193	9,082
	67.7	74.4	80.6	83.7	86.5	88.2
Korea	20.4	35.3	47	51.8	48.8	37.2
	0.8	0.9	0.8	0.7	0.5	0.4

Note: The population of Korea for 2045-2070 is based on the medium variant projections from Statistics Korea; the other data is cited from the United Nations World Population Prospects 2022 Revision.

Source: UN DESA (2022); Statistics Korea, Population Projections (KOSIS).

5. Conclusion

This chapter examined the trajectory of Korea's population growth by categorizing it into stages of demographic transition: ① traditional growth period, ② early transition period, ③ demographic turbulence period, ④ late transition period, and ⑤ post-transition period.

Korea's demographic transition unfolded over a short time span. The mortality rate began to decline in the 1910s and has consistently decreased, except during the Korean War. The fertility rate sharply declined due to economic development and state-led family planning initiatives in the 1960s. Since 2002, Korea has entered a state of ultra-low fertility, and since 2017, it has repeatedly set new records for the lowest fertility rates, marking the onset of a population decline.

The absolute population decline caused by low fertility and population aging is increasing socioeconomic burdens in various sectors. Firstly, the dependency costs associated with the elderly population are expected to rise significantly, placing serious strain on social welfare systems such as pensions and national health insurance. The shortage of the working-age population may result in labor shortages in the job market, which could hinder economic growth in Korean society. It is essential to devise measures to respond to this crisis based on the results of the Population and Housing Census.

Sex and Age Structure of Population

2025
Census
100th anniversary



1. Introduction

Demographic phenomena are closely related to social phenomena. Social phenomena influence births, deaths, and migrations, thereby changing the size and sex-age structure of the population. Events such as the Japanese colonial rule, war, economic downturns, and government-led population policies prompted certain demographic groups to emigrate or repatriate, altering the sex and age structure. In addition, son preferences and advances in medical technology have resulted in changes in the sex ratio at birth and age specific mortality rates, thus transforming the sex and age structure of the population.

The Population and Housing Census, conducted over the past 100 years since 1925, serves as an important resource for understanding how social changes have impacted demographic structure over time. This chapter aims to analyze the changes in the sex and age structure of the Korean population over the past century, using census data to link these changes to broader social transformations and to draw some conclusions from their implications.

The age structure of the population can be measured by the proportion of specific age groups within the total population, while the sex composition can be measured by the sex ratio, which is the ratio of males to females. Given changes in census coverage and limitations in the data, caution is needed when comparing the sex and age structure across time. In this chapter, to conduct a time-series analysis based on consistent criteria from

1925 to 2020, census data from 1925 to 1949 were adjusted to fit the current territorial boundaries.¹⁾

2. Age Structure

Age groups are typically categorized in five-year intervals and often classified into three broad categories according to the United Nations as follows: 0-14 years (child population), 15-64 years (working-age population), and 65 years and over (elderly population). The population pyramid visually represents the distribution of the population by age and sex, allowing for a clear understanding of demographic structure. Generally, the population structure in Korea maintained a pyramid shape until the 1970s, transitioned to a bell shape after the 1980s, and showed a typical pot shape by 2020 (Table 5-1, Figure 5-1).

1) Population Structure from 1925 to the 1970s: Pyramid Shape

From 1925 to 1955, the population structure showed a typical pyramid shape, with the proportion of younger cohorts gradually increasing. This reflected high fertility rates and a rapid increase in deaths as the population ages. In the Japanese colonial period,

1) The Population and Housing Census conducted during the Japanese colonial rule covered the entire Korean Peninsula, including North Korea. To enable a time-series analysis within the same geographical area, the boundaries were spatially adjusted to align with present-day territorial boundaries. However, census data for 1930, 1940, and 1944 have been excluded from the analysis due to technical difficulties in boundary adjustment.

the proportions of individuals aged 20-24 in 1925 and 30-34 in 1935 were notably low, likely due to migration. Between 1925 and 1930, 62% of all emigrants were aged 15-34 (Kwon, 1977), and from 1925, many minors from southern Korea were mobilized to work in northern coal mines and factories (Trewartha and Zelinsky, 1955). As a result, the net population decline in the southern region during the Japanese colonial period from 1925 to 1945 was about four times greater than in the north.

Driven by the high fertility trends at the time, the child population (0-14) increased at an average annual rate of 2.9% from 1925 to 1935, while the working-age population (15-64) increased at only 2.3% per year due to migration. During the same period, the proportion of the child population rose from 39.3% to 40.7%, while the proportion of the working-age population fell from 57.1% to 55.6%.

During the Japanese colonial period, it was not common for people to live long lives due to inadequate healthcare and poor nutrition. According to estimates by Ishi (1970), the life expectancy of Koreans was low: 32.4 years for men and 34.9 years for women from 1926 to 1930; 40.6 years for men and 44.7 years for women from 1936 to 1940. Consequently, the elderly population (65 years and over) grew at an average annual rate of only 2.7% between 1925 and 1935, comprising just 3.6% of the total population in 1925 and 3.7% in 1935.

Table 5-1. Trends in Population Composition by Age Group (1925-2020)

(Unit: %)

Category	Total	Child Population (0-14)	Working-Age Population (15-64)	Elderly Population (65+)
1925	100.0	39.3	57.1	3.6
1935	100.0	40.7	55.6	3.7
1949	100.0	41.7	58.3	
1955	100.0	41.2	55.5	3.3
1960	100.0	40.7	55.6	3.7
1966	100.0	43.5	53.2	3.3
1970	100.0	42.1	54.6	3.3
1975	100.0	38.1	58.4	3.5
1980	100.0	33.8	62.3	3.9
1985	100.0	29.9	65.7	4.3
1990	100.0	25.7	69.4	5.0
1995	100.0	23.0	71.1	5.9
2000	100.0	21.0	71.7	7.3
2005	100.0	19.1	71.6	9.3
2010	100.0	16.2	72.5	11.3
2015	100.0	13.6	73.4	13.0
2020	100.0	12.1	71.9	16.0

Source: Statistics Korea, Population and Housing Census (KOSIS).

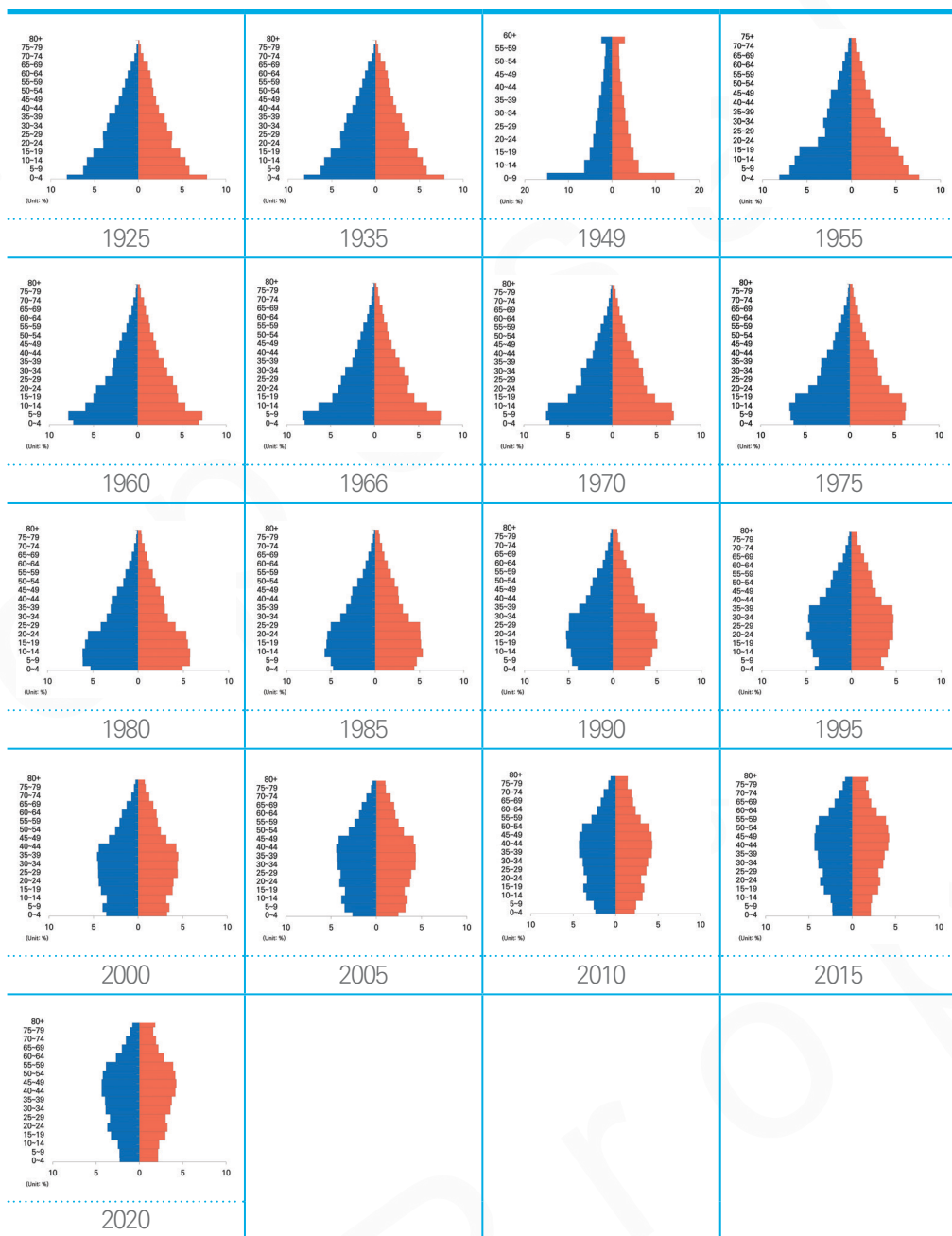


Figure 5-1. Changes in the Population Pyramid (1925-2020)

Note: Blue-colored areas represent male, orange-colored areas represent female.

Source: Statistics Korea, Population and Housing Census (KOSIS).

In 1949, following liberation, the population structure was significantly influenced by the return of overseas Koreans and the migration between North and South Korea. Those who had migrated to Japan for forced labor had very short stays, with many returning within a few years after liberation. From 1945 to 1949, 1.8 million people returned from abroad, and about 740,000 either returned from or migrated from North Korea (Lee, 2005).

Between 1935 and 1949, the child population (0-14) grew at an average annual rate of 2.4%, increasing its share of the total population to 41.7%. In contrast, the population aged 60 and over grew at only 1.7% per year, with its proportion decreasing from 5.7% in 1935 to 5.3% in 1949. Despite modest gains in life expectancy, the proportion of the elderly population declined because the influx of people into South Korea soon after liberation was young, and the fertility rate was high.

According to the results of the 1955 census, most age groups were restored due to the returning population and the influx from North Korea. However, the Korean War led to a sharp decline in the proportion of men in their 20s and 30s. As a result, the population aged 15-59 only increased at an average annual rate of 1.2% between 1949 and 1955. Additionally, the crude birth rate plummeted during the war, so that the child population barely increased from 1949 to 1955.

In the 1960s, Korea's most urgent national task was economic development, and a high population growth rate was perceived as a hindrance to this goal. In response, the government launched a family planning program in 1962 to curb population growth. The total fertility rate (TFR) sharply declined from 6.0 in 1960 to 4.53 in 1970 and further to 3.43 in 1975 (Economic Planning Board, 1976). However, the large number of women of reproductive age (15-49 years) led to an increase in the number of births until 1971. The population born between 1955 and 1974, commonly referred to as the *baby boomers* in Korea, constituted a considerable portion of the population. Despite the increase in life

expectancy, the child and working-age population ratio has risen due to the high birth rate. The proportion of the elderly population was at its lowest, at 3.3% in both 1966 and 1970 censuses.

Due to the long-term effects of the fertility control policy, the number of births began to decline after peaking in 1971. The proportion of the child population decreased to 38.1% in 1975 and 33.8% in 1980, while the proportion of the working-age population increased from 58.4% to 62.3% during the same period. On the other hand, life expectancy rose rapidly, with men entering their 60s in 1975 and women entering their 70s in 1980, resulting in an increase in the proportion of the elderly population to 3.9% by 1980. This trend led to a gradual transformation of the population structure from a pyramid shape to a bell shape.

2) Population Structure from 1980 to the 2010s: Bell Shape

A bell-shaped population structure typically emerges in situations where low fertility leads to a reduced proportion of the child population, and increased life expectancy results in lower mortality. The TFR rapidly declined, falling below the replacement level in 1983, and the number of births also decreased quickly. During this period, the population structure transitioned to a bell shape with the increase in the baby boom generation and the decline in the number of births.

In August 1996, the government officially abolished the population control policy. However, the decline in the fertility rate continued. As the number of births decreased, the lower part of the bell-shaped population gradually thinned, making it difficult to support the older age groups.

The baby boom generation began entering middle age (40-64) in 1995, and by 2015, the entire baby boom generation had become part of the middle-aged population, solidifying

the bell-shaped structure. Since baby boomers still remained in the working-age group (15-64), the proportion of the working-age population increased from 65.7% in 1985 to 73.4% in 2015. Consequently, the negative impacts of the population structure on society, such as labor shortages and fiscal burdens of old-age support, had not yet fully unfolded. However, as the low fertility phenomenon deepened, the proportion of the child population continued to decline, falling below 30% for the first time in 1985 (29.9%) and reaching 13.6% in 2015.

Although the baby boom generation had not yet entered old age by 2015, life expectancy rose substantially: from 64.6 years for men and 73.2 years for women in 1985, to 78.0 years for men and 85.2 years for women in 2015. As a result, Korea entered an aging society in 2000, with the proportion of the elderly population exceeding 7% of the total population.

3) Population Structure in the 2020s: Pot Shape

Two decades after becoming an aging society,²⁾ Korea surpassed the 14% threshold for the elderly share in 2020, thereby entering the category of an *aged society*. In 2020, the demographic trajectory of Korea underwent a pivotal shift as the number of deaths began to exceed the number of births, leading to a natural decrease. The population pyramid now resembled a pot-shaped configuration, characterized by a narrow base and expanding upper strata. The ultra-low fertility has continued, resulting in a decrease in the proportion of the child population to 12.1%. As the baby boom generation began entering old age, the proportion of the elderly population reached 16.0%. In the same year, life expectancy exceeded 80 years, with men living to 80.5 years and women to 86.5 years.

As low fertility rates and aging have persisted, the working-age population also decreased

2) According to the standards by the United Nations (UN), if the proportion of the population aged 65 and over exceeds 7%, it is classified as an aging society; if it exceeds 14%, it is an aged society; and if it exceeds 20%, it is classified as a super-aged society.

for the first time in the history of Korea's Population and Housing Census. The working-age population shrank from 37.5 million in 2015 to 37.3 million in 2020, and its proportion decreased from 73.4% to 71.9%.

The pot-shaped population structure represents a transition towards an inverted pyramid structure, driven by low birth rates and aging. Consequently, addressing the pot-shaped population structure has become an important issue.

3. Sex Composition

Over the past 100 years since 1925, the sex ratio in Korea has changed due to three major demographic factors: sex-selective international migration, imbalances in the sex ratio at birth, and the mortality rate gap between men and women (Table 5-2). These demographic characteristics have been influenced by various socioeconomic factors. Below, we will analyze the factors that have influenced the age-specific sex ratio since 1925 and examine how each factor is reflected in the overall population sex ratio.³⁾

1) Changes in Sex Composition Due to Selectivity

During the Japanese colonial period (1910-1945) and the Korean War (1950-1953), international migration had a significant impact on the sex composition. In the colonial period, international migration was primarily directed towards Manchuria, peaking particularly during the years of economic downturn in agriculture from 1935 to 1940

3) Here, the sex ratio is presented as the number of males per 100 females.

(Park, 2009). The number of Koreans residing in Manchuria was estimated at 200,000 in 1910, increasing to 1 million by 1938 (Lee, 2003). Additionally, a significant number of Koreans migrated to Japan during the colonial period. The Japanese government supplemented the labor shortage in the Japanese mainland with Korean workers for the Second Sino-Japanese War (1937-1945) and World War II. As Japan faced defeat in World War II, it revised the *National Mobilization Law* in 1944 to forcibly conscript Koreans. Between 1925 and 1944, migration to Manchuria or Japan tended to concentrate on males due to labor demands and wartime needs (Lee, 2003). Consequently, the results of the 1935 census showed a lower sex ratio among those in their 20s to 40s compared to 1925.

Table 5-2. Trends in Age-Specific Population Sex Ratio (1925-2020)

Year	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+
1925	103.9	108.1	109.0	107.7	105.5	104.8	109.3	110.1	112.9	110.0	107.3	96.2	88.2	80.0	75.9	67.2	60.7	45.5
1935	103.7	105.7	106.6	107.7	103.4	101.1	103.1	104.6	107.5	106.9	107.7	101.7	97.6	86.5	79.4	69.0		58.1
1949		103.7	104.0	103.7	101.1	103.3	106.3	106.8	106.4	103.5	100.0	91.3						82.3
1955	106.7	109.1	109.8	110.4	85.4	79.0	95.6	100.4	101.2	110.0	98.6	92.5	82.6	76.8	73.1			64.6
1960	105.3	107.4	110.3	110.1	106.5	92.0	87.7	94.3	101.7	100.4	100.9	92.2	83.3	75.6	68.5	65.4	60.3	51.2
1966	107.2	107.6	107.2	106.9	109.9	98.9	99.2	89.7	95.9	100.6	96.6	91.3	81.9	71.8	64.7	56.9	52.1	45.5
1970	106.8	107.6	107.3	103.8	106.1	99.0	102.3	97.4	89.7	95.9	97.8	91.2	83.3	71.6	62.1	53.2	45.8	39.8
1975	107.4	107.0	107.8	105.0	106.6	102.9	103.5	103.1	96.8	86.8	92.9	91.7	83.0	73.4	61.0	50.2	40.7	33.4
1980	107.3	106.8	106.8	106.5	104.1	100.0	105.5	102.8	102.8	95.1	85.0	86.5	83.2	72.5	61.5	47.8	36.4	26.9
1985	108.0	107.1	106.7	106.6	106.1	99.2	104.2	105.4	102.8	99.7	91.4	79.3	77.7	73.7	61.3	49.6	35.6	25.0

Year	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+
1990	111.2	107.3	106.0	103.9	109.1	99.5	103.8	106.1	107.4	102.3	97.9	88.3	74.7	71.6	64.5	51.3	39.1	24.9
1995	113.4	110.7	106.4	105.9	108.3	100.9	103.0	103.6	105.9	104.9	99.4	93.3	82.0	67.5	62.6	54.4	40.7	27.4
2000	110.2	113.6	111.4	107.7	111.4	100.9	102.1	102.3	103.2	102.8	101.7	95.1	87.8	75.9	61.1	54.3	44.9	29.8
2005	108.1	109.2	112.2	110.3	109.7	102.5	101.2	100.9	102.0	101.2	99.9	97.9	90.5	81.8	69.6	54.5	46.3	33.7
2010	106.1	108.0	109.0	113.3	113.7	103.8	102.0	101.0	100.6	100.8	98.8	96.8	93.9	85.1	75.3	61.0	45.4	34.8
2015	105.4	106.5	108.4	109.4	114.9	112.5	108.9	106.2	104.6	102.1	102.0	99.1	95.7	92.1	81.3	68.3	51.5	33.9
2020	105.3	105.2	106.4	107.9	110.0	114.8	111.8	107.4	104.6	103.1	100.8	100.4	97.0	92.6	87.6	74.7	59.7	37.8

Note: Data before 2010 are based on Korean citizens, while data from 2015 onward are based on the total population.

Source: Statistics Korea, Population and Housing Census (KOSIS).

After liberation, international migration to South Korea occurred in two main pathways. One was the return of overseas Koreans, and the other was the movement of returnees or refugees from North Korea due to the division of the peninsula. Between 1945 and 1949, approximately 2.6 million people moved to South Korea. Of these, 1.8 million were repatriated from abroad, while an estimated 740,000 were returnees and refugees from North Korea (Kwon, 1977). These migrants were primarily composed of the child and working-age groups, with a significantly larger number of men. Among overseas Koreans residing in Japan and Manchuria, large families tended to remain abroad even after World War II, and the return was selective among single or working-age males. Consequently, the male-selective return of overseas Koreans contributed to an increase in the sex ratio among those in their 20s and 30s in the 1949 census.

Due to the Korean War, a larger number of young men died compared to women of

the same age group, resulting in a lower sex ratio for men in their 20s and 30s in the 1955 census. In contrast, a population decrease among women due to the war was hardly observed. The sex ratio imbalance observed in the 1955 census among those in their 20s and early 30s continued over time in later decades. By the 1970 and 1990 censuses, these cohorts—in middle and older age—continued to exhibit notably low sex ratios compared to same-age groups in subsequent census years.

Several decades after the Korean War, the number of net international migrants became small, about 25,000 in 1985 and even 8,000 in 2000 (Lee et al., 1999). Though it increased to more than 82,000 in 2010 and neared 113,000 in 2020, the impact on the overall sex ratio remained negligible.

Women's fertility behavior—shaped by sociocultural values and medical technology—also influences the sex ratio. The natural sex ratio at birth is widely recognized as around 105 male births per 100 female births.⁴⁾ In 1925 and 1935, the sex ratio for children aged 0 to 4 was 103.9 and 103.7, respectively, indicating a nearly balanced sex ratio. Despite a strong son preference at the time, there were no technical means of selectively giving birth to boys. The sex ratio for this age group was maintained at a natural level, with figures such as 106.7 in 1955, 105.3 in 1960, 107.2 in 1966, 106.8 in 1970, 107.4 in 1975, and 107.3 in 1980.

The sex ratio for the population aged 0 to 4 rose to 108.0 in 1985, 111.2 in 1990, and peaked at 113.4 in 1995. Even after the decline began, it remained high at 110.2 in 2000 and 108.1 in 2005. The ratio eventually returned to natural levels by 2010. This trend aligns with the sex ratio at birth, which peaked at 116.5 in 1990 after rising from 107.1 in 1981 and continued to exceed 108 in the early 2000s.

4) The sex ratio at birth refers to the sex ratio immediately after birth, while the sex ratio for ages 0 to 4 reflects survival outcomes in subsequent periods; these two are conceptually distinct. The sex ratio for ages 0 to 4 can help understand population trends that include the birth sex ratio and infant mortality rates. This section focuses primarily on the sex ratio among children aged 0–4 as a proxy for broader population trends in early childhood.

The sharp increase in the sex ratio at birth is related to the rise of sex-selective abortion, facilitated by technological advances. The introduction of ultrasound machines in the early 1980s and their widespread availability in the late 1980s allowed for prenatal sex discernment. The development of medical technology, combined with a preference for fewer children and a preference for sons, intensified demographic imbalances. During this period, the total fertility rate dropped sharply from 2.82 in 1980 to 1.57 in 1990, further exacerbating the imbalance.

Since 2010, the sex ratio for ages 0 to 4 has been stable at around 105, with figures of 106.1 in 2010, 105.4 in 2015, and 105.3 in 2020. This stability is the result of the government's multifaceted efforts to overcome the imbalance. In 1987, the National Assembly in Korea amended the *Medical Service Act* to prohibit prenatal sex discernment, and in 1994, legal penalties were strengthened. In addition to legislative measures, broader institutional reforms also contributed. In 1985, the National Health Insurance System was reformed as part of efforts to reduce preference for sons, and in 1989, the family law was amended to recognize equal rights for women in social policies and inheritance. As a result of these sociocultural changes, the son preference decreased, gradually returning the sex ratio at birth to natural levels (Yoo et al., 2017; Lim et al., 2021).

Changes in the sex ratio of the population aged 0 to 4 have a cascading effect on the sex composition of subsequent age groups as they grow older. The sex ratio for ages 0 to 4 peaked at 113.4 in 1995, and five years later, the sex ratio for those aged 5 to 9 was also the highest at 113.6. Similarly, the sex ratio for ages 10 to 14 was 112.2 in 2005, for ages 15 to 19 it was 113.3 in 2010, and for ages 20 to 24 it peaked at 114.9 in 2015.

Personal and medical factors such as diseases and lifestyle, as well as socioeconomic factors and historical events like wars, can influence sex-specific mortality rates, further affecting the sex composition.

The Korean War, which broke out in 1950, impacted the sex ratio among those in their

20s and 30s. Civilian casualties from the Korean War were about 245,000, with 166,000 men and 79,000 women (Bureau of Statistics, 1953). The number of South Korean military casualties is estimated at 138,000, primarily consisting of men in their 20s and early 30s. Historical events such as the Korean War increased male mortality rates in specific age groups, thereby affecting the sex ratio.

In general, men are more vulnerable to chronic diseases and health problems such as cardiovascular diseases and malignant tumors compared to women. This is partly due to men's greater exposure to harmful lifestyles, such as smoking, drinking, and irregular eating. Historically, women experienced higher mortality rates related to childbirth; however, since the 1970s, declining fertility rates and advancements in medical technology have led to a rapid decline in maternal mortality rates (Lee et al., 2005; Yang et al., 2012). Because of these factors, women tend to have longer life expectancy than men, resulting in a lower sex ratio among the elderly. In the 1960 census, the sex ratio for those aged 85 and over dropped to 51.2. However, there has been a recent trend of increasing sex ratios among the elderly, attributed to the rapid decline in male mortality rates.

Nevertheless, the feminization of aging, where the number of elderly women exceeds that of elderly men, still continues. In the 2020 census, the sex ratios for those aged 65 and over declined with age: 92.6 for ages 65 to 69, 87.6 for ages 70 to 74, 74.7 for ages 75 to 79, 59.7 for ages 80 to 84, and 37.8 for those aged 85 and older. Given the persistent socioeconomic disadvantages faced by women in Korea, ensuring adequate support and care for elderly women remains a critical policy concern.

2) Trends in the Overall Sex Ratio

Changes in the sex ratio by age group ultimately affect the sex ratio of the total population. The demographic influence of sex selectivity on the sex ratio of the total

population over the years is as follows (Figure 5-2).

From the Japanese colonial period until shortly after the Korean War, the overall sex ratio steadily declined. In 1925, the sex ratio was 105.2, similar to the natural sex ratio at birth, but it dropped to 103.7 in 1935. This decline was due to the outmigration of male agricultural labor to Manchuria and the strong male selectivity of emigration caused by Japan's forced conscription. By 1955, the sex ratio had dropped to 100.0, reflecting significant male casualties during the Korean War. In the 1960s and 1970s, as international migration decreased and the affected cohorts aged, the sex ratio imbalance began to recover.

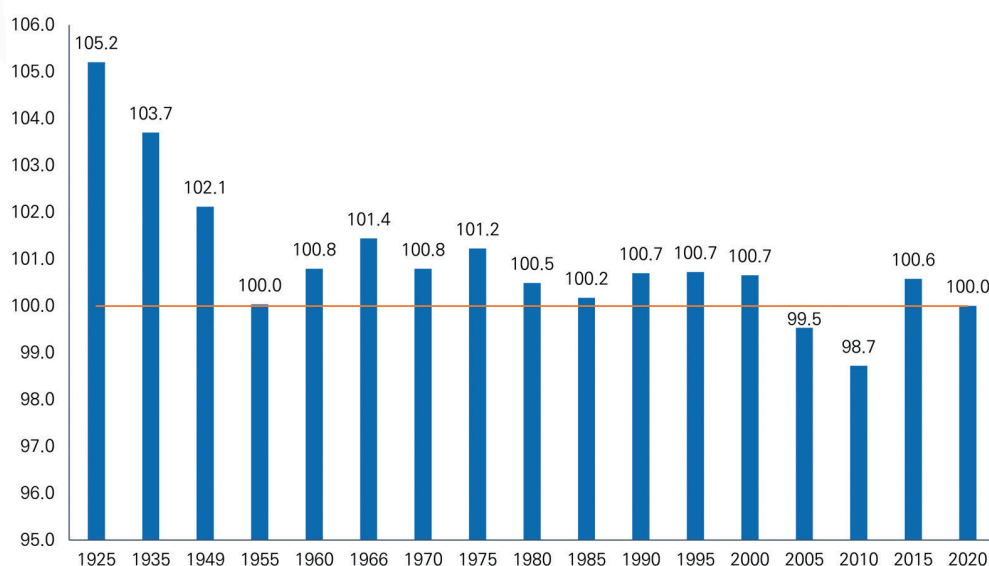


Figure 5-2. Trends in the Sex Ratio in Korea (1925–2020)

Note: Data before 2010 are based on Korean citizens, while data from 2015 onward are based on the total population.

Source: Statistics Korea, Population and Housing Census (KOSIS).

Consequently, the overall sex ratio increased slightly to 100.8 in 1960 and 101.4 in 1966, maintaining levels of 100.8 in 1970 and 101.2 in 1975. With the improvement in maternal mortality rates in the 1980s, the sex ratio decreased to 100.5 in 1980 and 100.2 in 1985. After a slight increase in 1990, the sex ratio remained at 100.7 from 1990 to 2000.

Since the early 2000s, with international migration exerting minimal influence and the sex ratio at birth stabilizing at natural levels, the overall sex ratio declined below 100 due to a rapid improvement in female mortality rates compared to males, reaching 99.5 in 2005 and 98.7 in 2010. However, this trend has recently reversed, as male mortality has decreased more rapidly in recent years. As a consequence, the sex ratio climbed back to 100.6 in 2015 and 100.0 in 2020, slightly exceeding 100. In the future, the sex composition of the population is likely to be driven more by differences in mortality rates between men and women than by fertility or international migration.

4. Conclusion

Over the past 100 years, the population structure of Korea has undergone a profound transformation. The age structure has rapidly shifted from a pyramid shape to a bell shape and then to a pot shape. Until the 1960s, both fertility and mortality rates were high, resulting in a pyramid-shaped population structure, but by the 1980s, it began to transform into a bell shape. By 2020, the continuous phenomenon of ultra-low fertility and the entry of the baby boomer generation into old age started to create a pot-shaped structure.

The sex ratio of the population maintained a near balance, but there were differences by age group. The sex composition of the population was significantly affected by international migration and male-specific wartime mortality. From the mid-1980s to the early 2000s, the imbalance in the sex ratio at birth had an impact, and the trends in mortality between men and women also influenced the sex composition.

The population structure revealed by the census over the past 100 years has been closely intertwined with political, social, and economic upheavals. Many of the factors that influenced the past population structure are disappearing. In the near future, influences that will fade from the population structure include the loss of men in their 20s due to the Korean War. Meanwhile, the effects of the imbalance in the birth sex ratio from the mid-1980s to the early 2000s will persist for some time. Lastly, the aging of the baby boomer cohort will further reinforce the pot-shaped age structure. Future censuses will show the socioeconomic impacts resulting from the prolonged ultra-low fertility and the entry of the baby boomer generation into old age.

Foreigners and Multicultural Households

2025
Census
100th anniversary



1. Introduction

According to the United Nations Department of Economic and Social Affairs (UN DESA), the number of international migrants reached an estimated 3.6% of the world population in 2020. These statistics are mainly compiled from census data collected by various countries, however, the criteria defining an *international migrant* often vary by country.¹⁾

The *Statistics on Foreign Residents by the Local Governments* is based on register-based census data and published by the Ministry of the Interior and Safety. According to the statistics, as of November 1, 2022, the number of foreign residents staying long-term (more than 90 days) in Korea was 2.3 million, accounting for 4.4% of the total population (Ministry of the Interior and Safety, 2023). This figure, however, includes naturalized citizens with migrant backgrounds and their Korean-born children, resulting in a broader scope than the UN's definition. When limited to foreign nationals without Korean nationality, the number declines to 1.8 million, representing 3.4% of the total population.

Korea, once a representative country of population outflow, has experienced a trend where incoming migrants outnumber outgoing migrants since 2006. According to Statistics Korea's *International Migration Statistics*, net international migration (the difference

1) UN DESA recommends defining international migrants as persons having moved across an international border and residing in another country for at least three or twelve months.

between incomings and outgoings) combining Korean citizens and foreign nationals showed a net outflow from 2001 to 2005, but recorded net inflow from 2006 to 2020. In 2021, unlike the previous year, a net outflow was observed, but net inflow resumed in 2022.

The increase in the number of foreign long-term residents in Korea has become prominent since the early 2000s. The *Employment Permit System*, introduced in 2004, brought in international workers, and the number of marriage immigrants also increased. The permanent residency status (F-5) was introduced in 2002. Since the *Framework Act on Treatment of Foreigners Residing in the Republic of Korea* (2007) and the *Multicultural Families Support Act* (2008) were enacted, the *Master Plan for Foreign Policy* and the *Master Plan for Multicultural Family Support Policy* have been enacted every five years.

Although foreign residents and multicultural families in Korea have rapidly increased over the past 20 years, statistical data to fully understand their living conditions remain insufficient. Administrative data-based statistics identify the number of foreigners by nationality, region, and residency status. However, they have limitations in capturing socio-economic status such as education level and occupation. The *Survey on Immigrants' Living Conditions and Labour Force*, jointly conducted annually since 2017 by Statistics Korea and the Ministry of Justice, targets foreign nationals and naturalized citizens within the last five years aged 15 or over residing in Korea. However, as it is an individual-level survey, it is difficult to ascertain household conditions. The *National Survey of Multicultural Families* is conducted every three years and has the advantage of providing household-level data. But it only covers multicultural families (composed of marriage immigrants and/or naturalized citizens), excluding households consisting solely of foreign nationals.

The Population and Housing Census is an important source that supplements the

limitations of administrative and survey statistics on foreigners. Because the census enumerates both Korean citizens and foreign nationals within the same framework, it can facilitate comparison between the two groups. Including foreigners in the same survey as Korean citizens also aligns with international standards for official statistical production.

2. Population Structure of Foreigners

In the Population and Housing Census, foreigners are defined as foreign nationals residing in Korea for at least three months. Foreigners who visit for less than three months, such as for tourism, visiting relatives, or business trips, are excluded from the enumeration. The trends of the foreign population were analyzed from 1966 to 2022. Below, data from complete enumerations based on field surveys were used for the years 1966 to 2010, while complete enumeration data based on register-based administrative data were used from 2015.

Table 6-1. Changes in Population Structure of Foreigners (1966-2022)

(Unit: persons, %)

Year	Child Population (0-14)	Working-Age Population (15-64)	Elderly Population (65+)	Total Foreign Population	Foreign Population to Total Population
1966	13,600	18,574	948	33,122	0.11
1970	15,510	14,583	303	30,402	0.10
1975	7,983	18,603	1,062	27,648	0.08
1980	6,799	21,536	1,165	29,500	0.08
1985	7,362	20,356	1,116	28,834	0.07
1990	4,810	14,824	891	20,525	0.05
1995	5,651	48,344	1,021	55,016	0.12
2000	7,999	138,061	2,755	150,812	0.33
2005	7,737	222,736	7,044	237,517	0.50
2010	19,245	560,656	9,631	589,532	1.23
2015	47,606	1,267,810	48,296	1,363,712	2.67
2016	53,875	1,308,443	51,450	1,413,758	2.76
2017	50,990	1,372,396	55,861	1,479,247	2.88
2018	62,927	1,527,600	61,034	1,651,561	3.20
2019	80,229	1,627,261	71,428	1,778,918	3.44
2020	78,211	1,535,697	81,735	1,695,643	3.27
2021	84,223	1,479,110	86,634	1,649,967	3.19
2022	89,698	1,562,260	100,388	1,752,346	3.39
Average Annual Growth Rate (2000-2022)	11.6	11.7	17.8	11.8	-
- Pre COVID-19 (2000-2019)	12.9	13.9	18.7	13.9	-
- In COVID-19 (2019-2021)	2.5	-4.7	10.1	-3.7	-

Source: Statistics Korea, Population and Housing Census (KOSIS).

From the 1960s to the 1990s, the foreign population in Korea did not exceed 100,000 (Table 6-1). The foreign population began to grow rapidly, increasing from 55,016 in 1995 to 150,812 in 2000. Especially between 2010 and 2015, the number more than doubled from 589,532 to 1,363,712 in just five years. As the foreign population grew, its share of the total population gradually increased. Before 2000, foreign nationals accounted for about 0.1% of the total population, but this rose to 1.2% in 2010 and 3.4% in 2022. From 2000 to 2022, the foreign population increased at an average annual rate of 11.8%. Compared to the Korean citizen population, which grew by an average of 0.4% annually during the same period, the growth rate of the foreign population has been rapid.

The COVID-19 pandemic significantly affected changes in the foreign population. In 2019, the foreign population was 1.8 million, having grown at an average annual rate of 13.9% from 2000 to 2019. During the pandemic period of 2019 to 2021, the foreign population decreased by approximately 150,000, representing an average annual decline of 3.7%.

As of the 2022 Population and Housing Census, the total number of foreign nationals was 1,752,346. The largest group of foreigners in 2022 was migrant workers, followed by overseas Koreans with foreign nationality, international students, and marriage immigrants. Compared to the previous year (2021), the number of foreigners increased by around 100,000 (6.2%), with notable increases among international students and overseas Koreans with foreign nationality.

When analyzing the foreign population by age groups—child population (0–14), the working-age population (15–64), and elderly population (65 and over)—the working-age population showed the largest increase since 1966. During the COVID-19 pandemic, the only age group that declined was the working-age population. This group grew at an average annual rate of 13.9% from 2000 to 2019, but decreased by an average of 4.7% annually from 2019 to 2021. This decline is likely attributable to restrictions on new entries

for employment, which affected groups such as migrant workers under the *Employment Permit System*.

The child population showed a steep average annual growth rate of 12.9% between 2000 and 2019, but the growth rate slowed to 2.5% annually through 2021 after COVID-19. The foreign child population likely consists of children born in Korea to foreign parents or those who migrated with their parents. The slight increase in the child population during the COVID-19 period is thought to be influenced by the number of births within foreign households settled in Korea.

Table 6-2. Changes in Foreign and Korean Population Structure (1966-2022)

(Unit: %)

Year	Foreign Nationals			Korean Citizens		
	Child (0-14)	Working Age (15-64)	Elderly (65+)	Child (0-14)	Working Age (15-64)	Elderly (65+)
1966	41.1	56.1	2.9	43.5	53.2	3.3
1970	51.0	48.0	1.0	42.1	54.6	3.3
1975	28.9	67.3	3.8	38.1	58.4	3.5
1980	23.0	73.0	3.9	33.8	62.3	3.9
1985	25.5	70.6	3.9	29.9	65.7	4.3
1990	23.4	72.2	4.3	25.7	69.4	5.0
1995	10.3	87.9	1.9	23.0	71.1	5.9
2000	5.3	91.5	1.8	21.0	71.7	7.3
2005	3.3	93.8	3.0	19.1	71.6	9.3
2010	3.3	95.1	1.6	16.2	72.5	11.3
2015	3.5	93.0	3.5	13.9	72.9	13.2
2020	4.6	90.6	4.8	12.3	71.3	16.4
2022	5.1	89.2	5.7	11.6	70.3	18.1

Source: Statistics Korea, Population and Housing Census (KOSIS).

The proportion of the working-age population within the foreign population has exceeded 90% since the 2000s (Table 6-2). Considering that the working-age population among Korean citizens has remained steady at around 70–73% during the same period, it is evident that the foreign population has contributed to the expansion of the overall working-age population. The share of the working-age population among foreigners peaked at 95.1% in 2010 and has shown a declining trend since then. This decline is largely due to an increase in the child and elderly populations rather than an absolute decrease in the working-age population.

From 1966 to 2022, the sex ratio of the foreign population, the number of males per 100 females, never fell below 110 (Table 6-3), indicating that males consistently outnumbered females by more than 10%. This pattern differs from that of Korean citizens; the sex ratio among Korean citizens remained close to 100 until 2005, when it fell below 100, meaning that the number of women exceeded that of men.

The child population's sex ratio is similar to that of the overall Korean population. The sex ratio of foreign children fluctuated between 102 and 113, which is lower than the overall sex ratio of the foreign population. The working-age population has had a very high sex ratio, never dropping below 120 from 1966 to 2022. It peaked at 207.2 in 2005 and has since stabilized around 130 after 2010. The sex ratio in the elderly population peaked at 235.0 in 1966 and has declined since then, falling below 80 from 2015 onward. In 2022, the working-age population sex ratio indicated approximately 30% more males than females, while the elderly population had more than 20% fewer males compared to females.

The population pyramid of foreigners, compared to Korean citizens, shows a higher proportion in the 20–44 age range than Korean citizens, while the proportions in the 60 and over and school-age groups are significantly lower than those of Korean citizens (Figure 6-1).

Table 6-3. Changes in Sex Ratio among Foreigners (1966–2022)

Year	Foreign Nationals				Total Korean Citizen
	Child (0-14)	Working Age (15-64)	Elderly (65+)	Total Foreign Population	
1966	104.4	125.7	235.0	118.4	101.4
1970	104.2	120.0	170.5	112.0	100.8
1975	108.6	149.8	182.4	137.3	101.2
1980	105.6	174.1	164.2	154.2	100.5
1985	106.6	136.6	140.0	128.2	100.2
1990	102.8	126.9	130.8	120.9	100.7
1995	113.4	142.4	125.9	138.7	100.7
2000	104.0	153.2	147.3	149.6	100.7
2005	107.7	207.2	136.1	199.8	99.5
2010	112.0	124.7	103.1	123.9	98.7
2015	105.5	141.5	79.4	137.1	99.7
2020	103.4	130.0	73.9	125.2	99.3
2022	102.6	129.0	75.8	123.6	99.2

Note: Sex ratio refers to the number of males per 100 females.

Source: Statistics Korea, Population and Housing Census (KOSIS).

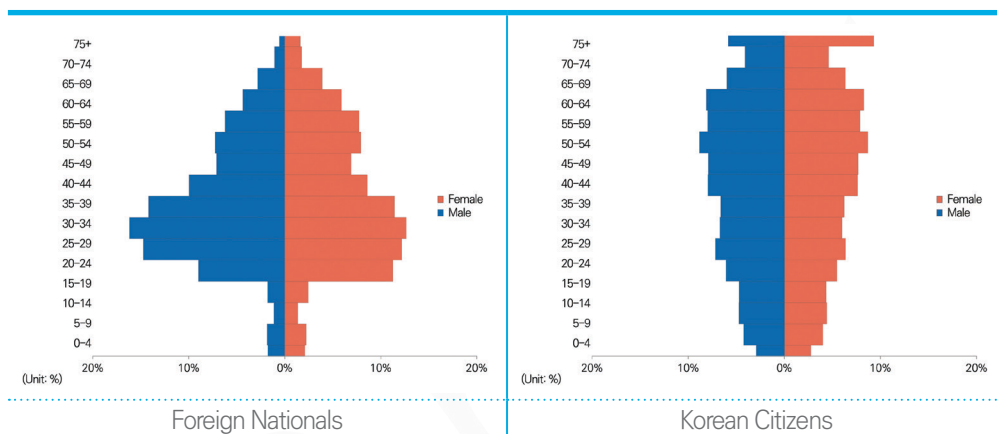


Figure 6-1. Population Pyramid of Foreigners and Korean Citizens (2022)

Source: Statistics Korea, Population and Housing Census (KOSIS).

The proportion of foreigners residing in the *Seoul metropolitan area* was 61.2% in 2022, higher than that of Korean citizens at 50.2%. While the Seoul metropolitan population share of Korean citizens exceeded 50% for the first time in 2022, foreigners had already surpassed this level since the 1970s (Figure 6-2).

From 2005 to 2022, the proportion of foreigners residing in a *dong* ranged between approximately 72% and 78%,²⁾ which is lower than that of Korean citizens, who ranged between 81% and 82% (Table 6-4). The proportion of working-age foreigners residing in a *dong* declined from 73.9% in 2005 to 71.0% in 2022. This suggests that marriage-immigrant women and foreign workers in agriculture and fisheries are contributing to the workforce and filling labor shortages in rural areas.

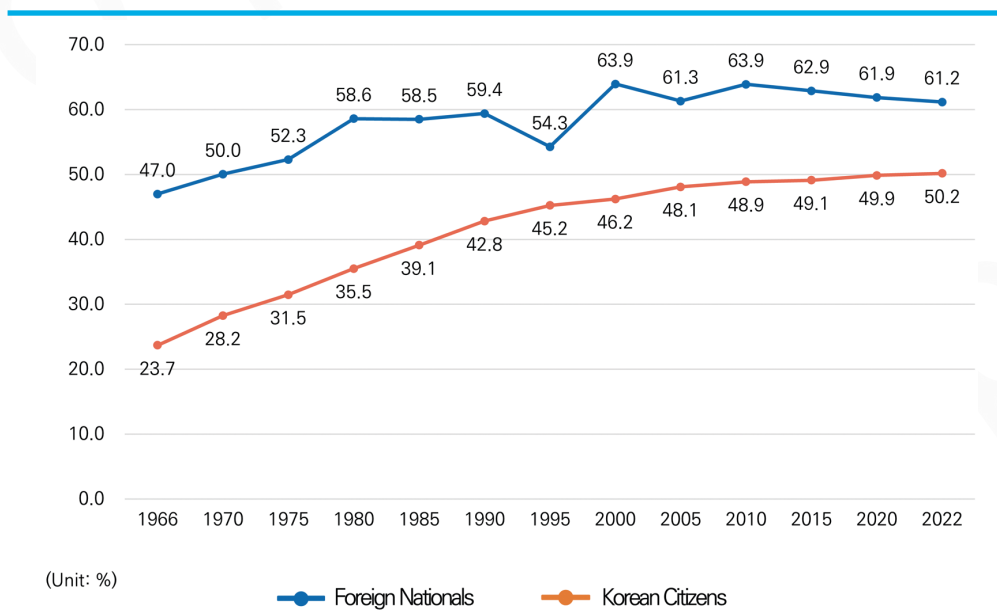


Figure 6-2. Changes in the Proportion of Foreigners and Korean Citizens Residing in the Seoul Metropolitan Area (1966-2022)

Source: Statistics Korea, Population and Housing Census (KOSIS).

2) The residential area of foreigners by *eup*, *myeon*, and *dong* has been available from the Population and Housing Census since 2005.

Table 6-4. Changes in Urban Area (*dong*) Population Shares by Age Group for Foreigners and Korean Citizens (2005-2022)

(Unit: %)

Year	Foreigners				Korean Citizens			
	Total	Child (0-14)	Working Age (15-64)	Elderly (65+)	Total	Child (0-14)	Working Age (15-64)	Elderly (65+)
2005	74.5	91.4	73.9	76.3	81.5	83.4	83.4	62.9
2010	77.9	93.2	77.2	86.7	82.0	83.5	84.1	66.7
2015	72.3	88.9	71.2	86.3	81.9	83.6	83.6	70.6
2020	72.6	84.9	71.2	87.4	81.5	83.1	83.2	72.7
2022	72.5	82.7	71.0	86.9	81.7	83.5	83.5	73.6

Source: Statistics Korea, Population and Housing Census (KOSIS).

3. Socioeconomic Characteristics of the Foreign Population

The analysis of the educational attainment and occupations of foreign residents in Korea is based on the 20% sample data from the 2015 and 2020 Population and Housing Census in comparison with Korean citizens. The age threshold of 25 was selected to exclude international students.

The educational attainment of foreigners showed that the largest share was high school graduates (Table 6-5). The proportion of high school graduates was 49.1% in 2015 and 51.7% in 2020. The proportion of highly educated individuals with a college degree or higher, including graduates of junior colleges, was 23.6% in 2015 and 26.3% in 2020. In contrast, among Korean citizens, the proportion of college graduates or higher was over

40% in both 2015 (40.3%) and 2020 (43.4%), indicating that the average educational level of the foreign population is lower than that of Korean citizens.

When educational attainment was disaggregated by sex among foreigners, the proportion of college graduates or higher was higher among females. As of 2020, 29.3% of foreign women had a college degree or higher, compared to 24.0% of foreign men.

According to the analysis of labor force participation, as of 2020, 70.1% of foreigners were employed, while 29.9% were not (Table 6-6). In the same year, 63.5% of Korean citizens were employed, and 36.5% were not. This indicates that foreigners participate more actively in the labor market than Korean citizens. By sex, the proportion of foreign men who are employed was 83.5% and 53.1% for foreign women, compared to 74.8% for Korean men and 52.5% for Korean women. In other words, employment rate of foreign men is higher than that of Korean men, while the rates for foreign and Korean women are similar.

Table 6-5. Educational Attainment of Foreigners and Korean Citizens (2015-2020)

(Unit: %)

Category	Foreigners (2015)			Foreigners (2020)			Korean Citizens (2015)			Korean Citizens (2020)		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Below High School	24.9	30.7	27.3	20.9	23.4	22.0	17.3	29.6	23.6	14.0	23.9	19.0
High School	52.1	44.8	49.1	55.1	47.3	51.7	37.6	34.7	36.1	38.7	36.6	37.6
College or Higher	23.0	24.5	23.6	24.0	29.3	26.3	45.1	35.7	40.3	47.3	39.5	43.4

Note: "College or higher" includes junior college graduates.

Source: Statistics Korea, Population and Housing Census, 20% sample microdata (Foreigners), KOSIS (Korean Citizens).

Many foreign men enter the country for employment purposes. The reason for the more pronounced gender gap in employment rates among foreigners compared to Koreans citizens is understood to be the higher proportion of non-employment-based immigration, such as marriage migration, among foreign women than men.

Most employed foreigners work as wage earners (Table 6-7). As of 2020, 93.1% of employed foreigners were wage workers (95.0% of men and 89.3% of women), while self-employed individuals accounted for 5.2% (3.8% without employees and 1.4% with employees), which is significantly lower than wage workers. In contrast, among Korean citizens, 76.4% were wage earners, and 20.3% were self-employed.

Table 6-6. Labor Force Participation of Foreigners and Korean Citizens (2015-2020)

(Unit: %)

Category		Foreigners (2015)			Foreigners (2020)			Korean Citizens (2020)		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Em- ployed	Mainly Worked	82.4	54.0	70.6	79.6	47.7	65.6	71.2	46.3	58.6
	Worked While Performing Other Activities	0.7	2.4	1.4	1.9	3.3	2.5	1.9	4.3	3.1
	Employed But Taking Time Off	0.7	0.7	0.7	1.9	2.0	2.0	1.8	1.9	1.8
	Subtotal	83.9	57.2	72.8	83.5	53.1	70.1	74.8	52.5	63.5
Not Employed		16.1	42.8	27.2	16.5	46.9	29.9	25.2	47.5	36.5

Source: Statistics Korea, Population and Housing Census 20% sample microdata.

Table 6-7. Employment Status of Foreigners and Korean Citizens (2015-2020)

(Unit: %)

Category	Foreigners (2015)			Foreigners (2020)			Korean Citizens (2020)		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Wage Workers	95.7	90.7	94.0	95.0	89.3	93.1	75.5	77.6	76.4
Self-Employed without Employees	2.6	3.6	2.9	3.1	5.1	3.8	16.9	12.4	15.0
Self-Employed with Employees	1.5	1.6	1.6	1.2	1.6	1.4	6.1	4.1	5.3
Unpaid Family Workers	0.2	4.2	1.5	0.6	3.9	1.7	1.5	5.9	3.4

Source: Statistics Korea, Population and Housing Census 20% sample microdata.

Table 6-8. Industries of Foreigners and Korean Citizens (2015-2020)

(Unit: %)

Category	Foreigners (2015)			Foreigners (2020)			Korean Citizens (2020)		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Manufacturing	49.9	27.8	42.6	47.4	27.0	40.6	22.2	11.4	17.6
Construction	17.1	1.9	12.1	17.4	2.8	12.6	10.1	2.0	6.7
Accommodation and Food Services	4.5	31.7	13.4	4.6	23.4	10.8	5.0	11.0	7.5
Wholesale and Retail Trade	4.3	7.6	5.4	5.6	10.1	7.1	12.6	14.3	13.3
Agriculture, Forestry, and Fishing	4.2	4.7	4.4	6.1	5.5	5.9	4.6	4.2	4.4
Others	20.1	26.3	22.1	18.9	31.3	23.0	45.6	57.1	50.4

Source: Statistics Korea, Population and Housing Census 20% sample microdata.

In 2020, the major industries employing foreign workers were manufacturing (40.6%), followed by construction (12.6%) and accommodation and food services (10.8%) (Table 6-8). About two-thirds of foreign men worked in manufacturing (47.4%) and construction (17.4%). In particular, the proportion of foreign men employed in manufacturing was more than twice that of Korean men (22.2%). Foreign women showed relatively high ratios in manufacturing (27.0%) and accommodation and food services (23.4%), indicating less concentration in specific industries compared to men.

4. Characteristics of Multicultural Households

The Population and Housing Census defines a multicultural household as “a household that includes a naturalized citizen, or a household formed through the marriage between a foreigner and a Korean citizen (including naturalized citizens), as well as a household that includes their children.” The analysis of multicultural households in Korea utilizes complete enumeration data from the 2010 field census and register-based census data from 2015, 2020, and 2022.

As of 2022, the number of multicultural households in Korea was around 400,000 (Table 6-9). The number decreased from 386,977 in 2010 to 299,241 in 2015, then increased again to 367,775 in 2020. The sharp decline in 2015 is linked to a policy change implemented by the Korean government in 2014, which imposed stricter requirements for marriage immigration visas to prevent fraudulent marriages

The rate of multicultural households living in an urban area (*dong*) slightly decreased from 81.4% in 2010 to around 77% between 2015 and 2022. The proportion of multicultural households residing in the Seoul metropolitan area declined from 65.3% in 2010 to 55.7% in 2015, then slightly increased to 56.1% in 2022.

Table 6-9. Multicultural Households by Region (2010–2022)

(Unit: households, %)

Category	2010		2015		2020		2022	
	Number of Households	Ratio	Number of Households	Ratio	Number of Households	Ratio	Number of Households	Ratio
Total	386,977	100.0	299,241	100.0	367,775	100.0	399,396	100.0
<i>Dong</i>	315,069	81.4	229,482	76.7	283,544	77.1	309,057	77.4
<i>Eup</i>	30,779	8.0	32,523	10.9	44,908	12.2	49,296	12.3
<i>Myeon</i>	41,129	10.6	37,236	12.4	39,323	10.7	41,043	10.3
Seoul Metropolitan Area	252,886	65.3	166,702	55.7	205,831	56.0	224,064	56.1

Source: Statistics Korea, Population and Housing Census (KOSIS).

Table 6-10. Changes in Multicultural Households Composition (2020-2022)

(Unit: households, %)

Category	2020		2022	
	Number of Households	Ratio	Number of Households	Ratio
Total	367,775	100.0	399,396	100.0
One-person Households (Naturalized Korean Citizens, etc.)	44,719	12.2	55,669	13.9
Multi-person Households	323,056	87.8	343,727	86.1
Korean Citizens (born) + Korean Citizens (naturalized, etc.)	163,160	44.4	183,649	46.0
Korean Citizens (born or naturalized, etc.) + Foreigners	151,910	41.3	148,421	37.2
Others	7,986	2.2	11,657	2.9

Source: Statistics Korea, Population and Housing Census (KOSIS).

The composition of multicultural households in Korea is as follows (Table 6-10). As of 2022, households composed of “Korean citizens (born) + Korean citizens (naturalized, etc.)” accounted for the largest share at 46.0% (around 184,000), followed by households composed of “Korean citizens (born or naturalized, etc.) + foreigners” at 37.2% (around 148,000). One-person households consisting of naturalized/acknowledged Korean citizens are also included in multicultural households, accounting for 13.9%. Compared to 2020, the number of households composed of “Korean citizens (born) + Korean citizens (naturalized, etc.)” increased by more than 20,000, and one-person households increased by around 10,000.

5. Conclusion

The number of foreign residents in Korea has steadily increased, particularly over the past two decades. The types of foreigners have also diversified, ranging from overseas Koreans and migrant workers to marriage migrants and international students. Among these groups, the number of individuals choosing or wishing to settle in Korea without returning to their home countries is gradually increasing. As concerns about population decline grow due to persistent low birth rates, the Korean government’s interest in the settlement of foreigners as a potential solution is also rising. By examining the size, trends, and characteristics of the foreign population through the Population and Housing Census, the following implications can be drawn:

First, policies supporting the settlement of foreigners in non-metropolitan and rural areas are a crucial component of the response to regional population decline. Given that the

foreign population is currently compensating for the decline in the working-age population in rural and fishing villages, it is important to support their settlement.

Second, existing immigrant social integration policies have primarily focused on multicultural families. The foreign population is growing relatively faster than multicultural households. Therefore, the focus of social integration policy should be broadened to encompass all foreign residents, not only multicultural families.

Lastly, it is necessary to establish a population framework that enables household-level analysis of foreigners in the Population and Housing Census, thereby ensuring the representativeness of foreign households in sample-based surveys.

Chapter 7

Fertility

2025
Census
100th anniversary



1. Introduction

Since Statistics Korea began compiling *Vital Statistics* in 1970, Korea experienced a natural population decline for the first time in 2020, when the annual number of deaths exceeded the number of births. According to the Population and Housing Census, the total population peaked at 51.83 million in 2020, then decreased to 51.74 million in 2021 and 51.69 million in 2022. Although the population slightly increased to 51.77 million in 2023, this was due to the net inflow of foreigners, while a natural decrease among Korean citizens has continued since 2020.

According to the 2022 medium-variant scenario of *Population Projection*, Korea's population is expected to decline from 51.67 million in 2022 to 51.14 million in 2032, and the pace of decline will accelerate thereafter, reaching 36.22 million in 2072 and 19.36 million in 2122. The scale of natural decrease is estimated to grow from 0.11 million in 2022, to 0.16 million in 2032, 0.59 million in 2060, and 0.53 million in 2072. The number of births is projected to fall from 0.25 million in 2022 to 0.16 million in 2072, while the number of deaths is expected to increase from about 0.36 million in 2022 to 0.69 million in 2072. The sharp decline in the total fertility rate is the fundamental driver of these demographic phenomena.

2. Population Policy and Fertility

From the 1960s to the 1980s, the Korean government regarded population growth as an obstacle to economic development and implemented active birth control policies. As a result, the total fertility rate began to decline, falling below the population replacement level (2.1) to 2.06 in 1983, while birth control policies continued.

The *Asian Financial Crisis* left deep scars across all sectors, particularly by dismantling the social foundations necessary for population reproduction and entrenching low fertility. Consequently, fertility rates have dropped further, recording 1.31 in 2001 and remaining below the ultra-low fertility threshold of 1.3 since 2002. It was only after the 2000s that the government dramatically shifted its population policy direction. With the enactment of the *Framework Act on Low Birth Rate in an Aging Society* in 2005, the government established the *Presidential Committee on Ageing Society and Population Policy*, initiating a comprehensive policy response to low fertility.

The fertility rate, along with population policy, has undergone rapid changes over approximately 65 years since the 1960s. The historical trends in childbirth can be examined through the results of the Population and Housing Census. The childbirth-related items in the census, targeting married women,¹⁾ have expanded since 1960.

This chapter examines the time series changes in the total fertility rate and the number of births based on the *Vital Statistics*, then analyzes changes in fertility among married women using the census data from 1970 to 2020. The fertility analysis is limited to households including women aged 20 to 59, and compares the results from the 2005 and

1) The childbirth-related items in the Population and Housing Census target married women, including not only those currently married but also women who are divorced or widowed.

2020 censuses.²⁾

3. Changes in Total Fertility Rate and Number of Births

Korea's total fertility rate (TFR) dropped sharply from 4.53 in 1970 to 3.43 in 1975, 2.82 in 1980, 1.66 in 1985, then further declined to 1.48 in 2000 and 1.09 in 2005 (Figure 7-1). It slightly increased to 1.23 in 2010 and 1.24 in 2015 but has been declining ever since. In 2018, it fell below 1 for the first time at 0.98, then continued to decrease to 0.92 in 2019, 0.84 in 2020, 0.81 in 2021, 0.78 in 2022, and 0.72 in 2023.

The annual number of births also showed a continuous decline. After recording 1.01 million in 1970 and 1.02 million in 1971, it steadily decreased, falling below 0.5 million by 2002 and near 0.3 million by 2017. In 2023, the number of births was 0.23 million, less than a quarter of the 1970 level.

In 1980, Korea had a higher TFR compared to major OECD countries, but since 2020, it has become the only country to have its TFR drop below 1.0 (Table 7-1). Korea's TFR fell below Japan's in 1985, and since 2005, it has been lower than that of Italy and Germany, which are among the lowest in Europe. In 2021, Korea's total fertility rate was nearly one lower than France's.

2) The 2005 census data are based on the analysis of 10% sample microdata conducted by Choi and Park (2009), while the 2020 data are derived from the analysis of 20% sample microdata provided by Statistics Korea through RAS (Remote Access Service).

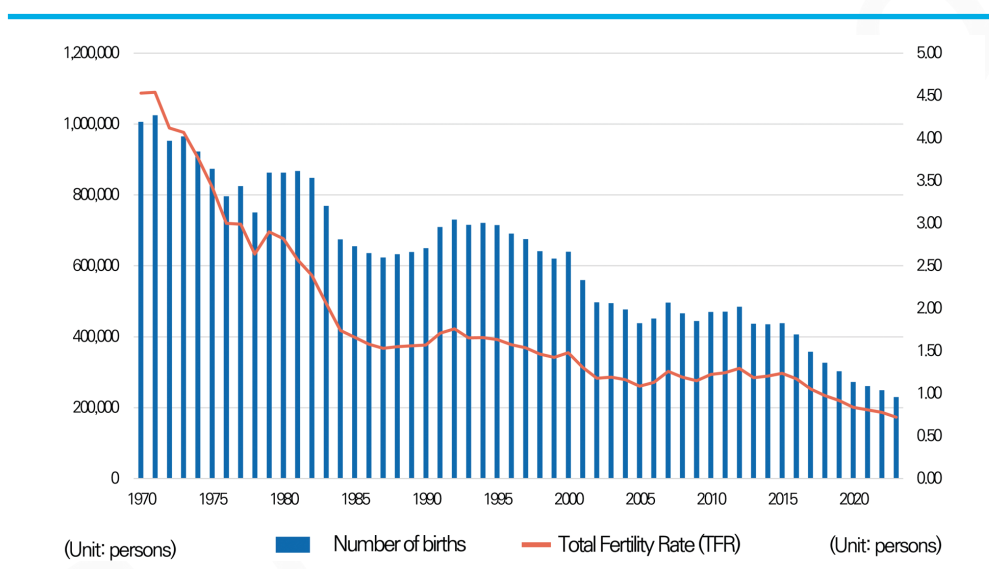


Figure 7-1. Changes in Korea's Total Fertility Rate and Number of Births (1970-2023)

Source: Statistics Korea, Vital Statistics.

Table 7-1. Total Fertility Rates of Major OECD Countries (1980-2021)

(Unit: number of births)

Category	1980	1985	1990	1995	2000	2005	2010	2015	2020	2021
OECD Average	2.25	2.03	1.98	1.77	1.70	1.67	1.75	1.68	1.56	1.58
Korea	2.82	1.66	1.57	1.63	1.48	1.09	1.23	1.24	0.84	0.81
Japan	1.75	1.76	1.54	1.42	1.36	1.26	1.39	1.45	1.33	1.30
USA	1.84	1.84	2.08	1.98	2.06	2.06	1.93	1.84	1.64	1.66
Sweden	1.68	1.73	2.14	1.74	1.55	1.77	1.98	1.85	1.66	1.67
Italy	1.68	1.45	1.36	1.19	1.26	1.33	1.44	1.36	1.24	1.25
France	1.95	1.81	1.78	1.71	1.87	1.92	2.02	1.93	1.79	1.80
Germany	1.56	1.37	1.45	1.25	1.38	1.34	1.39	1.50	1.53	1.58

Note: The source for Korean data is the Vital Statistics.

Source: OECD Family Database, "Fertility rates."

Table 7-2. Mean Age of Women at First Birth in Major OECD Countries (1980-2021)

(Unit: years)

Category	1980	1985	1990	1995	2000	2005	2010	2015	2020	2021
OECD Average	-	-	-	25.8	26.4	-	-	-	29.2	29.4
Korea	-	-	-	26.5	27.7	29.1	30.1	31.2	32.3	32.6
Japan	26.4	26.7	27.0	27.5	28.0	29.1	29.9	30.7	30.7	30.9
USA	22.7	23.7	24.2	24.5	24.9	25.2	25.4	26.4	27.1	27.3
Sweden	-	-	26.3	-	27.9	28.7	28.9	29.2	29.7	29.8
Italy	25.1	25.9	26.9	28.1	-	-	-	30.8	31.4	31.6
France	-	-	-	-	27.8	28.5	-	28.5	28.9	29.1
Germany	-	-	-	-	-	-	28.9	29.5	29.9	30.1

Note: The source for Korean data is the Vital Statistics.

Source: OECD Family Database, "Age of mothers at childbirth and age-specific fertility."

According to the *Vital Statistics*, the mean age of women at first birth in Korea steadily increased from 26.5 years in 1995 to 32.6 years in 2021 (Table 7-2). As of 2021, Korean women had the highest mean age at first birth among the seven major OECD countries.

4. Changes in Married Individuals and Fertility

The results of the analysis of the proportion of married individuals by age group from 1970 to 2020, based on data from the Population and Housing Census, are presented in Table 7-3. The proportion of married women aged 20–24, 25–29, and 30–34 steadily decreased from 1970 to 2020. In particular, the proportion of married women aged 25–29 dropped sharply from 88.4% in 1970 to 17.3% in 2020, showing a greater decline than other age groups. Meanwhile, the proportion of married women aged 35–39 peaked in 1980, while that of women aged 40–44 reached its peak in 1985, both have declined through 2020.

For men aged 20–24, 25–29, and 30–34, the proportion who were married was consistently lower than that of women, and since 2005, all age groups of men have had a lower proportion than that of women. The proportion of married men aged 30–34 saw the largest decline, from 92.5% in 1970 to 32.9% in 2020. Between 1970 and 2020, the proportion of married individuals aged 40–44 declined from 84.8% to 77.8% for women and from 97.5% to 68.1% for men, with the decline significantly steeper among men. In Korea, where non-marital births are extremely rare, the primary reason for the decline in the total fertility rate is the low proportion of married individuals.

Table 7-3. Proportion of Married Individuals by Sex and Age (1970-2020)

(Unit: %)

Age Group		1970	1975	1980	1985	1990	1995	2000	2005	2010	2015	2020
F	20-24	42.3	37.2	33.7	27.8	19.5	16.7	10.7	6.2	3.9	2.9	1.9
	25-29	88.4	86.8	84.9	80.9	77.3	69.9	59.1	40.1	30.0	22.0	17.3
	30-34	94.6	94.4	94.3	93.3	92.4	91.4	86.9	78.2	68.5	60.5	51.8
	35-39	92.0	93.2	93.4	93.3	92.8	92.2	90.7	86.8	81.6	76.1	72.3
	40-44	84.8	88.2	90.1	90.4	90.3	90.1	88.9	87.3	84.0	79.2	77.8
M	20-24	7.2	7.0	6.8	5.5	3.5	3.6	2.4	1.8	1.1	1.0	0.7
	25-29	56.0	52.6	54.4	48.9	42.4	35.3	28.5	17.9	14.3	9.8	7.2
	30-34	92.5	92.1	91.8	89.6	85.1	79.6	70.6	57.2	48.6	43.2	32.9
	35-39	97.3	97.3	96.7	95.7	94.2	91.1	86.4	78.0	69.9	64.5	59.6
	40-44	97.5	97.7	97.3	96.7	95.6	93.8	90.4	85.7	79.4	72.1	68.1

Source: Statistics Korea, Population and Housing Census (KOSIS).

The average duration from first marriage to first childbirth decreased from 2.0 years in 1980 to 1.4 years in 1991, then increased to 1.9 years in 2000, followed by a steady decline to 1.8 years in 2005, and 1.5 years in 2015 (Figure 7-2).³⁾

The average number of children born to married women decreased significantly across all age groups from 1970 to 2020 (Table 7-4). The decline in the average number of children was larger in older age groups; for example, women aged 45–49 saw a decrease from 5.63 children to 1.77 children. Women aged 25–29 had an average of 2.15 children in 1970, more than twice that of women aged 20–24 (1.03 children), but by 2020, this number had declined to 0.72 children, nearly equal to the 0.71 children of the 20–24 age group.

3) Based on the 2020 census results. The sharp decrease in average duration after 2016 should be interpreted with caution as the analysis truncates women who had not yet given birth by the reference date.

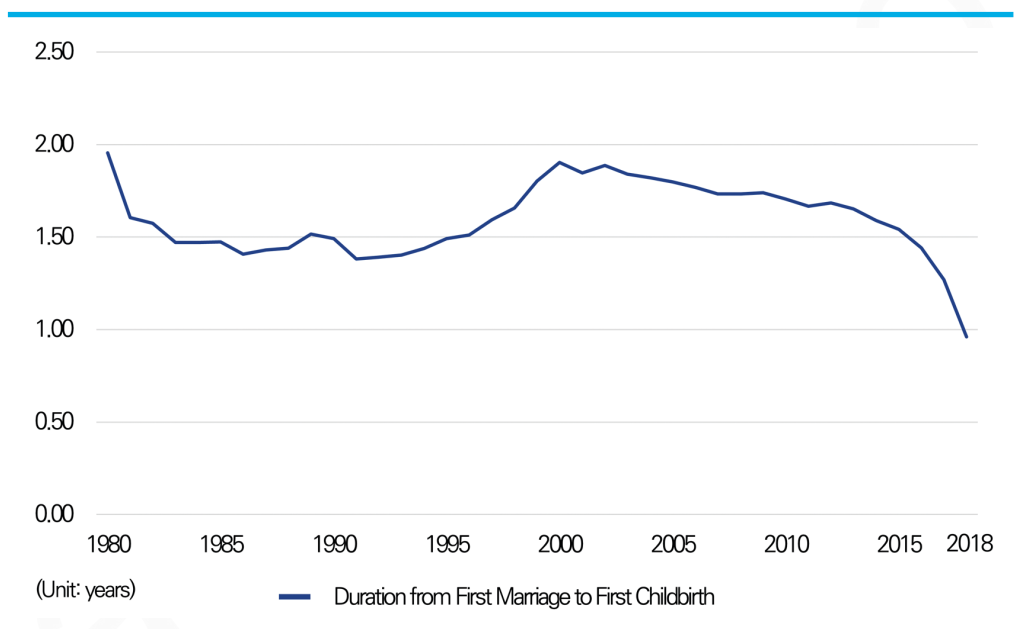


Figure 7-2. Average Duration from First Marriage to First Childbirth (1980-2020)

Note: Based on the 2020 Population and Housing Census results; cases where childbirth occurred before first marriage are excluded.

Source: Statistics Korea, Population and Housing Census, 20% sample microdata.

Table 7-4. Average Number of Children Born to Married Women (1970-2020)

(Unit: number of children)

Age Group	1970	1975	1980	1985	1990	2000	2005	2010	2015	2020
20-24	1.03	1.00	0.92	0.86	0.70	0.70	0.65	0.84	0.77	0.71
25-29	2.15	1.97	1.75	1.54	1.28	1.11	0.91	0.99	0.82	0.72
30-34	3.53	3.18	2.67	2.29	1.89	1.71	1.52	1.42	1.21	1.03
35-39	4.55	4.11	3.43	2.80	2.35	1.92	1.87	1.78	1.64	1.47
40-44	5.28	4.79	4.16	3.44	2.83	2.01	1.94	1.94	1.79	1.70
45-49	5.63	5.23	4.69	4.07	3.43	2.31	2.00	1.97	1.89	1.77

Note: Number of children born was not surveyed in 1995.

Source: Statistics Korea, Population and Housing Census (KOSIS).

Between 1970 and 2020, among married women aged 25 to 44, the proportions of those with no children and those with one child increased, while the proportion with three or more children declined significantly (Table 7-5). The proportion of married women with three or more children dropped sharply from 71.6% in 1970 to 56.8% in 1980, 25.2% in 1990, and 11.2% in 2000, continuing to decline slightly to 10.2% in 2005, 9.5% in 2015, and 8.7% in 2020. The proportion of childless women had never exceeded 10% before 2010 but rose to 13.7% in 2015 and 17.9% in 2020.

Table 7-5. Proportion of Married Women Aged 25-44 by Number of Children (1970-2020)

(Unit: %)

Number of Children	1970	1975	1980	1985	1990	2000	2005	2010	2015	2020
No Children	4.0	4.2	4.7	5.4	6.4	7.9	9.6	7.4	13.7	17.9
1 Child	9.4	9.8	11.8	15.6	21.1	22.4	23.2	29.4	29.4	32.6
2 Children	15.0	18.3	26.7	38.3	47.2	58.4	56.9	53.0	47.4	40.9
3+ Children	71.6	67.6	56.8	40.8	25.2	11.2	10.2	10.3	9.5	8.7

Source: Statistics Korea, Population and Housing Census (KOSIS).

5. Changes in Fertility Differentials by Socioeconomic Characteristics and Region

This section aims to identify the causes of low fertility through socioeconomic characteristics and regional fertility differentials. The analysis is based on households including women aged 20 to 59.⁴⁾ Since the Population and Housing Census does not collect data on the number of children for unmarried women, they were assumed to have no children. In tables that include married women with childbirth experience, the term *mothers* is used; in tables that also include unmarried women as well, the term *women* is used.

Comparing the number of children by age group of mothers in households with childbirth experience between 2005 and 2020, the proportion of one child increased across all age groups (Table 7-6). In particular, among mothers aged 30–34, the proportion rose from 34.3% to 57.3%, an increase of 23.0%p, greater than in other age groups.

4) The number of households used for analysis was 983,765 in 2005 and 1,956,459 in 2020; results are presented using unweighted data.

Table 7-6. Proportion of Mothers by Number of Children and Age Group (2005-2020)

(Unit: %)

Age Group	2005			2020		
	1 Child	2 Children	3+ Children	1 Child	2 Children	3+ Children
20-24	77.4	21.3	1.3	78.6	19.6	1.8
25-29	61.7	35.2	3.1	67.0	29.1	4.0
30-34	34.3	58.2	7.6	57.3	36.9	5.8
35-39	17.4	69.0	13.7	39.2	50.2	10.6
40-44	15.5	69.2	15.3	28.9	57.1	14.0
45-49	15.5	65.2	19.3	25.1	62.2	12.8
50-54	10.9	53.3	35.8	20.2	66.8	13.0
55-59	9.5	36.7	53.8	18.5	67.7	13.7

Note: Households without children were excluded from the tabulation.

Source: Statistics Korea, Population and Housing Census, 10% and 20% sample microdata.

The proportion of mothers with two children decreased among those under 50 but increased among those aged 50 and above. The largest decrease in the proportion with two children was observed in the 30–34 age group, while the largest increase was in the 55–59 age group. The proportion of mothers with three or more children declined in all age groups aged 30 and above, with the greatest decrease in the 55–59 age group. In 2005, the proportion of mothers with three or more children varied significantly by age group, whereas in 2020, the proportions were nearly uniform across age groups.

Table 7-7. Average Number of Children by Women's Education and Age Group (2005-2020)

(Unit: number of children)

Category		25-29	30-34	35-39	40-44	45-49	50-54	55-59
2005	Middle School or Below	1.33	1.72	1.98	2.00	2.08	2.32	2.56
	High School	1.03	1.63	1.92	1.95	1.95	2.11	2.31
	College or University	0.63	1.34	1.80	1.91	1.88	2.00	2.17
	Graduate School or Higher	0.48	1.07	1.65	1.83	1.85	1.97	2.09
2020	Middle School or Below	0.83	1.13	1.15	1.28	1.49	1.71	1.83
	High School	0.46	0.94	1.31	1.58	1.71	1.81	1.83
	College or University	0.19	0.71	1.29	1.56	1.63	1.74	1.79
	Graduate School or Higher	0.08	0.52	1.10	1.33	1.39	1.52	1.64

Source: Statistics Korea, Population and Housing Census, 10% and 20% sample microdata.

In both 2005 and 2020, the average number of children born generally decreases as women's educational attainment increases (Table 7-7). However, when examined by age group, significant changes can be observed in 2020. In 2005, across all age groups, higher education levels corresponded to fewer children, but in 2020, women aged 35–39, 40–44, 45–49, and 50–54 with a high school diploma had more children than those with only a middle school education or below.

In 2020, while women's overall educational attainment had significantly improved, younger age groups with higher education levels showed a declining proportion of married women with children, along with an increasing trend in the proportions of unmarried women and married women without children compared to 2005 (Table 7-8).

Table 7-8. Women's Marital and Childbearing Status by Age and Education (2005-2020)

(Unit: %)

Category		2005			2020		
		Single	Married with No Children	Married with Children	Single	Married with No Children	Married with Children
25-29	Middle School or Below	20.0	8.8	71.2	27.9	16.5	55.6
	High School	24.0	9.6	66.4	51.9	16.7	31.4
	College or University	43.0	11.2	45.8	66.9	18.6	14.5
	Graduate School or Higher	47.3	13.3	39.4	75.3	17.5	7.2
30-34	Middle School or Under	7.2	7.3	85.5	16.4	13.8	69.8
	High School	6.7	5.5	87.8	24.6	17.6	57.8
	College or University	9.7	8.4	81.9	27.5	23.2	49.2
	Graduate School or Higher	15.2	12.8	72.1	34.3	26.8	38.9
35-39	Middle School or Below	3.0	4.7	92.4	14.4	17.2	68.5
	High School	3.2	3.1	93.7	14.2	13.4	72.4
	College or University	4.8	3.3	91.9	13.1	11.3	75.6
	Graduate School or Higher	9.1	5.4	85.4	18.0	13.1	68.9
40-44	Middle School or Below	1.3	3.4	95.3	12.6	14.4	73.1
	High School	1.8	2.5	95.7	8.8	8.8	82.3
	College or University	3.5	2.1	94.4	8.8	7.0	84.3
	Graduate School or Higher	7.8	3.3	89.0	14.6	9.0	76.4
45-49	Middle School or Below	0.9	2.6	96.5	6.7	10.5	82.8
	High School	1.6	2.4	96.0	5.4	6.1	88.5
	College or University	3.2	2.6	94.2	7.0	5.5	87.5
	Graduate School or Higher	9.3	3.8	86.9	14.4	7.7	77.9

Source: Statistics Korea, Population and Housing Census, 10% and 20% sample microdata.

Table 7-9. Average Number of Children by Women's Economic Activity and Age (2005-2020)

(Unit: number of children)

Category		25-29	30-34	35-39	40-44	45-49	50-54	55-59
2005	Employed	0.62	1.42	1.88	1.98	2.07	2.42	2.86
	Unemployed	0.30	0.91	1.57	1.69	1.81	2.04	2.30
	Economically Inactive	1.10	1.62	1.91	1.95	1.98	2.23	2.53
2020	Employed	0.16	0.60	1.17	1.51	1.65	1.78	1.83
	Not in Employment	0.59	1.10	1.47	1.63	1.65	1.75	1.79

Source: Statistics Korea, Population and Housing Census, 10% and 20% sample microdata.

In 2005, the average number of children by economic activity was highest among economically inactive women, followed by employed and unemployed women in 25-39 age groups. In 2020, among women under 45, those not in employment had higher average numbers of children than employed women (Table 7-9). In 2005, employed women aged 30 and over had an average of more than one child, while in 2020 this threshold rose to age 35 and over.

Among employed women, a comparison between 2005 and 2020 shows that the proportion of those who are married with children decreased, while the proportions of unmarried women and married women without children increased across all age groups (Table 7-10).

Table 7-10. Women's Marital and Childbearing Status by Age and Economic Activity (2005-2020)

(Unit: %)

Category			2005			2020		
			Unmarried	Married with No Children	Married with Children	Unmarried	Married with No Children	Married with Children
25-29	Employed		52.6	12.2	35.3	70.5	17.8	11.7
	Not in Employment	Unemployed	71.2	16.6	12.2	39.2	18.7	42.0
		Economically Inactive	9.5	8.2	82.2			
30-34	Employed		15.5	8.8	75.7	34.7	24.6	40.7
	Not in Employment	Unemployed	36.8	21.3	41.9	11.3	16.5	72.2
		Economically Inactive	2.3	4.7	93.0			
35-39	Employed		5.8	3.7	90.5	18.2	13.4	68.4
	Not in Employment	Unemployed	16.8	10.9	72.3	6.3	10.0	83.8
		Economically Inactive	1.6	2.8	95.6			
40-44	Employed		2.8	2.6	94.7	11.4	8.0	80.6
	Not in Employment	Unemployed	8.2	7.1	84.7	5.3	7.8	87.0
		Economically Inactive	1.1	2.7	96.2			
45-49	Employed		1.9	2.4	95.7	7.4	5.7	86.9
	Not in Employment	Unemployed	5.4	5.3	89.4	4.8	7.0	88.1
		Economically Inactive	1.1	2.7	96.3			

Source: Statistics Korea, Population and Housing Census, 10% and 20% sample microdata.

Table 7-11. Average Number of Children born to Married Women by Age Group (2005-2020)

(Unit: number of children)

Category	2005					2020				
	Total	25-29	30-34	35-39	40-44	Total	25-29	30-34	35-39	40-44
Nationwide	1.92	0.91	1.52	1.87	1.94	1.66	0.72	1.03	1.47	1.70
Seoul	1.79	0.70	1.32	1.76	1.86	1.55	0.46	0.76	1.27	1.55

Note: The total age group refers to ages 20-59.

Source: Statistics Korea, Population and Housing Census (KOSIS).

In 2020, the average number of children born to married women in Seoul (1.55) was lower than the national average (1.66) (Table 7-11). Compared to 2005, the average number of children born to married women decreased both nationwide and in Seoul in 2020. The decline was particularly pronounced among women under the age of 35. Notably, Seoul was the only province where the average number of children for married women aged 30–34 fell below one. According to *Vital Statistics*, Seoul’s total fertility rate was 0.55 in 2023, significantly lower than the national average of 0.72.

6. Conclusion

Unless the younger generation believes that “the world is livable enough to bring my child into it,” no policy will effectively address the low fertility problem. As regional imbalance has intensified to the point where the *Seoul metropolitan area* is described as a monocentric system, population decline in non-capital areas has become severe, leading to

the enactment of the *Special Act on Support for Depopulation Regions* in 2022. Recently, not only provincial governments but also local governments have been establishing master plans (comprehensive plans) for population policy and master plans for depopulation regions. However, Korea's population crisis is not a problem that can be addressed at the local government level. Nor can it be handled by a single ministry of the central government—it requires a comprehensive, nationwide response involving the central government and beyond.

In Korea, marriage, pregnancy, childbirth, and childcare still require a significant investment of time and money. In particular, women continue to suffer from the dual burden of sole childcare and career interruptions, facing various barriers from the moment they give birth. Without fundamentally addressing these issues, overcoming the low fertility crisis will be difficult. The cases of Sweden and France, which have strengthened social responsibility for childbirth and childcare and have focused on ensuring the rights of children and women, provide important lessons. These countries have built strong welfare systems to overcome the population crisis and have worked to eliminate discrimination based on marital status by institutionally recognizing diverse family forms.

The role of the Population and Housing Census is vital to establishing evidence-based policies related to fertility, which inevitably require substantial human and financial resources. It also remains the essential statistical source that can provide birth data at local levels (*si, gun, gu*)—the most basic unit for policy-making in response to population decline and local extinction. Thus, it is necessary to derive effective policies through various analyses of birth-related statistics drawn from the census at the national, provincial, and local levels.

Mortality

2025
Census
100th anniversary



1. Introduction

The three major components of population change are births, deaths, and migration. Deaths, along with births, determine natural increase; while births contribute positively, deaths contribute negatively. The term *mortality* describes the level of deaths in a country or region. Mortality is influenced by medical and socioeconomic factors such as public health standards, advances in medical technology, nutritional status, and lifestyle changes.

This chapter analyzes how mortality in Korea has changed over time, drawing on a range of indicators such as crude death rates, age-specific death rates, life expectancy, and cause-specific mortality rates.

2. Trends in Mortality

1) Number of Deaths and Crude Death Rate

The number of deaths is influenced by the size of the population and the mortality rate. In Korea, the population steadily increased until 2020, while mortality rates steadily declined. Meanwhile, the decline in mortality rates offset the increase in deaths due to population

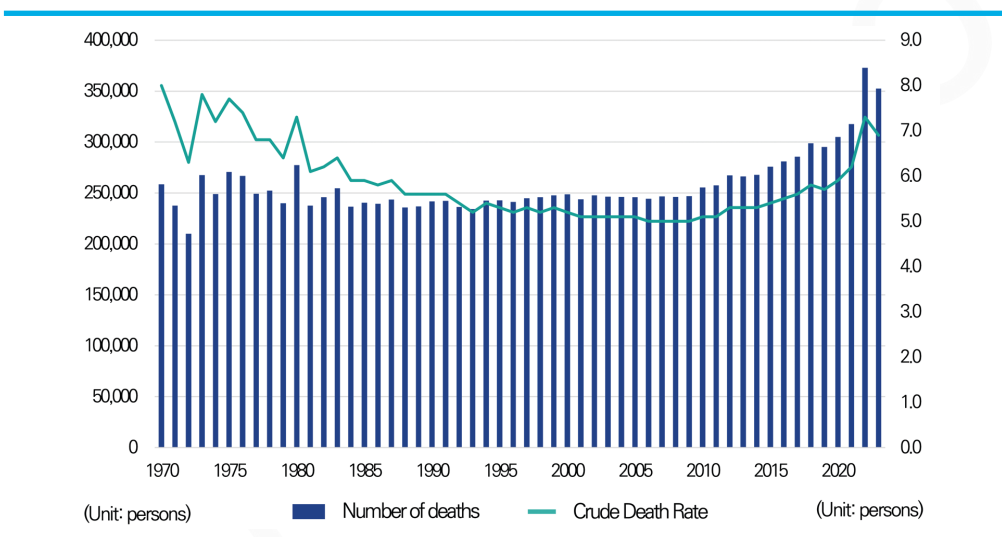


Figure 8-1. Trends in Number of Deaths and Crude Death Rate (1970–2023)

Source: Statistics Korea, Vital Statistics (KOSIS).

growth, resulting in the number of deaths remaining around 240,000 from the late 1980s through the 2000s.

Despite continued improvements in mortality, the aging population has increased, resulting in a sharp rise in deaths from 0.26 million in 2010 to 0.35 million in 2023 (Figure 8-1). The crude death rate, defined as the number of deaths per 1,000 people, was relatively high at 8.0 in 1970, but gradually declined to 5.0 during 2006–2009. As the number of deaths began to rise due to population aging, the crude death rate increased to 6.9 in 2023. Population aging, driven by declining birth rates and changes in mortality that increase the proportion of older people, is a major factor contributing to the rise in the overall crude death rate.

2) Age-Specific Mortality Rates

Analyzing mortality trends from 1983 to 2023, based on deaths per *Population Statistics Based on Resident Registration*, reveals that infant mortality rates for both males and

females were initially high but have steadily decreased. In the past, the lowest age-specific mortality rate was observed in the 10–14 age group, but recently, it has shifted to the 5–9 age group (Figure 8-2).

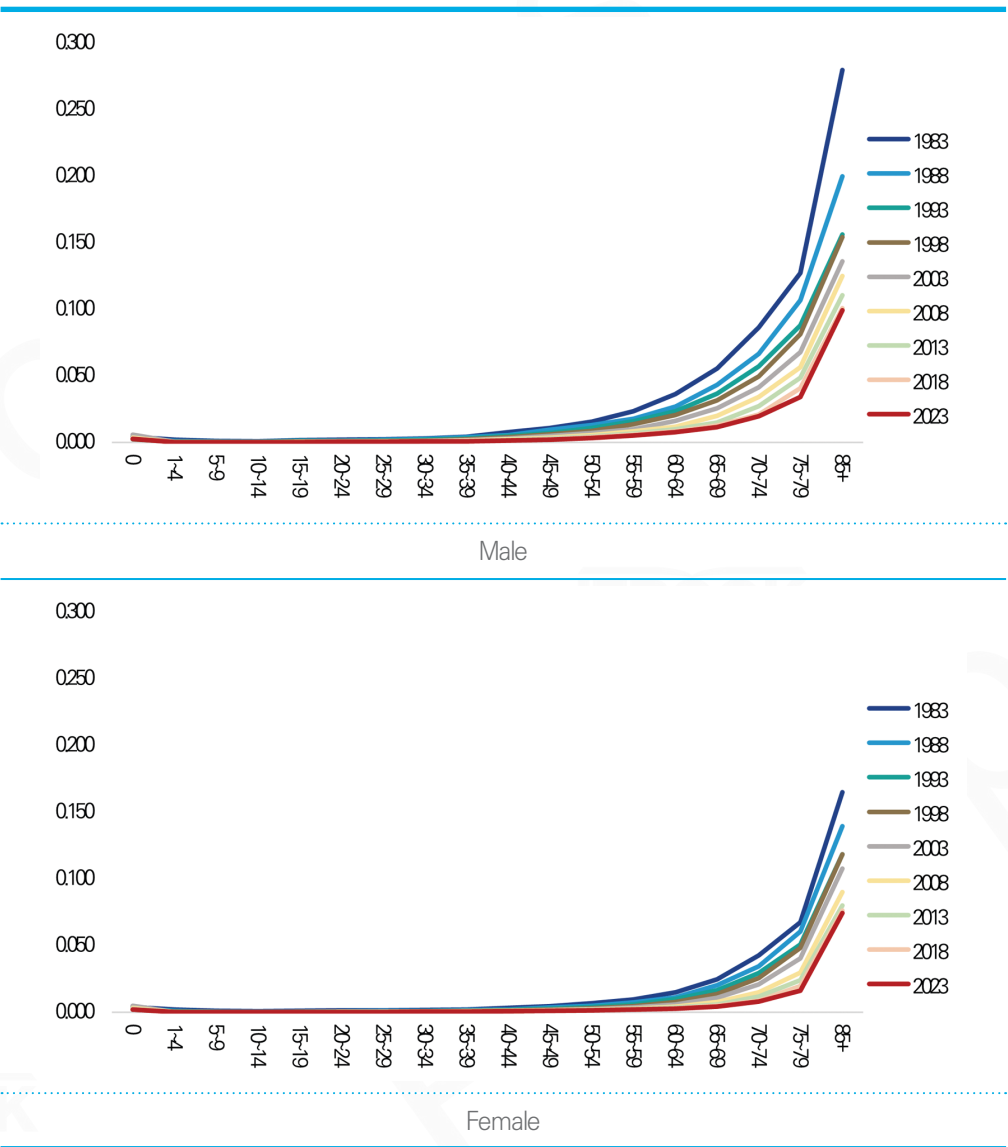


Figure 8-2. Trends in Age-Specific Mortality Rates by Sex (1983-2023)

Source: Statistics Korea, Life Tables (KOSIS).

Male mortality rates previously began to rise significantly starting in their 40s, but this age threshold has gradually shifted upward. In 2023, mortality rates started to rise from the late 60s. For females, mortality rates historically began to increase in their 50s, but this threshold has also shifted upward, with rates starting to rise from their 70s as of 2023.

3) Life Expectancy

Life expectancy can be calculated by applying the life table method to age-specific mortality rates. Statistics Korea created the first *Life Tables* for 1978–1979 based on the 1980 *Vital Statistics*. Since 1990, Life Tables have been compiled using death registration data. Between 1970 and 2023, life expectancy at birth increased from 58.7 to 80.6 years for males, and from 65.8 to 86.4 years for females (Figure 8-3). During the early COVID-19 pandemic in 2020, life expectancy was 83.5 (80.5 for males, 86.5 for females). It decreased slightly to 82.7 in 2022 (79.9 for males, 85.6 for females).

The primary reason that females live longer than males involves a complex interplay of biological, immunological, behavioral, and social factors. Males consistently exhibit higher mortality rates than females from fetal stages through infancy, adolescence, and adulthood (Holden, 1987).

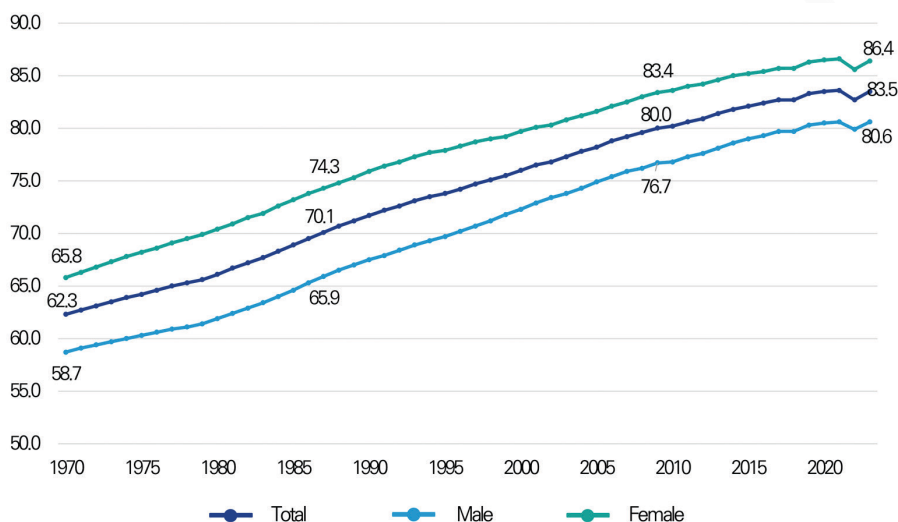


Figure 8-3. Life Expectancy by Sex (1970-2023)

Source: Statistics Korea, Life Tables (KOSIS).

In 1970, Korean women lived on average 7.1 years longer than men. This gap widened to 8.6 by 1985. Since then, male mortality has improved more rapidly than female mortality, narrowing the life expectancy gap to 5.8 years by 2023.

3. Causes of Death

Statistics Korea compiles and publishes *Causes of Death Statistics* annually based on data from death registration. While *Causes of Death Statistics* are published using 57 categories, a more detailed classification is applied and provided on KOSIS.

As of 2023, cause-specific mortality rates per 100,000 population are as follows: malignant neoplasms (cancer) 166.7, heart disease 64.8, pneumonia 57.5, cerebrovascular disease 47.3, intentional self-harm (suicide) 27.3, Alzheimer's disease 21.7, diabetes mellitus 21.6, hypertensive diseases 15.6, septicemia (sepsis) 15.3, and COVID-19 14.6. These top 10 causes account for 65.6% of all deaths (Figure 8-5). The four major causes—cancer, heart disease, pneumonia, and cerebrovascular disease—account for 48.8% of deaths.

Examining trends from 1983 to 2023 for each of the top 10 causes, mortality rates from cancer, heart disease, pneumonia, sepsis, and Alzheimer's disease have continuously increased over 40 years. Mortality rates from cerebrovascular disease and diabetes increased until the 1990s and 2000s, then declined, but have recently begun to rally. Suicide rates increased until the early 2010s and have remained relatively stable since then. Mortality from hypertensive diseases sharply decreased and remained at a low level from the late 1990s through the 2010s, but has recently begun to rise gradually again. The mortality rate from chronic diseases has been rising in recent years.

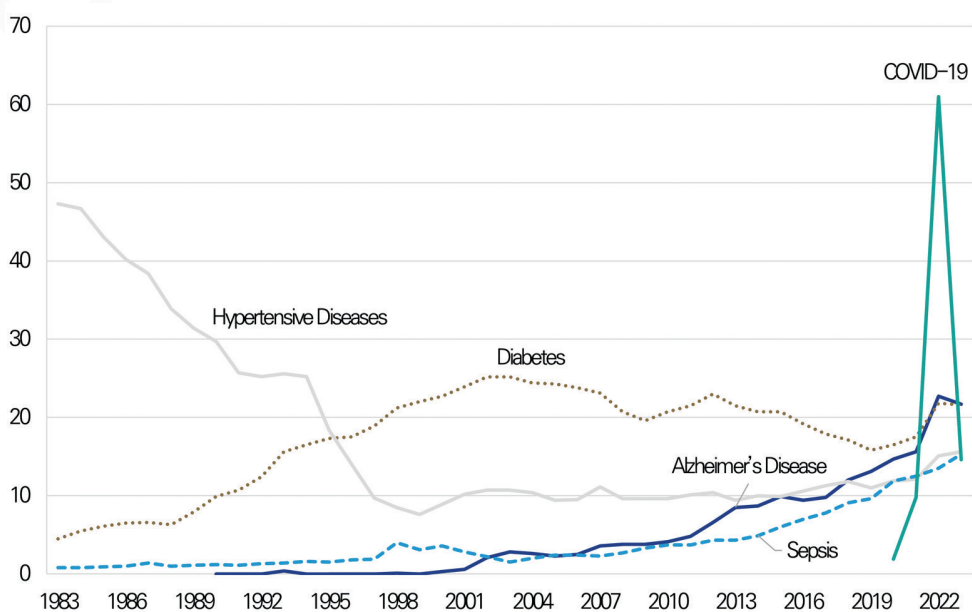
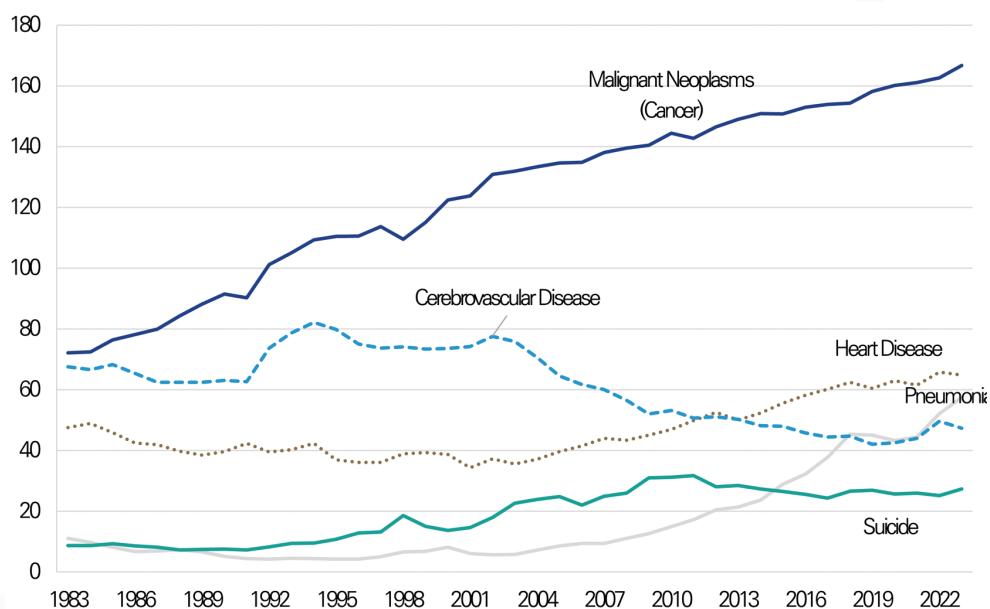


Figure 8-4. Trends in Mortality Rates for Top 10 Causes of Death (1983-2023)

Source: Statistics Korea, Causes of Death Statistics (KOSIS).

As the elderly population with weakened immune systems rapidly increases, mortality from pneumonia and sepsis is also on the rise. Mortality from Alzheimer's disease, related to the increasing prevalence of dementia, is expected to continue increasing.

As of 2023, cause-specific analysis shows cancers rank second among those aged 10–39 and first among all other age groups. Heart disease is among the top five causes of death in all age groups except 0–9 years. Suicide ranked the fifth leading cause of death overall. Causes of death are closely linked to demographic and sociological factors such as aging and weakness in the social safety net.

4. Conclusion

Death is one of the main factors driving population change. However, as a demographic issue, it has received less attention than births and migration. Longevity is generally given greater emphasis in health and medical contexts than in demographic studies.

Mortality patterns in Korea are entering a new phase due to rapid population aging. Although extended life expectancy initially postponed mortality, the current rise in deaths reflects the impact of widespread population aging. Even as the overall population decline has begun recently, the number of deaths continues to grow. Following a period of low crude death rates, there has been a marked upward shift in the trend. The age at which mortality rates begin to rise sharply is also increasing. Mortality from chronic diseases is rising sharply as the proportion of the elderly population increases.

Mortality indicators are primarily measured based on the *Vital Statistics*. The Population

and Housing Census has certain limitations as a data source for measuring mortality. In order to clearly identify the causes of population changes between censuses, it is necessary to establish a system that combines census data with *Vital Statistics*.

Internal Migration

2025
Census
100th anniversary



1. Introduction

Births, deaths, and migration are the three primary factors of population change. Among these, migration differs from the other two because it is a social factor that drives population change. It not only changes the population at the origins and destinations but also transforms the demographic, social, and economic structures of the regions involved (Koo, 2018). Areas with high in-migration often undergo accelerated economic growth and urbanization but may also face negative consequences such as housing, transportation, and environmental problems. Conversely, regions with high out-migration suffer from labor shortages, economic decline, and even the risk of local extinction.

Migration can be broadly divided into internal and international migration, with internal migration referring specifically to movement between regions within a country. In Korea, internal migration patterns have steadily evolved in response to socio-economic factors such as urbanization, industrialization, and government policies. These changes have contributed to significant disparities in resource allocation and economic opportunities between regions, thereby emerging as significant social issues.

This chapter explores the trends in internal migration over the past 50 years using census data. Internal migration in the census is compiled through sample surveys. Specifically, migration has been measured through questions about previous residence, chiefly via the place of birth. In 1970, questions about residence 5 years prior were added, and in 1980,

questions about residence 1 year prior were included.

This chapter examines changes in internal migration from 1970 to 2020 using census data on residence five years prior. First, it summarizes overall migration trends, including both intra-provincial and inter-provincial movements. Next, it analyzes patterns of in-migration, out-migration, and net migration by province. Finally, it focuses on the Seoul metropolitan area, the core of internal migration in Korea, to assess changes in migration patterns.

2. Trends in Internal Migration

Internal migration from 1965 to 2020 is closely linked to economic and social changes (Table 9-1). Migration refers to movement into a specific area from another (in-migration) or movement out of a specific area to another (out-migration), crossing administrative boundaries such as provinces (*si-do*), cities/districts (*si-gun-gu*), submunicipal units (*eup-myeon-dong*).¹⁾ In this chapter, migration is defined as a change of residence across *si-gun-gu* boundaries; relocations within the same *si-gun-gu* but between different *eup-myeon-dong* are not counted as migration.

1) In Korea, the administrative geography is organized hierarchically into three primary levels: provinces (*si* and *do*), cities/districts (*si*, *gun*, and *gu*), and submunicipal units (*eup*, *myeon*, and *dong*). Although both types are referred to as *si* in English, a distinction is made between metropolitan-level *si*, and province-affiliated self-governing *si*, which are geographically situated within provincial boundaries. The term *si* used in the province level means Special Metropolitan City, Metropolitan City, Metropolitan Autonomous City as defined in the *Local Autonomy Act*.

Table 9-1. Trends in Internal Migration in Korea (1965–2020)

(Unit: thousand persons, %)

Category	Total Migrants	Intra-Provincial Migration	Inter-Provincial Migration	Total Migration Rate	Intra-Provincial Migration Rate	Inter-Provincial Migration Rate
1965-1970	4,394	1,918	2,477	14.0	6.1	7.9
1970-1975	5,209	2,361	2,840	17.6	8.0	9.6
1975-1980	7,658	3,879	3,765	20.8	10.5	10.3
1980-1985	8,402	3,654	4,721	20.8	9.0	11.7
1985-1990	9,871	4,379	5,437	23.1	10.3	12.9
1990-1995	10,183	4,397	5,690	23.2	10.0	13.2
1995-2000	9,711	4,191	5,386	21.1	9.1	11.7
2000-2005	9,141	3,730	5,238	20.8	8.5	11.9
2005-2010	8,498	2,969	5,083	18.8	6.6	11.2
2010-2015	7,748	2,613	4,651	16.4	5.5	9.9
2015-2020	11,238	4,813	5,526	23.2	9.9	11.4

Source: Statistics Korea, Population and Housing Census (KOSIS).

The total number of migrants is the sum of in-migrants and out-migrants. This total is categorized into intra-provincial migration (moves within the same *si-do* but to a different *si-gun-gu*) and inter-provincial migration (moves between different *si-do*). In addition, *other migrants*, mostly representing immigration from overseas, are included in the total migration count. Migration rates are calculated as the number of migrants divided by the population aged five or above.

First, both the number of internal migrants and total migration rates showed a steady increase from 1965 to 1995. Specifically, the total number of internal migrants increased from 4.39 million between 1965–1970 to 10.18 million between 1990–1995. During the 1970s and 1980s, rapid industrialization and urbanization led to increased migration toward major cities, while suburbanization in the 1990s expanded urban outskirts, further increasing total migration.

Since 2000, the scale of internal migration has generally shown a decreasing trend. The total number of migrants declined steadily from 9.71 million during 1995–2000 to 7.75 million between 2010 and 2015, and the total migration rate fell from 21.1% to 16.4%. In particular, the intra-provincial migration rate declined sharply from 9.1% during 1995–2000 to 5.5% between 2010 and 2015.

3. Inter-Provincial Migration

The following section discusses changes in inter-provincial migration. The number of out-migrants and the out-migration rates represent the count and proportion of people who moved from one province to another, serving as important indicators for understanding regional migration trends.

In Seoul, both the number of out-migrants and the out-migration rate steadily increased alongside population growth until 1990–1995 (Table 9-2). During that period, Seoul's out-migrant count and rate peaked at 1.93 million and 19.2%, respectively. Notably, the number of out-migrants increased by 0.55 million compared to five years earlier, reflecting significant out-migration associated with the development of *New Towns* around Seoul

during that period. Subsequently, Seoul's out-migrant numbers continued to decrease but rose again to 1.46 million between 2015 and 2020.

Metropolitan cities show broadly similar patterns, characterized by a peak followed by a gradual decline, although the timing differs among them. Busan's out-migrant peaked at 0.46 million during 1990–1995, and then declined in a pattern similar to that of Seoul. Daegu and Incheon experienced their highest out-migration rates around 2000–2005 before decreasing. In contrast, Gwangju, Daejeon and Ulsan recorded their highest out-migration rates more recently, during 2015–2020.

Other provinces (*dos*) recorded their highest out-migrant counts prior to the 1990s, followed by a decreasing trend. Chungbuk and Gyeongnam had their highest out-migrant counts of 0.21 million and 0.39 million, respectively, between 1975 and 1980. Chungnam and Gyeongbuk peaked later, with 0.35 million and 0.51 million out-migrants, respectively, between 1980 and 1985. Out-migration rates in Gangwon, Jeonnam, and Gyeongbuk exceeded 15% during their peak periods, reflecting relatively large population outflows.

Table 9-2. Number of Out-Migrants and Out-Migration Rates Between Provinces (1965–2020)

(Unit: thousand persons, %)

Category	65-70	70-75	75-80	80-85	85-90	90-95	95-00	00-05	05-10	10-15	15-20
Seoul	248 (4.5)	524 (8.9)	753 (9.2)	1,081 (11.2)	1,377 (13.2)	1,928 (19.2)	1,655 (16.8)	1,471 (16.0)	1,349 (14.7)	1,312 (14.4)	1,455 (16.2)
Busan	127 (6.8)	169 (8.1)	221 (7.1)	332 (9.4)	348 (9.3)	460 (12.3)	400 (10.9)	380 (11.5)	342 (10.6)	287 (8.8)	328 (10.3)
Daegu	-	-	-	185 (9.1)	214 (9.7)	226 (9.4)	248 (10.0)	244 (10.6)	240 (10.5)	208 (9.0)	229 (10.0)
Incheon	-	-	-	136 (9.8)	174 (9.7)	236 (10.4)	278 (11.3)	312 (13.3)	290 (11.7)	259 (9.7)	308 (11.2)
Gwangju	-	-	-	-	122 (10.9)	129 (10.5)	144 (10.7)	144 (11.0)	138 (10.0)	128 (9.1)	162 (11.6)
Daejeon	-	-	-	-	97 (9.3)	100 (8.0)	152 (11.1)	163 (12.2)	176 (12.6)	181 (12.6)	242 (17.1)
Ulsan	-	-	-	-	-	-	111 (11.0)	96 (9.8)	108 (10.7)	92 (8.6)	125 (11.7)
Sejong	-	-	-	-	-	-	-	-	-	12 (6.3)	40 (12.2)
Gyeonggi	321 (9.6)	332 (9.7)	437 (9.0)	542 (11.3)	727 (12.0)	754 (10.0)	908 (10.2)	892 (9.3)	1,003 (9.6)	979 (8.6)	1,052 (8.4)
Gangwon	185 (9.9)	195 (12.5)	275 (15.6)	267 (15.5)	299 (19.3)	240 (16.7)	179 (12.0)	178 (13.0)	174 (12.7)	144 (10.1)	179 (12.4)
Chung-buk	164 (11.1)	148 (11.3)	208 (14.9)	204 (14.7)	190 (13.9)	151 (11.0)	143 (9.8)	152 (11.2)	146 (10.4)	131 (8.9)	174 (11.4)
Chung-nam	308 (10.8)	281 (11.2)	332 (11.4)	349 (11.6)	326 (16.5)	256 (14.8)	199 (10.8)	217 (12.3)	208 (11.1)	186 (9.6)	260 (12.9)
Jeonbuk	206 (8.5)	199 (9.6)	274 (12.2)	274 (12.5)	268 (13.2)	204 (11.0)	169 (9.0)	182 (11.0)	158 (9.5)	121 (7.0)	169 (9.9)
Jeonnam	278 (6.9)	318 (9.4)	429 (11.5)	425 (11.4)	438 (17.9)	330 (16.3)	227 (11.4)	225 (13.2)	189 (11.5)	137 (8.1)	187 (11.1)
Gyeong-buk	302 (6.6)	293 (7.0)	400 (8.2)	509 (16.9)	454 (16.2)	330 (12.6)	281 (10.4)	295 (12.1)	274 (11.3)	215 (8.6)	294 (11.8)
Gyeong-nam	307 (9.8)	296 (10.6)	385 (11.8)	374 (10.6)	372 (10.3)	314 (8.3)	261 (8.8)	254 (8.9)	250 (8.6)	229 (7.5)	274 (8.8)
Jeju	12 (3.3)	34 (10.0)	25 (5.4)	32 (6.6)	33 (6.6)	30 (6.1)	31 (6.0)	34 (7.0)	37 (7.5)	31 (5.6)	46 (7.4)
Total	2,457 (7.8)	2,790 (9.4)	3,739 (10.2)	4,711 (11.7)	5,437 (12.7)	5,690 (13.0)	5,386 (11.7)	5,238 (11.9)	5,083 (11.2)	4,651 (9.9)	5,526 (11.4)

Source: Statistics Korea, Population and Housing Census (KOSIS).

Table 9-3. Number of In-Migrants and In-Migration Rates Between Provinces (1965–2020)

(Unit: thousand persons, %)

Category	65-70	70-75	75-80	80-85	85-90	90-95	95-00	00-05	05-10	10-15	15-20
Seoul	1,183 (21.4)	1,053 (17.9)	1,232 (15.0)	1,345 (14.0)	1,299 (12.4)	1,003 (10.0)	972 (9.9)	1,015 (11.0)	966 (10.6)	741 (8.1)	1,010 (11.3)
Busan	308 (16.4)	376 (18.1)	538 (17.3)	424 (12.1)	371 (9.9)	229 (6.1)	216 (5.9)	198 (6.0)	205 (6.4)	208 (6.4)	219 (6.9)
Daegu	-	-	-	331 (16.3)	291 (13.3)	245 (10.2)	200 (8.1)	179 (7.8)	161 (7.0)	143 (6.2)	171 (7.5)
Incheon	-	-	-	325 (23.4)	411 (22.9)	438 (19.2)	339 (13.8)	290 (12.3)	316 (12.7)	324 (12.1)	342 (12.4)
Gwangju	-	-	-	-	186 (16.5)	188 (15.2)	164 (12.2)	143 (10.9)	137 (10.0)	105 (7.5)	125 (9.0)
Daejeon	-	-	-	-	196 (18.9)	259 (20.7)	210 (15.3)	196 (14.6)	185 (13.2)	168 (11.7)	163 (11.5)
Ulsan	-	-	-	-	-	-	110 (10.9)	94 (9.7)	91 (9.1)	100 (9.4)	86 (8.0)
Sejong	-	-	-	-	-	-	-	-	-	107 (57.5)	157 (48.2)
Gyeonggi	344 (10.3)	588 (17.1)	900 (18.5)	1,095 (22.8)	1,452 (23.9)	1,901 (25.2)	1,680 (18.8)	1,787 (18.6)	1,561 (14.9)	1,322 (11.6)	1,735 (13.9)
Gangwon	103 (5.5)	85 (5.4)	104 (5.9)	126 (7.3)	123 (7.9)	140 (9.8)	164 (11.1)	148 (10.8)	154 (11.2)	160 (11.2)	170 (11.7)
Chung-buk	56 (3.8)	68 (5.2)	73 (5.2)	102 (7.3)	121 (8.9)	165 (12.0)	169 (11.5)	148 (10.9)	171 (12.1)	164 (11.1)	173 (11.4)
Chung-nam	97 (3.4)	123 (4.9)	164 (5.7)	187 (6.2)	136 (6.9)	182 (10.5)	262 (14.2)	263 (14.9)	310 (16.5)	279 (14.4)	272 (13.5)
Jeonbuk	54 (2.2)	66 (3.2)	65 (2.9)	85 (3.9)	81 (4.0)	116 (6.2)	134 (7.1)	99 (5.9)	122 (7.3)	119 (6.9)	123 (7.2)
Jeonnam	57 (1.4)	65 (1.9)	88 (2.4)	127 (3.4)	140 (5.7)	135 (6.7)	171 (8.6)	113 (6.6)	127 (7.7)	142 (8.5)	172 (10.2)
Gyeong-buk	144 (3.2)	200 (4.8)	262 (5.4)	203 (6.8)	244 (8.7)	257 (9.8)	276 (10.2)	246 (10.1)	255 (10.5)	250 (10.0)	241 (9.7)
Gyeong-nam	97 (3.1)	146 (5.2)	293 (9.0)	337 (9.6)	358 (9.9)	401 (10.6)	283 (9.5)	284 (10.0)	288 (9.8)	264 (8.6)	281 (9.0)
Jeju	15 (4.0)	20 (5.8)	20 (4.3)	25 (5.1)	29 (5.7)	31 (6.2)	36 (7.1)	35 (7.2)	34 (6.8)	55 (9.7)	87 (14.0)
Total	2,457 (7.8)	2,790 (9.4)	3,739 (10.2)	4,711 (11.7)	5,437 (12.7)	5,690 (13.0)	5,386 (11.7)	5,238 (11.9)	5,083 (11.2)	4,651 (9.9)	5,526 (11.4)

Source: Statistics Korea, Population and Housing Census (KOSIS).

The number of in-migrants and the in-migration rates represent the count and proportion of people moving into each province, reflecting the economic attractiveness and living conditions of those areas. In Seoul, the number of in-migrants steadily increased from 1970 through 1985, peaking at 1.35 million between 1980 and 1985 (Table 9-3). Following this peak, the number of in-migrants generally declined. The in-migration rate was highest at 21.4% during 1965–1970 and steadily decreased to 9.9% during 1995–2000.

Metropolitan cities generally exhibit similar patterns to Seoul, with increases in both in-migrant counts and rates during certain periods followed by subsequent declines. Busan experienced its peak in-migrant count of approximately 0.54 million between 1975 and 1980, followed by a steady decline. Daegu and Gwangju have generally seen declining in-migrant counts and rates. In contrast, Incheon and Daejeon had their highest in-migrant counts, approximately 0.44 million and 0.26 million, respectively, around 1990–1995, coinciding with Seoul’s peak out-migration.

Since its establishment in 2012, Sejong has experienced very high in-migration rates, around 50%, reflecting rapid population inflow.²⁾ Gyeonggi also stands out with a significant increase in in-migrants. Gyeonggi’s in-migrant count steadily grew, reaching about 1.9 million between 1990 and 1995, when Seoul recorded its highest out-migration. Chungnam also experienced steady growth, peaking at 0.31 million in-migrants between 2005 and 2010. Meanwhile, Jeju’s in-migration rate consistently increased, reaching 14% between 2015 and 2020, the second highest among provinces.

Net migration is the difference between in-migrants and out-migrants in a given area (Table 9-4). As natural population growth has recently slowed in Korea, net migration has a significant impact on regional population dynamics. Seoul experienced *positive* net migration (more in-migrants than out-migrants), but since 1985–1990, it has shown a steady

2) Sejong is the *Metropolitan Autonomous City* located inland in the Chungcheong region. The relocation of several administrative institutions led to a significant population inflow.

trend of *negative* net migration (more out-migrants than in-migrants). Specifically, Seoul's net in-migration steadily decreased, falling from about 0.94 million during 1965–1970 to approximately 0.26 million between 1980 and 1985. Conversely, net out-migration has remained around 500,000 since 2000. This pattern reflects migration to Gyeonggi and Incheon, driven by *New Towns* around Seoul in the 1990s. The trend has continued due to urban overcrowding and high housing costs in Seoul.

Most metropolitan cities initially experienced net in-migration, which shifted to net out-migration after 2000. Busan began to show net out-migration slightly later than Seoul, starting from 1990–1995; Daegu followed from 1995–2000; and Daejeon from 2010–2015. Ulsan has exhibited a continuous trend of net out-migration since its elevation to metropolitan city status. In contrast, Incheon showed net in-migration during most periods, except for 2000–2005, which can be interpreted in connection with Seoul's net out-migration pattern. Lastly, Sejong recorded net in-migration throughout the whole period, with about 0.12 million net in-migrants between 2015 and 2020—the highest among provinces.

Table 9-4. Net Migration and Net Migration Rates by Province (1965–2020)

(Unit: thousand persons, %)

Category	65-70	70-75	75-80	80-85	85-90	90-95	95-00	00-05	05-10	10-15	15-20
Seoul	935 (16.9)	529 (9.0)	479 (5.8)	264 (2.7)	-78 (-0.7)	-925 (-9.2)	-684 (-6.9)	-456 (-5.0)	-384 (-4.2)	-571 (-6.3)	-445 (-5.0)
Busan	180 (9.6)	207 (10.0)	317 (10.2)	93 (2.6)	23 (0.6)	-231 (-6.2)	-184 (-5.0)	-182 (-5.5)	-137 (-4.2)	-78 (-2.4)	-110 (-3.4)
Daegu	-	-	-	146 (7.2)	77 (3.5)	19 (0.8)	-48 (-1.9)	-64 (-2.8)	-79 (-3.5)	-65 (-2.8)	-58 (-2.6)
Incheon	-	-	-	189 (13.6)	237 (13.2)	202 (8.9)	61 (2.5)	-23 (-1.0)	26 (1.1)	65 (2.4)	34 (1.2)
Gwangju	-	-	-	-	64 (5.7)	58 (4.7)	20 (1.5)	-1 (-0.1)	0 (-0.0)	-23 (-1.6)	-37 (-2.6)
Daejeon	-	-	-	-	99 (9.6)	159 (12.7)	58 (4.2)	33 (2.5)	8 (0.6)	-13 (-0.9)	-79 (-5.6)
Ulsan	-	-	-	-	-	-	-1 (-0.1)	-2 (-0.2)	-16 (-1.6)	8 (0.8)	-39 (-3.7)
Sejong	-	-	-	-	-	-	-	-	-	95 (51.1)	117 (36.0)
Gyeonggi	24 (0.7)	256 (7.4)	463 (9.5)	552 (11.5)	724 (11.9)	1,148 (15.2)	772 (8.6)	896 (9.3)	557 (5.3)	343 (3.0)	682 (5.5)
Gangwon	-82 (-4.4)	-111 (-7.1)	-171 (-9.7)	-141 (-8.2)	-176 (-11.4)	-100 (-6.9)	-14 (-1.0)	-29 (-2.2)	-20 (-1.4)	16 (1.1)	-10 (-0.7)
Chung-buk	-108 (-7.3)	-80 (-6.1)	-135 (-9.7)	-102 (-7.4)	-69 (-5.0)	14 (1.0)	26 (1.8)	-4 (-0.3)	24 (1.7)	32 (2.2)	-1 (-0.1)
Chung-nam	-211 (-7.4)	-159 (-6.3)	-168 (-5.8)	-163 (-5.4)	-190 (-9.7)	-74 (-4.3)	63 (3.4)	46 (2.6)	102 (5.4)	93 (4.8)	12 (0.6)
Jeonbuk	-152 (-6.2)	-133 (-6.4)	-209 (-9.3)	-189 (-8.6)	-186 (-9.2)	-88 (-4.7)	-36 (-1.9)	-83 (-5.0)	-36 (-2.1)	-1 (-0.1)	-45 (-2.7)
Jeonnam	-220 (-5.5)	-253 (-7.5)	-341 (-9.2)	-298 (-8.0)	-298 (-12.2)	-194 (-9.6)	-56 (-2.8)	-112 (-6.6)	-62 (-3.8)	5 (0.3)	-15 (-0.9)
Gyeong-buk	-159 (-3.5)	-93 (-2.2)	-138 (-2.8)	-306 (-10.2)	-209 (-7.5)	-74 (-2.8)	-5 (-0.2)	-49 (-2.0)	-19 (-0.8)	35 (1.4)	-53 (-2.1)
Gyeong-nam	-210 (-6.7)	-150 (-5.3)	-93 (-2.8)	-37 (-1.1)	-14 (-0.4)	87 (2.3)	22 (0.7)	30 (1.1)	38 (1.3)	35 (1.1)	7 (0.2)
Jeju	2 (0.7)	-14 (-4.2)	-5 (-1.1)	-8 (-1.5)	-5 (-0.9)	0 (0.0)	6 (1.1)	1 (0.2)	-3 (-0.7)	23 (4.2)	41 (6.6)

Source: Statistics Korea, Population and Housing Census (KOSIS)

Other than metropolitan cities, patterns of net migration vary across regions. Gyeonggi has shown continuous net in-migration, indicating rapid population growth in the area. Its net in-migration steadily increased, peaking at about 1.15 million during 1990–1995, which coincided with Seoul’s highest level of net out-migration. Although the scale of net in-migration declined afterward, it remained around 0.6 million until 2015–2020. Additionally, Chungnam and Gyeongnam have also experienced steady net in-migration since 1995–2000. Conversely, Gangwon, Jeonbuk, Jeonnam, and Gyeongbuk have shown net out-migration during most periods, indicating accelerating population outflows.

4. Migration in the Seoul Metropolitan Area

The following section examines changes in internal migration, with a focus on the Seoul metropolitan area, which includes Seoul, Incheon, and Gyeonggi (Table 9-5). First, in-migration to the Seoul metropolitan area from other regions increased steadily from 1.15 million during 1965–1970 to 1.53 million between 1980 and 1985. However, after this peak, the volume of in-migration to the Seoul metropolitan area declined. Notably, during 2010–2015, the number of in-migrants fell below one million to 0.77 million but rose again to 1.14 million during 2015–2020.

The destinations within the Seoul metropolitan area for people migrating from outside have changed significantly. Between 1965 and 1970, about 0.93 million out of the 1.15 million in-migrants moved to Seoul. However, this proportion gradually declined, and from 2000–2005 onward, more migrants moved to Gyeonggi than to Seoul. This trend of greater in-migration to Gyeonggi continued through 2015–2020, when approximately 0.58 million of the in-migrants, about half of all those who moved into the Seoul metropolitan area, settled in Gyeonggi.

Table 9-5. Internal Migration within the Seoul Metropolitan Area (1965–2020)

(Unit: thousand persons)

Category	65-70	70-75	75-80	80-85	85-90	90-95	95-00	00-05	05-10	10-15	15-20
Migration within the Metropolitan Area	373	541	747	1,235	1,656	2,125	1,961	1,953	1,805	1,617	1,949
Seoul → Gyeonggi	122	299	436	603	825	1,295	1,098	1,058	912	816	996
Seoul → Incheon	-	-	-	120	160	178	126	93	99	107	101
Incheon → Seoul	-	-	-	52	64	65	65	68	61	48	65
Incheon → Gyeonggi	-	-	-	50	65	99	119	167	135	117	162
Gyeonggi → Seoul	251	242	311	341	440	360	432	465	466	383	488
Seoul → Gyeonggi	-	-	-	69	102	129	122	103	132	146	138
Migration from Outside the Metropolitan Area	1,154	1,101	1,386	1,530	1,505	1,217	1,030	1,139	1,037	770	1,137
Seoul	931	811	922	952	794	579	475	482	439	310	457
Incheon	-	-	-	136	149	131	92	94	85	70	104
Gyeonggi	222	290	465	442	562	508	463	563	514	389	576
Migration Out of the Metropolitan Area	195	316	443	525	621	793	881	722	837	932	867
Seoul	126	226	317	359	392	456	432	320	337	389	358
Incheon	-	-	-	34	44	72	94	78	94	94	82
Gyeonggi	69	90	126	132	185	265	355	324	406	450	427
Net Migration in the Metropolitan Area	958	785	943	1,005	884	424	149	417	200	-163	271
Seoul	805	585	605	593	402	122	44	162	101	-78	99
Incheon	-	-	-	102	105	59	-3	16	-9	-23	22
Gyeonggi	153	200	338	310	376	243	108	239	108	-61	150

Source: Statistics Korea, Population and Housing Census (KOSIS).

As the population of the Seoul metropolitan area steadily increased, the number of people moving out of the area also rose. About 0.2 million people moved out of the Seoul metropolitan area during 1965–1970, and this number gradually increased to 0.88 million by 1995–2000. Since 2000, out-migration has fluctuated but generally remained above 0.8 million. Before 2000–2005, most out-migrants from the Seoul metropolitan area originated in Seoul, but afterward, Gyeonggi accounted for a larger share.

In the past, net migration was positive. Specifically, up to 1985–1990, when in-migration was increasing, the net migration was close to one million. However, from 1990–1995, the net migration sharply decreased.

Another notable characteristic of internal migration in the Seoul metropolitan area is the gradual increase in within-migration. This trend is attributed to both the population growth and the development of *New Towns* around Seoul, which have contributed to increased internal migration. Specifically, the volume of internal migration between different cities within the Seoul metropolitan area rose significantly from 0.37 million during 1965–1970 to 2.13 million during 1990–1995. Notably, about 1.3 million people moved from Seoul to Gyeonggi during 1990–1995. This migration resulted in the largest negative net migration in Seoul and the largest positive net migration in Gyeonggi. The trend continued through 2015–2020, with approximately 1.95 million people relocating between cities within the area.

Table 9-6. Age-Specific Internal Migration in the Seoul Metropolitan Area (1975–2020)

(Unit: thousand persons, %)

Category	1975-1980	1985-1990	1995-2000	2005-2010	2015-2020
In-Migration	1,386 (100.0)	1,505 (100.0)	1,030 (100.0)	1,037 (100.0)	1,137 (100.0)
19 and under	489 (35.3)	391 (25.9)	213 (20.7)	174 (16.7)	101 (8.9)
20-29	556 (40.1)	641 (42.6)	426 (41.3)	368 (35.5)	431 (37.9)
30-39	189 (13.6)	281 (18.6)	227 (22.0)	243 (23.5)	281 (24.7)
40-49	72 (5.2)	84 (5.6)	86 (8.3)	118 (11.4)	126 (11.1)
50-59	40 (2.9)	50 (3.4)	29 (2.9)	59 (5.7)	83 (7.3)
60 and over	39 (2.8)	58 (3.9)	50 (4.8)	75 (7.3)	116 (10.2)
Out-Migration	443 (100.0)	621 (100.0)	881 (100.0)	837 (100.0)	867 (100.0)
19 and under	112 (25.3)	144 (23.2)	222 (25.2)	162 (19.3)	101 (11.6)
20-29	174 (39.2)	212 (34.2)	203 (23.0)	198 (23.6)	145 (16.7)
30-39	103 (23.2)	185 (29.8)	270 (30.7)	221 (26.4)	213 (24.6)
40-49	29 (6.5)	40 (6.5)	103 (11.7)	119 (14.2)	141 (16.3)
50-59	12 (2.8)	19 (3.0)	36 (4.1)	71 (8.4)	112 (12.9)
60 and over	13 (3.0)	21 (3.3)	47 (5.3)	67 (8.0)	155 (17.9)
Net Migration	943	884	149	200	271
19 and under	377	247	-9	12	0
20-29	383	429	223	170	286
30-39	86	95	-43	22	68
40-49	43	43	-17	-1	-15
50-59	28	32	-6	-12	-29
60 and over	26	38	3	8	-39

Note: The numbers in parentheses () denote the share of each age group.

Source: Statistics Korea, Population and Housing Census (KOSIS.)

Migration patterns differ by sex, age, and education level, with age identified as a key factor. Generally, migration follows the life cycle, with the highest mobility observed

among young people due to education and employment. The Seoul metropolitan area, with its concentration of universities and jobs, attracts a large influx of young people, which is a primary cause of population concentration.

Examining the age distribution of in-migrants to the Seoul metropolitan area shows that people in their 20s and 30s consistently have accounted for a large share of in-migrants across all periods (Table 9-6). The highest number of in-migrants was recorded during 1985–1990, with 0.64 million people in their 20s, accounting for 42.6% of the total. In every period, those in their 20s comprised more than 35% of in-migrants, the largest share among all age groups. The proportion of in-migrants aged 30–39 steadily increased from 13.6% during 1975–1980 to 24.7% between 2015 and 2020, making them the second-largest age group after those in their 20s.

Out-migrants from the Seoul metropolitan area also show a high proportion of people in their 20s and 30s, but the share of those in their 40s has risen sharply. The largest number of out-migrants in their 30s was 0.27 million during 1995–2000. From that period onward, out-migrants aged 30–39 have surpassed those in their 20s, becoming the age group with the highest out-migrants. In contrast, the proportion of out-migrants in their 20s decreased significantly from 39.2% during 1975–1980 to 16.7% between 2015 and 2020. Meanwhile, the proportion of out-migrants in their 40s increased markedly over the same period, showing a trend opposite to that of their 20s.

In-migration of people in their 20s has been the main driver of overall net in-migration in the Seoul metropolitan area. While the Seoul metropolitan area exhibited positive net migration for a long time, most age groups, particularly those 40 or over, showed net out-migration after 1990. By contrast, people in their 20s continued to show a strong net inflow, exceeding the total net migration of 0.27 million across all age groups during 2015–2020, although net in-migration in their 20s also declined.

5. Conclusion

Over the past 50 years, internal migration trends in Korea have reflected social changes such as urbanization, suburbanization, and interregional disparities. Specifically, before 1990, the main trend was concentration into large cities. All metropolitan cities and Gyeonggi experienced positive net migration, with more in-migrants than out-migrants, while other provinces showed negative net migration. This trend indicates population outflows from rural areas to major cities. Since 1990, suburbanization has led to population dispersion toward the outskirts of metropolitan areas, contributing to the emergence of new large cities. During this period, major cities such as Seoul, Busan, Daegu, and Ulsan experienced more out-migration than in-migration, while their surrounding regions, Gyeonggi and Gyeongnam, exhibited net in-migration.

Since 2000, the government has made efforts through balanced national development policies to reduce disparities between the Seoul metropolitan area and non-capital areas; however, the goal has yet to be achieved. Although the populations of Seoul and metropolitan cities have steadily declined since 2000, migration has not been evenly distributed across regions. In particular, while Seoul's population has decreased, the populations of Incheon and Gyeonggi, within the Seoul metropolitan area, have steadily increased.

Most other provinces continue to experience steady population outflows. In particular, provinces with severe population loss such as Gangwon, Jeonbuk, and Gyeongbuk, are experiencing a steady rise in natural decrease, raising serious concerns about the potential for local extinction. Significant disparities in education and employment environments between the Seoul metropolitan area and non-capital are considered critical factors that may

accelerate population decline in the latter.

Internal migration patterns in Korea have undergone rapid changes and would evolve in response to ongoing socioeconomic changes. In particular, local extinction is one of the major challenges currently facing the nation, and balanced national development is a key strategy for enhancing the sustainability of Korean society. Continuous surveys on internal migration are essential for diagnosing regional population decline and formulating effective policies.

Labor Force Participation and Industry

2025
Census
100th anniversary



1. Introduction

Humans participate in economic activities to obtain goods necessary for sustaining life. Participation in the labor market is the primary means of securing resources needed for living in modern society.

The range of working age and job types are influenced by industrial and social structures. In the past, people tended to enter the workforce at a relatively early age, but recently, the entry point into the labor market has gradually been delayed. As average life expectancy increases and household structures evolve, the retirement age is also being progressively postponed.

Not everyone who wants to work can find employment. Since the 2000s, as economic growth has slowed and corporate labor demands have shifted, structural mismatches between available jobs and workers' skills have become more frequent, leading to an increase in the number of people who have given up on job seeking. Although the government aims to raise employment rates and improve job quality, structural constraints within capitalism and global labor market volatility continue to pose challenges to ensuring decent work for all.

Changes in social structure have transformed the types and nature of work, and the characteristics of workers by occupation have also changed. While Western countries underwent a long-term transition from agricultural to industrial and then to information societies, Korea experienced rapid industrial and occupational structural changes within a

short period since the 1960s. Shortly after liberation, Korea was an agricultural country, but within just 60 years, it developed into a high-tech manufacturing nation.

The occupational structure is heavily influenced by the industrial structure. Generally, in agrarian societies, most people work in primary industries such as farming. However, as the manufacturing and service industries expand, employment in related occupations increases accordingly. These industrial structural changes have led to the fragmentation and specialization. The rapidly advancing technologies would bring changes to jobs in the future and the occupational structure is likely to completely differ from what it is today.

This chapter examines how the labor force participation rate among the Korean population has changed since the 1960s using census data. It also analyzes changes in employment by industry in response to shifts in the industrial structure, and further explores the occupational structure of workers based on sex and age.

2. Labor Force Participation Rate

1) Concept and Definition

The labor force refers to the human capacity employed in producing goods and services. It is measured by the labor force participation rate or employment-to-population ratio. The labor force participation rate represents the proportion of the population aged 15 and older who are either employed—meaning they performed income-generating work during the reference period—or unemployed but actively seeking work with the intention to start immediately.

The measure of the *economically active population* (labor force) used in the Population

and Housing Census has continuously changed. Until 2000, significant differences existed in survey questions, age criteria, reference period, and minimum activity hours, making time-series comparisons difficult.

Specifically, from 1980 to 1995, the economically active population could be measured as those working full-time or part-time, temporarily absent from work, and actively seeking work. However, between 2000 and 2010, the measure would be limited to those who had worked in the previous week or job seekers who were capable of working immediately.¹⁾ Since 2015, information on job-seeking among non-working persons has not been collected, limiting the precise identification of the labor force.

Accordingly, the following criteria were applied to ensure consistency in the time-series comparison of the economically active population. Until 1995, the economically active population included those who worked, those who were temporarily absent from work, and those who were not working but seeking a job. For 2000 and 2005, it includes those who worked and were temporarily absent, as well as those not working but seeking employment, with job seekers presented under two definitions. Values marked with “a” include those who were employed at the time of the survey and those who were actively seeking work and reported being available for work. Values marked with “b” include both the employed and all job seekers regardless of their availability for work, allowing for comparability with earlier census data.

Since 2010, the economically active population includes only those who worked and were temporarily absent from work; job seekers are excluded. In this regard, data from 2010 onward is functionally closer to the employment-to-population ratio, and caution is needed when making comparisons.

1) However, KOSIS does not disclose job search information for those not working in the 2010 census results.

2) Trends in Labor Force Participation Rate

Information on the economically active population can be traced through the Population and Housing Census since 1930.²⁾ According to the 1930 census conducted during the Japanese colonial period, the employment to population ratio among Koreans was 59.5% for men and 32.6% for women. In the 1940 and 1944 census data, the rates declined to 53.7% and 52.9% for men, and 21.9% and 29.0% for women, respectively. The decrease during the 1940s was influenced by the economic sanctions on Japan by the United States to support China following the outbreak of the Second Sino-Japanese War, including bans on iron ore, oil, and other military supplies. According to the 1955 census conducted after liberation, the labor force participation rate for the population aged 14 and older was 76.6% for men and 48.0% for women. The female participation rate increased by about 20 percentage points compared to 28.9% in 1944, primarily due to the large-scale entry of women into the workforce following the Korean War. In 1960, the labor force participation rate of the population aged 13 and older was 73.4% for men and 26.8% for women.

2) The survey targets, items, scope, and reference period of the Population and Housing Census vary by year. Since 1985, foreign residents with *de facto* residence in Korea have been included in the population.

Table 10-1. Changes in Labor Force Participation Rate (1966–2020)

(Unit: %)

Category	Male	Female
1966	78.6	31.5
1970	72.5	37.6
1975	77.8	45.7
1980	72.4	38.4
1985	71.5	32.1
1990	68.3	32.6
1995	71.6	36.6
2000	70.9(a) 74.4(b)	39.2(a) 46.0(b)
2005	68.8(a) 71.8(b)	39.9(a) 44.3(b)
2010	66.9	45.6
2015	67.5	45.3
2020	68.5	49.4

Source: Data for 1966–2000 cited from statistics Korea(2002); Post-2000 data from Statistics Korea, Population and Housing Census (KOSIS).

The Population and Housing Census exhibits significant fluctuations until 1980 due to methodological inconsistencies (Table 10-1). Women's labor force participation rate has steadily increased since 1985, while men exhibit an inverted U-shaped pattern. There are significant differences in participation rates by year, especially with greater variability among women compared to men. This is likely due to fluid and often ambiguous boundaries

between economic and non-economic activities among female respondents.

An analysis of the labor force participation rate by sex and age reveals a notable decline in youth participation (Table 10-2). In 1980, 21.4% of males aged 19 and under participated in economic activities, but this dropped to 5.3% in 2020. Similarly, the participation rate of young females decreased sharply from 25.1% in 1980 to 7.2% in 2020. Youth labor remained common through the 1980s, but it declined significantly in the 2000s. This can be attributed to increased household income from economic growth and changes in labor market demand, leading youths to choose education over employment.

The trends in labor force participation rates differ between men and women aged 20 and over. For men, the rate decreased from 85.8% in 1980 to 72.2% in 2020, whereas for women, it increased from 40.1% to 51.8% during the same period. The decline in men's participation was significantly influenced by a drop among those in their early 20s. The participation rate of the 25–34 age group, which previously exceeded 90%, has also steadily declined since 2000. In contrast, women's participation rates increased in all age groups aged 25 and over in 2020 compared to 1980, except for the 20–24 age group, with particularly notable growth among women aged 25–44.

Table 10-2. Changes in Labor force Participation Rate by Sex and Age (1980-2020)

(Unit: %)

Category		15-19	20 and over						
			Total	20-24	25-34	35-44	45-54	55-64	65 and over
Male	1980	21.4	85.8	71.0	94.1	96.4	92.1	75.9	40.5
	1985	12.7	85.5	61.5	94.3	97.9	94.3	75.5	40.0
	1990	12.4	84.1	53.3	93.8	97.6	93.4	74.8	37.0
	1995	10.6	86.1	58.4	94.6	98.2	95.0	78.6	40.5
	2000(a)	6.5	78.6	38.8	86.0	93.9	89.3	69.0	39.0
	2000(b)	11.1	82.0	45.8	89.2	95.9	92.3	73.4	42.9
	2005(a)	3.2	75.0	32.4	81.2	92.4	88.6	68.1	35.1
	2005(b)	6.0	78.1	38.2	84.6	94.5	91.2	71.8	38.3
	2010	4.8	73.1	29.9	78.0	88.9	87.5	72.0	34.3
	2015	5.7	72.7	30.6	77.6	90.3	88.6	75.6	34.2
	2020	5.3	72.2	36.3	77.9	90.5	89.0	76.8	36.2
Female	1980	25.1	40.1	51.2	31.9	46.0	50.2	38.3	12.4
	1985	13.9	35.7	49.4	28.1	38.8	46.3	35.2	10.7
	1990	16.1	36.9	57.2	31.2	39.2	44.2	34.8	11.5
	1995	11.9	42.0	61.3	39.2	44.4	46.7	40.2	16.8
	2000(a)	7.8	42.5	48.9	44.2	49.6	47.7	37.5	18.9
	2000(b)	12.9	49.5	57.0	51.9	57.1	54.6	43.6	23.5
	2005(a)	5.2	42.8	46.3	51.8	49.7	47.5	33.9	17.9
	2005(b)	8.0	47.3	51.1	56.8	55.1	51.7	38.0	21.0
	2010	6.6	49.0	43.5	61.7	58.4	59.0	41.7	18.5
	2015	6.5	48.2	41.6	63.7	58.7	61.5	43.8	15.9
	2020	7.2	51.8	43.8	71.3	64.6	66.8	51.2	18.2

Source: Data for 1980-2000 cited from statistics Korea(2002); Post-2000 data from Statistics Korea, Population and Housing Census, 10% and 20% sample microdata.

For both men and women, labor force participation rates drop sharply after age 55, largely because many leave or retire from their primary jobs in their late 50s. In 2020, the rates of 45-54 men and women were 89.0%, 66.8% respectively, and those of 55-64 men and women were 76.8%, 51.2% respectively, a decline of more than 10 percentage points for both sexes.

Among those aged 65 and over, participation rates dropped significantly to 36.2% for men and 18.2% for women, with a larger decline observed among women than men.

Meanwhile, women's participation rates by age still exhibit an M-shaped curve. Compared to men, women tend to enter economic activity earlier and remain active until marriage, but often leave the labor market during periods of marriage, childbirth, and child-rearing. Since 2000, as women have become more actively engaged in economic activities, marriage and childbirth have been delayed, leading to an increase in employment to population ratio and causing the M-shaped pattern to diminish.

Table 10-3. Changes in Labor force Participation Rate by Sex and Marital Status (1980-2020)

(Unit: %)

Category	Male					Female				
	Total	Married	Widowed	Divorced	Single	Total	Married	Widowed	Divorced	Single
1980	74.7	90.3	45.5	84.8	50.0	38.5	36.2	32.1	63.3	46.0
1985	74.1	91.4	43.8	85.1	45.6	33.1	31.1	28.5	60.9	39.2
1990	73.8	90.4	42.7	86.2	44.7	34.2	31.0	28.4	70.7	42.9
1995	77.6	91.0	46.7	88.1	51.3	38.9	36.8	30.3	70.2	47.2
2000(a)	71.2	85.2	39.0	75.6	43.3	39.3	40.9	27.5	60.3	39.8
2000(b)	74.7	87.5	44.7	83.2	48.9	46.1	47.7	33.6	72.3	46.7
2005(a)	68.8	82.7	35.2	71.5	44.4	40.0	40.4	24.6	61.0	43.8
2005(b)	71.8	84.7	39.8	78.2	49.1	44.3	44.9	28.5	68.7	47.8
2010	66.9	79.8	33.7	69.4	45.7	45.6	49.4	23.4	61.7	45.5
2015	67.5	79.9	32.6	68.8	48.5	45.3	48.1	22.9	61.5	47.0
2020	68.5	77.7	33.2	66.9	55.5	49.4	52.0	23.0	62.7	53.0

Source: Data for 1980-2000 cited from statistics Korea(2002); Post-2000 data from Statistics Korea, Population and Housing Census, 10% and 20% sample microdata.

Trends in labor force participation rates by marital status reflect changes in gender roles within Korean society. From 1980 to 2020, married men and divorced women have the highest participation rates (Table 10-3). In 1980, married men's participation rate (90.3%) was 54.1 percentage points higher than that of married women (36.2%).

However, this gap between men and women in marriage has significantly narrowed due to the increase in dual-income households. Until 1995, unmarried women had higher participation rates than married women, but since 2000, the participation rate of married women has risen to a level similar to that of unmarried women.

3. Industrial and Occupational Structure of the Employed

1) Changes in Industrial Structure of the Employed

Industrial structure refers to the composition of various industries within an economy and varies depending on a country's natural environment and stage of economic development. Generally, countries with limited natural resources initially tend to begin industrialization with labor-intensive light industries. As technology and capital accumulate, the industrial structure undergoes advancement, shifting toward industries that require higher technological capabilities. This growth process involves a transition from a structure dominated by primary industries to one increasingly characterized by secondary industries, followed by the expansion of tertiary industries as the economy continues to develop.

Examining changes in the structure of employment by industry through the census, in

1995, employment in agriculture, forestry, and fisheries accounted for 16.4%, mining and manufacturing for 23.6% (Table 10-4). Within the service sector, wholesale and retail trade held the largest share at 16.9%, followed by accommodation and food services (6.4%), and educational services (5.3%). By 2020, employment in agriculture, forestry, and fisheries had plummeted to about a quarter of that in 1995, and manufacturing decreased to 17.4%, while the service sector continued to grow.

The composition of employment within the service sector also changed rapidly. Although wholesale and retail trade remained the largest sector, accounting for 13.4% of employment in 2020, it had declined compared to 1995. Educational services rose from 5.3% in 1995 to 7.4% in 2010 but decreased to 6.7% in 2020 due to a decline in the school-age population. On the other hand, employment in health and social welfare services increased from 1.7% in 1995 to 8.3% in 2020, reflecting growing demands for welfare services due to population aging. Employment in accommodation and food services also grew, driven by increases in household spending on dining out. Employment in transportation and warehousing rose from 4.6% in 1995 to 5.2% in 2020.

Table 10-4. Changes in Employment Structure by Industry (1995-2020)

(Unit: %)

Category		1995	2000	2005	2010	2015	2020
1995-2015	2020						
Agriculture, Forestry, and Fisheries		16.4	13.8	10.9	7.9	6.6	4.3
Mining		0.2	0.1	0.1	0.1	0.1	0.1
Manufacturing		23.4	20.7	19.7	17.3	17.7	17.4
Electricity, Gas, and Water Supply	Electricity, Gas, Steam, and Air Conditioning Supply	0.5	0.5	0.4	0.4	0.5	0.4
Sewage, Waste Treatment, Raw Material Recycling, and Environmental Restoration	Water Supply, Sewage, Waste Treatment, and Raw Material Recycling	-	-	-	0.3	0.4	0.6
Construction		8.6	7.2	7.5	7.0	6.3	6.5
Wholesale and Retail Trade		16.9	15.7	15.0	14.2	13.7	13.4
Transportation	Transportation and Warehousing	4.6	4.8	4.6	4.9	4.9	5.2
Accommodation and Food Services		6.4	7.5	7.7	7.8	8.0	8.2
Publishing, Video, Broadcasting, Telecommunications, and Information Services	Information and Communication	0.8	1.2	1.2	2.8	2.9	3.2
Finance and Insurance		3.6	3.7	3.3	3.6	3.4	3.5
Real Estate and Rental Services	Real Estate Services	1.5	1.7	2.4	2.4	2.6	2.2
Professional, Scientific, and Technical Services		-	-	-	3.9	4.4	4.4
Business Services	Business Facility Management, Business Support, and Rental Services	2.9	4.3	5.8	4.0	4.4	4.4
Public Administration, Defense, and Social Security		3.8	3.9	3.8	4.1	4.0	5.3
Educational Services		5.3	6.0	6.8	7.4	7.2	6.7
Health and Social Welfare Services		1.7	2.3	3.6	5.3	6.5	8.3
Arts, Sports, and Leisure-related Services		1.3	1.8	2.0	1.6	1.7	1.8
Associations, Repair, and Other Personal Services		1.8	4.3	4.4	4.6	4.3	3.9
Household Employment Activities / Undifferentiated Own-Use Production Activities		0.3	0.4	0.3	0.5	0.4	0.1
International and Foreign Organizations		0.1	0.1	0.0	0.1	0.1	0.1

Source: Statistics Korea(2002), Population and Housing Census, 2% sample microdata(1995-2000), 10% and 20% sample microdata(2005-2020).

2) Changes in Occupational Structure of the Employed

Changes in the industrial structure have greatly influenced the composition of occupations. From 1955 to 2020, the proportion of skilled workers in agriculture, forestry, and fisheries sharply declined, while the share of other occupational groups such as professionals steadily increased (Table 10-5).

In 1955, 79.5% of workers were skilled in agriculture, forestry, and fisheries, but this share rapidly decreased through industrialization, falling to 4.3% in 2020. The proportion of production workers rose from 8.7% in 1955 to 31.6% in 1990, but gradually declined until 2005. However, after 2010, it reversed to an increasing trend again, reaching 30.6% in 2020. This indicates that Korea continues to generate significant employment in the manufacturing sector.

The share of professionals steadily increased from 4.5% in the 1980s to 10.5% in 1995 and 20.0% in 2020. The proportion of clerical workers surged from 5.9% in 1970 to 15.4% in 1990, then stabilized at 20.4% in 2020 as IT advances led to the automation and standardization of work.

Generally, as industrial structures advance, the share of services in the economy's value-added and employment increases. Likewise, as Korea's economy has become more service-oriented, the proportion of service and sales occupations in employment rose from 13.5% in 1960 to 24.0% in 2020. However, growth rates have stagnated since 1990.

Table 10-5. Changes in Occupational Composition (1955–2020)

(Unit: %)

Category	1955	1960	1966	1970	1975	1980	1985	1990	1995	2000	2005	2010	2015	2020
Managers	1.2	1.3	0.9	1.0	0.8	1.1	1.5	2.1	4.3	4.6	3.6	2.8	1.5	0.8
Professionals	1.6	2.4	2.8	3.2	3.3	4.5	5.8	7.4	10.5	16.3	19.0	19.4	20.9	20.0
Clerical Workers	2.4	2.6	4.3	5.9	6.7	9.5	11.5	15.4	14.5	14.3	16.5	16.3	17.4	20.4
Sales Workers	4.5	8.3	10.7	10.2	10.5	12.1	15.5	14.0	15.8	12.7	11.1	12.3	11.9	11.3
Service Workers	2.1	5.2	5.4	6.7	6.5	7.1	10.8	8.8	11.8	9.7	9.8	10.0	10.6	12.7
Production Workers	8.7	13.4	19.2	21.8	23.0	28.1	30.3	31.6	27.0	28.8	29.1	31.5	32.5	30.6
Skilled in Agriculture & Fisheries	79.5	66.7	56.8	51.2	49.2	37.6	24.6	20.7	16.1	13.6	10.8	7.6	5.2	4.3

Note: To align with the criteria used in the 2002 Korean population data, technicians, assemblers, and simple laborers are classified as production workers.

Source: Data for 1955–2000 cited from statistics Korea(2002); Post-2000 data from Statistics Korea, Population and Housing Census, 10% and 20% sample microdata.

Occupational composition shows clear differences by sex (Table 10-6). Both men and women have experienced a sharp decline in the share of skilled workers in agriculture, forestry, and fisheries, accompanied by an increasing share of other occupations. In 2020, the largest proportions among male workers were production workers (39.9%), followed by clerical workers (18.8%), professionals (18.0%), and sales workers (10.0%). The growth of production workers slowed after 2010, and the growth rates of professionals and clerical workers also decelerated in the 2000s.

Table 10-6. Changes in Occupational Composition by Sex (1955–2020)

(Unit: %)

Category		1955	1960	1966	1970	1975	1980	1985	1990	1995	2000	2005	2010	2015	2020
M	Managers	1.9	1.5	1.2	1.4	1.3	1.6	2.3	3.0	6.3	6.9	5.3	4.2	2.1	1.1
	Professionals	2.3	2.8	3.3	3.8	4.1	5.2	5.9	7.0	9.9	16.7	18.3	18.0	18.2	18.0
	Clerical Workers	3.8	3.5	5.6	7.6	8.5	10.0	12.4	15.3	13.7	13.0	15.3	15.6	16.0	18.8
	Sales Workers	5.3	7.8	10.1	10.5	11.1	12.3	13.6	13.6	14.8	10.4	9.3	10.4	10.5	10.0
	Service Workers	1.8	3.4	3.4	4.5	4.6	5.4	6.9	6.4	8.5	5.8	5.8	5.7	6.7	7.6
	Production Workers	12.5	15.9	21.6	25.7	27.4	32.9	36.0	37.0	33.9	35.9	36.8	39.0	41.4	39.9
	Skilled in Agriculture & Fisheries	72.4	65.2	54.7	46.3	43.0	32.5	22.7	17.5	13.0	11.4	9.2	7.0	5.1	4.6
F	Managers	0.1	0.8	0.0	0.0	0.0	0.0	0.1	0.2	0.6	0.9	1.0	1.0	0.7	0.4
	Professionals	0.6	1.5	1.8	2.1	2.1	3.5	5.3	8.3	11.8	15.7	20.2	21.3	24.7	22.6
	Clerical Workers	0.4	0.5	1.5	2.8	4.0	8.6	10.2	15.5	16.0	16.4	18.4	17.3	19.3	22.4
	Sales Workers	3.2	9.7	11.8	9.6	9.5	11.6	18.3	14.6	17.7	16.7	14.1	14.8	13.7	13.1
	Service Workers	2.4	9.7	9.5	10.8	9.3	9.9	17.0	13.3	17.8	16.1	16.1	15.8	16.2	19.3
	Production Workers	3.1	7.2	14.0	14.7	16.2	19.9	21.3	21.0	14.2	17.2	16.8	21.3	19.9	18.2
	Skilled in Agriculture & Fisheries	90.2	70.5	61.4	59.8	58.8	46.4	27.6	27.0	21.5	17.0	13.4	8.5	5.5	3.9

Source: Data for 1955–2000 cited from statistics Korea(2002); Post-2000 data from Statistics Korea, Population and Housing Census, 10% and 20% sample microdata.

Among women in 2020, professionals (22.6%), clerical workers (22.4%), service workers (19.3%), and production workers (18.2%) had a high proportion. Notably, the proportion of female professionals nearly doubled from 8.3% in 1990 to 15.7% in 2000 and continued to increase, reaching 22.6% in 2020.

The median age by occupation for men has steadily increased since 1980, with a particularly rapid rise after 2000 (Table 10-7). The median age of all employed men increased from 35 in 1980 to 40 in 2000 and 47 in 2020. Except for skilled workers in agriculture, forestry, and fisheries and managers, the median age of most occupations was in the mid-30s in 1980 and the late 30s in 2000, but by 2020, it had risen to the 40s and 50s for most occupations, indicating a rapid increase in the share of older workers.

Table 10-7. Median Age of Male Workers by Occupation (1955-2020)

(Unit: years)

Category	1955	1966	1970	1975	1980	1985	1990	1995	2000	2005	2010	2015	2020
Total	35	34	34	34	35	36	37	37	40	42	43	44	47
Professionals	32	35	35	36	36	36	36	36	37	38	39	41	42
Managers	31	42	42	42	42	44	43	43	43	46	45	48	52
Clerical Workers	27	36	34	34	33	34	35	35	35	38	40	42	44
Sales Workers	37	37	36	36	36	38	42	42	39	41	42	43	45
Service Workers	30	30	31	33	35	37	39	39	38	39	40	41	42
Production Workers	36	27	31	31	31	33	34	34	39	42	45	48	50
Skilled in Agriculture & Fisheries	35	35	33	37	42	46	50	50	57	59	61	61	62

Source: Data for 1955-2000 cited from statistics Korea(2002); Post-2000 data from Statistics Korea, Population and Ho using Census, 10% and 20% sample microdata.

Table 10-8. Median Age of Female Workers by Occupation (1955-2020)

(Unit: years)

Category	1955	1966	1970	1975	1980	1985	1990	1995	2000	2005	2010	2015	2020
Total	33	33	33	33	34	36	35	37	39	40	42	42	45
Professionals	30	39	35	42	42	42	39	35	41	43	40	45	51
Managers	23	26	26	26	27	27	27	28	29	31	34	36	39
Clerical Workers	22	23	22	22	22	22	23	24	27	30	33	36	40
Sales Workers	37	39	38	37	37	38	36	36	39	41	43	45	47
Service Workers	21	22	22	24	32	37	38	40	41	43	45	48	50
Production Workers	28	24	22	20	21	30	29	38	42	44	48	51	52
Skilled in Agriculture & Fisheries	37	36	37	39	43	47	51	55	58	61	62	63	63

Source: Data for 1955-2000 cited from statistics Korea(2002); Post-2000 data from Statistics Korea, Population and Housing Census, 10% and 20% sample microdata.

The median age of female workers by occupation is also rapidly aging, similar to men (Table 10-8). Although the median age of female workers is slightly lower than that of males, it increased by about 6 years over 20 years, from 39 in 2000 to 45 in 2020. However, aging patterns varied more widely by occupation among women. Since 2000, the median age of clerical workers increased by 13 years, and that of professionals, managers, and production workers each increased by 10 years, showing a faster increase than the average across all occupations. This is likely due to women re-entering the labor market after career interruptions caused by marriage, childbirth, and child-rearing.

Occupations with relatively higher status—managers, professionals, and clerical workers—have higher median ages for men, while occupations with relatively lower status—sales, service, and production workers—have higher median ages for women. This reflects the persistent sex and age segregation in the Korean labor market.

4. Conclusion

This chapter examined the impact of changes in the industrial structure on labor force participation rates and occupational composition from various perspectives. Industrialization led to the growth of industries with high employment multipliers, which in turn contributed to an increase in the economically active population. This increase was mainly driven by the rising participation of women in the labor market. As women's withdrawal from the labor market due to marriage and childbirth has decreased, the M-shaped curve has weakened compared to the past.

The occupational structure of employees has changed significantly. While workers in agriculture, forestry, and fisheries once predominated, the shares of professionals and clerical workers have increased through industrialization. Aging trend among workers has been more pronounced among women, who tend to re-enter the labor market after career interruptions related to marriage and childbirth.

Due to compressed economic growth, changes in Korea's industrial and occupational structures have occurred more rapidly and intensely than in other countries. Structural changes such as low birth rates and aging significantly influence industrial and occupational structures. Recent advances in science and technology are expected to bring

fundamental changes to these structures. With the advancement of the Fourth Industrial Revolution and artificial intelligence (AI) technology, the labor market is expected to undergo rapid transformation, making it essential for both the nation and individuals to prepare accordingly.

Commuting and Daytime Population

2025
Census
100th anniversary



1. Introduction

Many cities around the world are undergoing metropolitanization, which often leads to a mismatch between workplaces and residences. This mismatch inevitably increases the commuting population and travel distances for work and school. Commuting refers to short- or long-distance population movement that occurs as part of daily life. This movement may take place within the same administrative district of residence, or it may involve crossing administrative boundaries. In large metropolitan areas, commuting across administrative boundaries for work and school is even more prevalent.

Excessive increases in commuting for work and school can contribute to various urban problems, underscoring the importance of analyzing commuting patterns. This movement is a major cause of urban traffic congestion and causes environmental problems, including excessive energy consumption and the emission of pollutants.

The increase in the population commuting to work and school has necessitated the introduction of a new concept: the *daytime population*. The daytime population differs from the *resident* (nighttime) population, which refers to the number of people living in a given area. As many people spend most of their time at school or work, the daytime population can place greater demands on administrative and public services than the resident population. Therefore, analyzing the daytime population is essential for local governments in policy formulation and implementation and serves as a valuable reference for urban and

transportation planning.

The daytime population can be calculated as the sum of (1) individuals who do not commute to work or school and remain within the administrative area, (2) those who commute to work or school within the same area, and (3) those who commute into the administrative district unit from other districts.

This chapter analyzes commuting patterns and the daytime population at both the national level and within the Seoul metropolitan area using census data. It begins with a basic analysis of commuting and daytime population characteristics across the country, followed by an in-depth analysis of the Seoul metropolitan area, which includes Seoul, Incheon, and Gyeonggi.

2. Nationwide Analysis of Commuting Patterns and Daytime Population

1) Commuting Rates and Age-Specific Characteristics

First, this chapter examines age-specific characteristics and trends in the population commuting for work and school (Table 11-1). In this context, commuting refers to the movement of individuals aged 12 or older who travel for study or work. This movement is categorized into two types: commuting within the same administrative district of residence (i.e., intra-district) and commuting across administrative boundaries to a different administrative district (i.e., inter-district). Table 11-1 shows commuting rates that include both types.

Specifically, most teenagers are engaged in academic activities, leading to a significantly

higher commuting rate compared to other age groups. Approximately 99% of those aged 12–14 have commuted across all observed years, and more than 85% of those aged 15–19 have also commuted.

The rate of commuting to work and school among those aged 20–49 is lower than that of teenagers, but remains relatively high, ranging from 59% to 79%. As the 20–49 age group constitutes the core of the economically active population, daily commuting is a routine activity for this group.

Table 11-1. Changes in the Rate of Population Commuting to Work and School by Age Group, Nationwide (1995–2020)

(Unit: %)

Age	1995	2000	2005	2010	2015	2020
12-14	99.6	99.6	98.9	99.0	97.5	99.6
15-19	89.5	88.8	89.4	87.7	88.3	85.1
20-24	62.8	62.0	70.5	79.1	74.1	65.8
25-29	60.9	63.9	67.0	77.8	75.5	72.6
30-34	59.1	61.7	62.8	73.0	74.4	74.2
35-39	61.7	64.6	65.0	73.0	73.8	72.9
40-44	62.9	65.1	66.3	76.3	75.9	73.7
45-49	61.5	62.7	62.9	75.9	76.7	74.2
50-54	58.7	57.0	57.1	71.2	73.6	71.6
55-59	53.6	49.2	47.8	62.5	65.3	64.1
60-64	29.9	41.2	37.4	48.6	51.4	48.9
65 and over	-	23.2	21.6	25.1	23.6	21.0

Note: The rate for 60-64 in 1995 reflects commuting among the population aged 60 and over.

Source: Statistics Korea, Population and Housing Census (KOSIS).

Among aged 50 or older, the rate of commuting has increased since 2010. For the 50–54 age group, the commuting rate was below 60% until 2005, but rose to over 71% beginning in 2010. Among those aged 55–59, the rate also has exceeded 62% since 2010, surpassing the pre-2010 rate for the 50–54 age group. For those aged 65 and over, the commuting rate has remained relatively stable, ranging from 21% to 25% across all observed years.

Depending on the age group, commuting rates differ significantly between the two types, intra- and inter-district (Table 11-2). Among teenagers, who show the highest commuting rate, the rate of intra-district commuting exceeds 75%. This indicates that although teenagers have a high rate of commuting, they generally travel short distances. The proportion of intra-district commuting among teenagers has shown an upward trend, increasing from 75.8% in 1995 to 81.7% in 2020.

Among individuals in their 20s, the inter-district commuting rate is higher than that of other age groups at most points in time. This is largely due to the high proportion of university students in this age group and the fact that universities are fewer and more geographically concentrated than high schools. The inter-district commuting rate for those in their 20s increased from 32.6% in 1995 to 37.2% in 2010, but declined to 26.5% in 2020. The inter-district commuting rate for those in their 20s is lower than the rates for those in their 30s (31.0%) and 40s (28.2%).

Table 11-2. Changes in the Rate of Commuting by Type and Age Group, Nationwide (1995–2020)

(Unit: %)

Category		10s	20s	30s	40s	50s	60s
1995	Not Commuting to Work or School	3.9	33.1	39.4	37.7	43.5	69.5
	Intra-District Commuting	75.8	34.3	37.0	40.5	41.0	27.1
	Inter-District Commuting	20.4	32.6	23.5	21.8	15.5	3.4
2000	Not Commuting to Work or School	4.9	31.0	36.5	35.4	46.3	69.9
	Intra-District Commuting	78.4	37.1	39.8	42.9	39.1	27.0
	Inter-District Commuting	16.7	31.9	23.7	21.7	14.6	3.1
2005	Not Commuting to Work or School	6.7	31.3	36.1	35.3	47.0	65.9
	Intra-District Commuting	77.4	31.6	33.8	38.4	33.8	27.4
	Inter-District Commuting	15.9	37.1	30.1	26.2	19.1	6.7
2010	Not Commuting to Work or School	8.1	21.6	27.0	23.9	32.5	56.8
	Intra-District Commuting	79.1	40.8	40.4	47.6	44.6	32.3
	Inter-District Commuting	12.7	37.2	32.2	28.0	22.5	10.5
2015	Not Commuting to Work or School	8.7	25.2	25.9	23.7	30.4	55.2
	Intra-District Commuting	78.7	40.4	40.2	46.4	46.1	32.8
	Inter-District Commuting	12.6	34.4	33.9	29.9	23.5	12.0
2020	Not Commuting to Work or School	9.6	30.5	26.5	26.0	32.1	57.1
	Intra-District Commuting	81.7	43.0	42.5	45.8	45.9	31.6
	Inter-District Commuting	8.7	26.5	31.0	28.2	22.1	11.3

Source: Statistics Korea, Population and Housing Census (KOSIS).

Individuals in their 30s and 40s also exhibit high rates of commuting to work and school. For those in their 30s, the intra-district commuting rate was 37.0% in 1995, exceeding the inter-district rate of 23.5%. After 2000, however, the inter-district commuting rate rose to over 30% and has remained above that level. Among individuals in their 40s, intra-district commuting is more prevalent than inter-district commuting. The inter-district commuting rate for those in their 40s increased from 21.8% in 1995 to 28.2% in 2020.

Figure 11-1 shows the inter-district commuting rates by local administrative units across the country. As of 2020, local administrative units with a relatively high rate of inter-district commuting are generally concentrated in the Seoul metropolitan area. Excluding the Seoul metropolitan area, elevated inter-district commuting rates are observed in non-capital metropolitan cities. In particular, Busan exhibits notably high inter-district. Aside from Busan, the inter-district commuting rate is also high in Daegu, Ulsan, and Sejong.

Comparing the inter-district commuting rate in 2000 and 2020, a noticeable increase is observed in southern Gyeonggi. Outside the Seoul metropolitan area, the areas with the most significant increases in inter-district commuting during this period are Cheonan in Chungnam and Yuseong-gu in Daejeon. This trend is likely attributable to the expansion of the Seoul metropolitan area and the growth of Sejong.

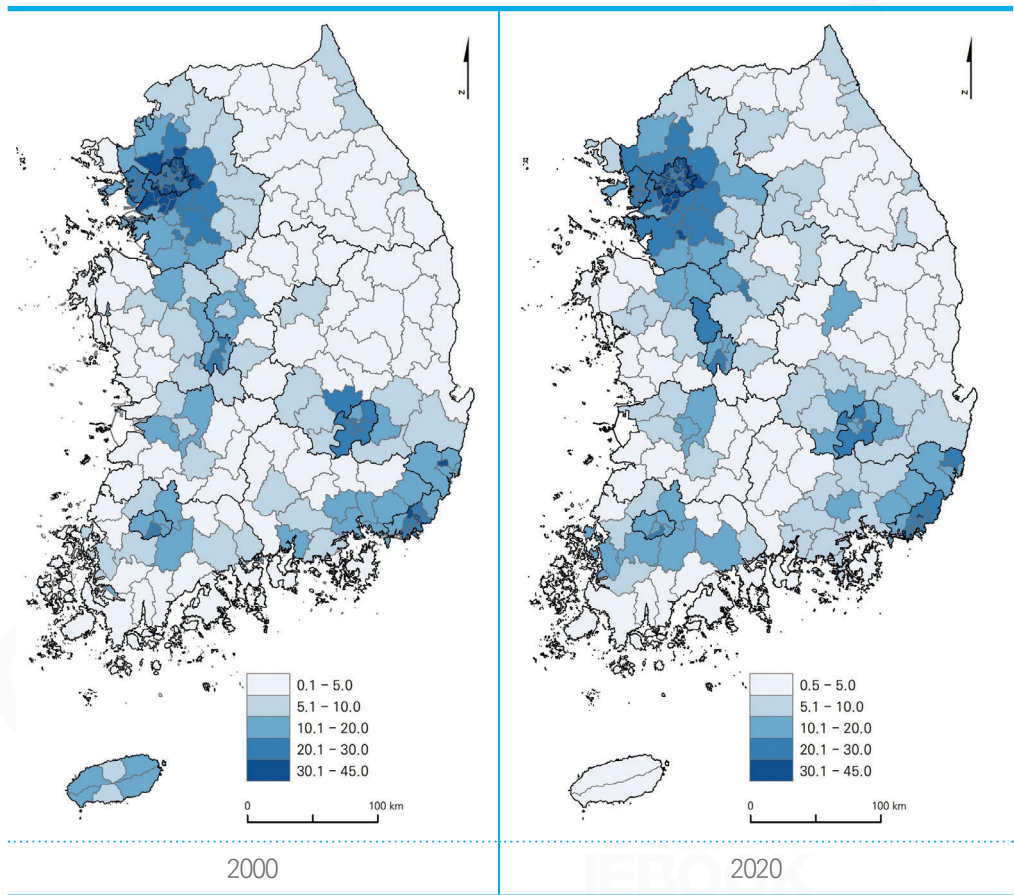


Figure 11-1. Inter-District Commuting Rates by Local Administrative Units (2000-2020)

Source: Statistics Korea, Population and Housing Census (KOSIS).

2) Changes in the Daytime Population Index by Region

Among the types of commuting, inter-district commuting, which refers to commuting across administrative boundaries, creates a discrepancy between the resident population and the daytime population. The daytime population index is calculated by multiplying the ratio of the daytime population to the resident population by 100. An index greater than 100 indicates the daytime population exceeds the resident population, while a value less than 100 means the resident population is greater than the daytime population.

An examination of the daytime population index by province shows that, except for Seoul and Ulsan, most metropolitan cities have an index below 100 (Table 11-3). This indicates that more people commute out of these cities than into them during the daytime. In contrast, most provinces, excluding Gyeonggi, have a daytime population index above 100, which suggests net daytime inflows from adjacent metropolitan areas. Among metropolitan cities, Incheon and Daegu, in particular, show a notably low index. The index for Daegu declined from 96.0 in 2005 to 95.2 in 2015, before increasing to 96.6 in 2020.

Table 11-3. Changes in Daytime Population Index by Province (1995–2020)

Region	Daytime Population Index					
	1995	2000	2005	2010	2015	2020
Seoul	105.0	105.0	106.0	108.6	108.1	108.8
Busan	98.0	98.0	98.0	98.4	98.3	99.4
Daegu	96.0	97.0	96.0	95.4	95.2	96.6
Incheon	96.0	95.0	95.0	95.3	92.2	94.2
Gwangju	98.0	98.0	97.0	96.6	96.6	97.2
Daejeon	98.0	99.0	98.0	98.2	97.9	99.0
Ulsan	-	101.0	101.0	101.3	101.3	101.0
Sejong	-	-	-	-	105.4	93.4
Gyeonggi	93.0	95.0	95.0	92.7	94.1	94.5
Gangwon	101.0	101.0	101.0	101.3	101.5	100.5
Chungbuk	101.0	101.0	101.0	101.6	102.1	101.6
Chungnam	103.0	104.0	105.0	104.5	105.7	103.1
Jeonbuk	100.0	100.0	100.0	100.3	100.1	100.0
Jeonnam	101.0	101.0	102.0	102.9	102.9	102.2
Gyeongbuk	104.0	103.0	104.0	104.8	105.1	103.5
Gyeongnam	102.0	102.0	101.0	101.0	101.0	100.0
Jeju	100.0	100.0	100.0	100.0	100.0	100.0

Source: Statistics Korea, Population and Housing Census (KOSIS).

In the Seoul metropolitan area, commuting from Incheon and Gyeonggi to Seoul is dominant and has been both sustained and intensified over time. In 1995, the index for Seoul was 105.0, indicating the daytime population was about 5% larger than the resident population. That is, more people commuted into Seoul for work and school than those who left the capital. This elevated index is primarily due to inflows from Gyeonggi (93.0) and Incheon (96.0). While the index for Seoul has steadily increased to 108.8 by 2020, the index for Gyeonggi declined from a peak of 95.0 in 2005 to 94.5 in 2020. Similarly, the index for Incheon in 2020 was also lower than in 1995, reinforcing the trend of concentrated commuting into Seoul.

3. Commuting Patterns and Daytime Population in the Seoul Metropolitan Area

As of the 2020 census, the Seoul metropolitan area (Seoul, Gyeonggi, Incheon) had a population of 26.0 million, accounting for 50.2% of the national total. Despite various policies to disperse population concentration, this trend has persisted. *New Towns* such as Bundang and Ilsan were developed to alleviate population concentration in Seoul. These developments mainly facilitated residential dispersion, while the decentralization of education and employment remained relatively limited (Lee and Lee, 2008). Seoul continues to attract a large inflow of daily commuters from surrounding areas due to its concentration of jobs and educational institutions.

The mismatch between workplaces and residences is most pronounced in the Seoul metropolitan area. Therefore, analyzing the commuting patterns in this area, along with

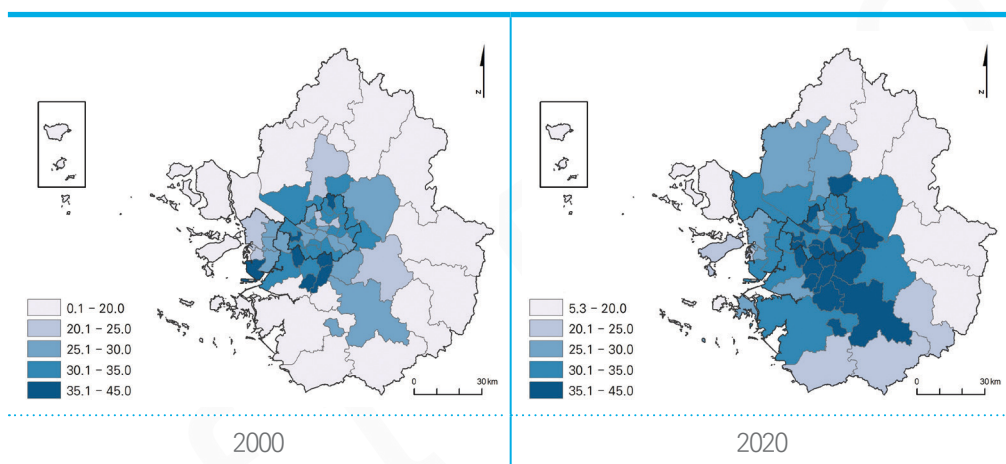


Figure 11-2. Inter-District Commuting Rates by Local Administrative Units in the Seoul Metropolitan Area (2000-2020)

Source: Statistics Korea, Population and Housing Census (KOSIS).

changes in the daytime population, can provide essential insights for addressing urban problems. This section explores commuting patterns and changes in the daytime population in the Seoul metropolitan area, focusing on 2020 and comparing it with 2000.

1) Commuting Characteristics in the Seoul Metropolitan Area

Inter-district commuting is relatively high in Gyeonggi compared to other provinces of the Seoul metropolitan area. As of 2020, Gwacheon (41.3%), and Uiwang (39.5%) in Gyeonggi recorded high inter-administrative commuting rates of their population aged 12 or over (Figure 11-2). In Seoul, inter-district commuting rates are relatively high in Gwangjin-gu, Gwanak-gu, and Dongjak-gu.

The rate of inter-district commuting increased in most areas in 2020 compared to 2000. In 2000, the districts with the highest inter-district commuting rates were Uiwang (43.1%), Gwacheon (43.0%), and Gunpo (38.4%) in Gyeonggi, and these rates showed little change

in 2020. By contrast, in districts such as Suwon, Osan, Gimpo, Gwangju and Hwaseong, rose above 5 percentage points between 2000 and 2020.

The provincial commuting rates within the Seoul metropolitan area from 1995 to 2020 is summarized in Table 11-4. Until 2010, intra-Seoul commuting accounted for the highest share, but from 2015 onward, intra-Gyeonggi commuting became more prevalent. The rate of population commuting within Seoul steadily decreased from 48.1% in 1995 to 38.0% in 2010 and further to 33.3% in 2020. In contrast, intra-Gyeonggi commuting steadily increased from 27.5% in 1995 to 36.9% in 2010 and 41.7% in 2020. Commuting from Seoul to Gyeonggi consisted around 4% and the rate of commuting from Gyeonggi to Seoul has remained around 9% throughout the period. Similarly, commuting from Incheon to Seoul stayed constant at around 1%.

Within the Seoul metropolitan area, Seoul serves as a primary destination for commuting with notable differences in commuting rates to Seoul among the districts in Gyeonggi and Incheon (Figure 11-3). Commuting rate to Seoul is generally higher in Gyeonggi than in Incheon, especially in areas adjacent to Seoul. In 2020, Hanam recorded the highest commuting rate to Seoul at 24.7%, followed by Gwacheon (24.2%), Gwangmyeong (23.3%), and Guri (22.0%).

Comparing 2000 and 2020, the rate of commuting to Seoul declined in districts located southwest of Seoul, while it increased in districts located to the east. Specifically, southwestern Gyeonggi, Bucheon, Anyang, and Gunpo experienced a decrease in commuting rates to Seoul. In contrast, eastern districts such as Gapyeong and Yangpyeong recorded low rates of around 2% in 2000, which rose to 3.2% and 6.4%, respectively, by 2020. In Gimpo, located to the west of Seoul, the commuting rate also increased from 12.6% in 2000 to 15.6% in 2020.

Table 11-4. Changes in Provincial Commuting Rates in the Seoul Metropolitan Area (1995–2020)

(Unit: %)

Movement Type	1995	2000	2005	2010	2015	2020
Seoul → Seoul	48.1	42.9	39.2	38.0	35.0	33.3
Seoul → Incheon	0.6	0.5	0.6	0.6	0.5	0.4
Seoul → Gyeonggi	4.0	4.3	4.2	3.6	4.1	3.7
Incheon → Seoul	1.2	1.3	1.2	1.2	1.3	1.1
Incheon → Incheon	9.2	9.1	8.7	8.9	8.7	8.8
Incheon → Gyeonggi	0.7	1.0	1.1	0.9	1.4	1.3
Gyeonggi → Seoul	8.2	8.6	8.8	9.0	8.9	8.8
Gyeonggi → Incheon	0.6	0.6	0.8	0.9	0.8	0.9
Gyeonggi → Gyeonggi	27.5	31.7	35.4	36.9	39.3	41.7
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Statistics Korea, Population and Housing Census (KOSIS).

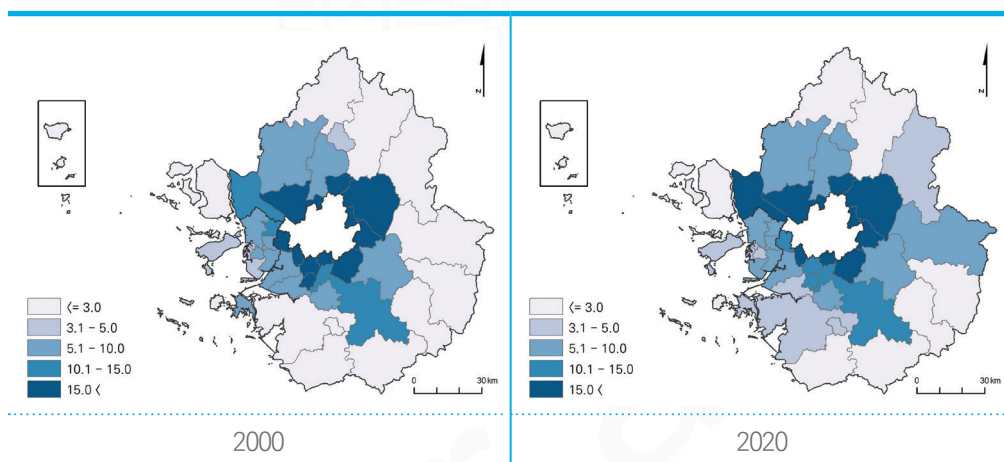


Figure 11-3. Commuting Rates to Seoul for Work and School in the Seoul Metropolitan Area (2000–2020)

Source: Statistics Korea, Population and Housing Census (KOSIS).

2) Daytime Population in the Seoul metropolitan area

The imbalance between outbound and inbound commuting for work and school results in a discrepancy between the resident and daytime population. This difference is reflected in the daytime population index by districts in the Seoul metropolitan area (Figure 11-4). The index is generally greater than 100 in central Seoul and its adjacent districts, indicating a net inflow, while it falls below 100 in districts in Gyeonggi and Incheon, particularly those on the outskirts or adjacent to Seoul.

Specifically, based on the daytime population index by district in the Seoul metropolitan area, Jung-gu recorded the highest value at 321.0, followed by Jongno-gu (244.7), Gangnam-gu (192.7), and Yeongdeungpo-gu (142.8). These districts are key business hubs within Seoul and serve as major destinations for commuters from other parts of the metropolitan area. In contrast, Eunpyeong-gu, Gwanak-gu, and Dobong-gu, located on the outskirts of Seoul, recorded the lowest index values and primarily served as residential origins for commuting within Seoul.

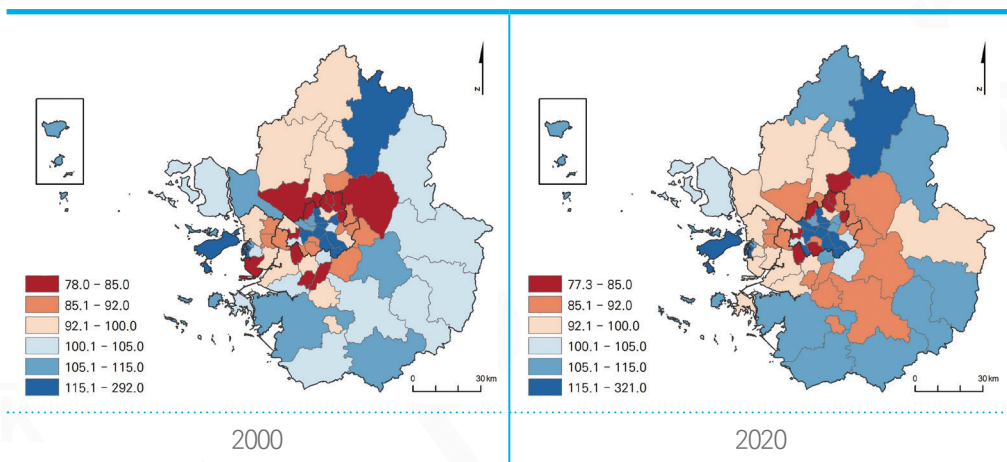


Figure 11-4. Daytime Population Index in the Seoul Metropolitan Area (2000-2020)

Source: Statistics Korea, Population and Housing Census (KOSIS).

Table 11-5. Changes in Daytime Population Index: Top and Bottom 5 Local Administrative Units in the Seoul Metropolitan Area (2000-2020)

Category	Cities / Districts	2000 (A)	2020 (B)	Changes (B – A)
Rise	Geumcheon-gu, Seoul	88.8	128.6	39.8
	Jung-gu, Seoul	292.0	321.0	29.0
	Jongno-gu, Seoul	215.7	244.7	29.0
	Gangnam-gu, Seoul	166.4	192.7	26.3
	Seocho-gu, Seoul	121.2	140.2	19.0
Fall	Dongdaemun-gu, Seoul	129.6	105.2	-24.4
	Gimpo-si, Gyeonggi	114.2	94.1	-20.1
	Gwangju-si, Gyeonggi	103.7	87.8	-15.9
	Yongin-si, Gyeonggi	104.1	90.0	-14.1
	Osan-si, Gyeonggi	100.1	86.5	-13.6

Source: Statistics Korea, Population and Housing Census (KOSIS).

Changes in the daytime population index from 2000 to 2020 reflect spatial shifts in the urban structure of the Seoul metropolitan area. Table 11-5 presents the results of a comparative analysis of the index between 2020 and 2000. A positive change in the index indicates that the daytime population has increased relative to the resident in that district.

The largest increase in the daytime population index was observed in Geumcheon-gu, located in southwestern Seoul. This is likely due to the development of the Gasan Digital Complex, which has strengthened the area's function as a business district. Other notable increases occurred in Jung-gu, Jongno-gu, and Gangnam-gu in Seoul, which already had high daytime population indices. In contrast, Gwangju and Gimpo in Gyeonggi showed

the largest decreases. These areas, characterized by recent residential development, have experienced increased out-commuting. Overall, changes in the daytime population index indicate a reinforcement of the roles of traditional business centers and an outward shift of residential functions toward Seoul's periphery. However, some areas, like Dongdaemun-gu, have experienced a sharp decline in daytime population due to the decline of business and commercial districts.

4. Conclusion

This chapter examined commuting to work and school, which is a form of daily, repetitive population movement, and the resulting disparities between the resident and daytime populations. As the volume of commuting continues to grow, the disparity between the two populations becomes more pronounced. Therefore, the daytime population should be regarded as equally important as the resident population in urban planning and administration. Analysis of commuting patterns and the daytime population can be utilized to understand urban characteristics and to support urban plans.

As examined in this chapter, changes in commuting patterns and the daytime population index in the Seoul metropolitan area can be utilized to explore the urban structure of large cities and its changes. For example, such analysis can help evaluate the impact of past *New Town* developments and anticipate how future developments may reshape the urban structure. *New Towns* in the Seoul metropolitan area and around other major cities were primarily developed within designated land development zones. While this development succeeded in relocating residential population, employment remained concentrated in

existing urban centers such as Seoul, resulting in increased commuting. In response to growing urban problems associated with long-distance commuting, recent trends emphasize the development of mixed-use *New Towns* that integrate both housing and employment functions. Commuting data from the census in existing cities can serve as a foundation for evaluating the potential impacts of future developments.

Education

2025
Census
100th anniversary



1. Introduction

In Korean society, education has functioned not merely as a vehicle for individual achievement, but as a field for the pursuit of intergenerational upward social mobility, serving as a driving force behind economic growth and social change. Given the strong social interest in education, education-related items have been considered important topics in the Population and Housing Census. During the 1960s and 1970s, literacy rates were low and educational opportunities were limited to certain social groups; therefore, literacy and school enrollment status were treated as important indicators. However, as higher education has become more widespread, the educational categories have been further subdivided into junior colleges, universities, and graduate schools. With the expansion of higher education opportunities, the public concerns regarding education shifted from whether one entered university to which university one attended and what occupation one pushed after graduation.

This chapter analyzes education and related indicators using data from the Population and Housing Census, with the aim of examining how people's educational attainment has changed over the past decades and how these changes have influenced people's lives. The main period of analysis began in 1960, when relatively consistent time-series data became available.

The expansion of the public education system will be examined through data from the

Ministry of Education. It then examines census data to assess improvements in educational outcomes, generational shifts in attainment, and patterns of labor force participation by educational background. Educational attainment is analyzed based on the highest level completed, and education categories generally follow Korean educational institutions¹⁾: elementary (primary) school, middle school, high school, and university.²⁾

2. The Role of Public Education in Raising Educational Attainment

The public education system in Korea expanded rapidly after liberation. Primary education became compulsory in 1948, and middle school education in 1985. High school education, although still not compulsory, became widely available in the 1990s. The college/university enrollment rate rose at an unprecedented pace, even by global standards.

Between 1970 and 2020, new schools were established rapidly (Table 12-1). The number of elementary schools peaked at 6,487 in 1980, decreased to 5,267 by 2000, and then rose again to 6,120 in 2020, similar to levels in the 1990s. The number of middle and high schools has steadily increased since 1970, although the growth rate has slowed considerably since 2010. Middle schools increased from 1,608 in 1970 to 3,223 in 2020, and high schools

1) The public education system in South Korea changed multiple times during the Japanese colonial period (1910-1945) and the U.S. military government period (1945-1948). The current system of six years of elementary school, three years of middle school, three years of high school, and four years of university was fixed by the revised *Education Act* of 1951.

2) Post-secondary education under four years has been represented by various terms in surveys and publications. In the 2020 census, it was categorized as *university*(2-3 years). Hereafter, institutions offering less than four years of higher education are referred to as *junior college*, and those offering four years or more as *university*.

from 889 in 1970 to 2,367 in 2020.

In 1970, the average number of students per class was around 60 across all school levels, and by 1980, it remained between 50 and 60. By 2000, elementary and middle schools had fewer than 40 students per class, and by 2020, class sizes at all levels had been reduced to the 20s (Table 12-2).

In the 1960s and 1970s, the number of students far exceeded the available school facilities, resulting in overcrowded classrooms where morning and afternoon shifts often shared a single room. Nowadays, most schools have classes of about 20 students, and in some regions, due to declining student numbers, schools have been consolidated or closed.

Table 12-1. Number of Schools by Educational Level (1970-2020)

(Unit: number)

Category	1970	1980	1990	2000	2010	2020
Elementary School	5,961	6,487	6,335	5,267	5,854	6,120
Middle School	1,608	2,100	2,474	2,731	3,130	3,223
High School	889	1,353	1,683	1,957	2,253	2,367

Source: Ministry of Education, Annual Report on Education Statistics.

Table 12-2. Average Number of Students per Class by Educational Level (1970-2020)

(Unit: persons)

Category	1970	1980	1990	2000	2010	2020
Elementary School	62.1	51.5	41.4	35.8	26.6	21.8
Middle School	62.1	65.5	50.2	38.0	33.8	25.2
High School	58.2	59.8	52.8	42.7	33.7	23.4

Source: Ministry of Education, Annual Report on Education Statistics

According to the population census conducted in 1944 before liberation, 80.3% of Koreans aged 15 and over had never attended school. Public education was institutionalized soon after the liberation, but the illiteracy rate among those aged 13 and over remained around 30% as of 1960 (Table 12-3).

During this period, illiteracy rates varied significantly by age group and showed substantial gaps between males and females. In 1960, 69.4% of those aged 55 and over and 39.9% of women were illiterate. The rapid expansion of primary education in the 1950s to 1970s led to a swift decline in illiteracy among younger age groups and narrowed the gap between males and females.

Table 12-3. Literacy Rates by Sex and Age for Aged 13 and Over (1960)

(Unit: persons, %)

Category	Total	Sex		Age Group			
		Male	Female	34 and Under	35-44	45-54	55 and Over
Can Read and Write	10,926,136	6,089,756	4,836,380	7,498,230	1,733,880	1,036,295	657,731
	71.1	83.1	60.1	86.2	66.8	53.6	30.6
Cannot Read and Write	4,450,819	1,239,234	3,211,585	1,202,395	863,240	896,765	1,488,419
	28.9	16.9	39.9	13.8	33.2	46.4	69.4
Total	15,376,955	7,328,990	8,047,965	8,700,625	2,597,120	1,933,060	2,146,150
	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Statistics Korea, Population and Housing Census (KOSIS).

Table 12-4. Changes in Educational Attainments by Sex for Aged 30 and Over (1970-2020)

(Unit: thousand persons, %)

Category		1970	1980	1990	2000	2010	2020
Total	Population	10,378	13,375	19,075	24,699	30,171	34,919
	Elementary School or Below	77.7	61.6	39.7	26.6	19.1	11.7
	Middle School	9.7	15.8	19.7	15.1	11.2	9.1
	High School	8.2	15.6	28.7	37.2	37.8	38.2
	Junior College	1.1	0.8	1.6	6.1	9.5	11.5
	University or Above	3.2	6.2	10.3	15.1	22.4	29.5
M	Population	4,959	6,413	9,267	11,975	14,546	17,056
	Elementary School or Below	65.8	47.6	27.7	17.5	12.2	7.0
	Middle School	13.5	18.4	18.9	13.9	10.5	8.4
	High School	12.8	22.3	35.1	39.8	38.6	38.5
	Junior College	1.9	1.1	2.3	7.5	10.4	11.6
	University or Above	6.0	10.5	16.0	21.3	28.4	34.5
F	Population	5,419	6,962	9,808	12,724	15,625	17,863
	Elementary School or Below	88.6	74.5	51.1	35.2	25.5	16.1
	Middle School	6.3	13.3	20.5	16.2	11.9	9.8
	High School	4.1	9.5	22.6	34.8	37.0	37.9
	Junior College	0.4	0.4	1.0	4.7	8.7	11.4
	University or Above	0.7	2.3	4.8	9.2	16.9	24.8

Note: Foreigners are excluded.

Source: Statistics Korea, Population and Housing Census (KOSIS).

Based on graduation, educational attainment of the population aged 30 and over has improved substantially over time (Table 12-4). In 1970, 77.7% had only completed elementary school or less, while middle school and high school were each below 10%, and those with a university degree or higher accounted for only 3.2%. Until 1990, more than half of the population aged 30 and over had not completed education beyond middle school, but by 2020, that proportion had dropped to around 20%. Specifically, the share of those with only an elementary school education or less fell to 11.7%, and middle school graduates to 9.1%. In contrast, the proportions increased for high school graduates (38.2%), junior college graduates (11.5%), and those with a university degree or higher (29.5%).

A strong cultural emphasis on education persisted across generations, and the overall level of education has continuously improved. However, for a long time, family support remained virtually the sole foundation enabling continued education, as government financial assistance was relatively slow to become institutionalized.³⁾

With the rapid expansion of educational opportunities for women, the gender gap in educational attainment has greatly decreased. In 1970, among those aged 30 and over, the proportion of elementary school or below was 65.8% for men and 88.6% for women, more than 20% points higher for women, and university or above was 6.0% for men and 0.7% for women. From 1970 to 2020, the share of women aged 30 and over with elementary school or below decreased significantly from 88.6% to 16.1%, while the share with a high school diploma or higher increased from 5.1% to 74.1%. In 2020, the proportion of university or above was still lower for women (24.8%) than for men (34.5%).

3) Tuition-free high school education was institutionalized in the late 2010s, and the Korea Student Aid Foundation, which supports college tuition loans, was established in 2009.

3. Educational Attainment Across Generations

This section examines how educational attainments between parent and child generations changed over 50 years from 1970 to 2020. Although the average age at first marriage and first childbirth rose significantly by 2020 compared to 1970, a generation is generally considered to be about 30 years. For analytical purposes, the age groups 25-29 were set as the child generation, and 55-59 as the parent generation. The changes in educational attainments of parent and child generations from 1970 to 2020 are summarized in Table 12-5 and Figure 12-1.

Table 12-5. Educational Attainment Across Generations (1970-2020)

(Unit: thousand persons, %)

Category		25-29 years old	55-59 years old
1970	Population	2,204	855
	Elementary School or Below	52.3	91.6
	Middle School	20.1	4.7
	High School	20.1	2.2
	Junior College	1.7	0.7
	University or Above	5.8	0.7
2020	Population	3,423	4,092
	Elementary School or Below	0.1	2.7
	Middle School	0.9	12.3
	High School	31.6	52.3
	Junior College	19.3	7.7
	University or Above	48.1	25.0

Note: Foreigners excluded.

Source: Statistics Korea, Population and Housing Census (KOSIS).

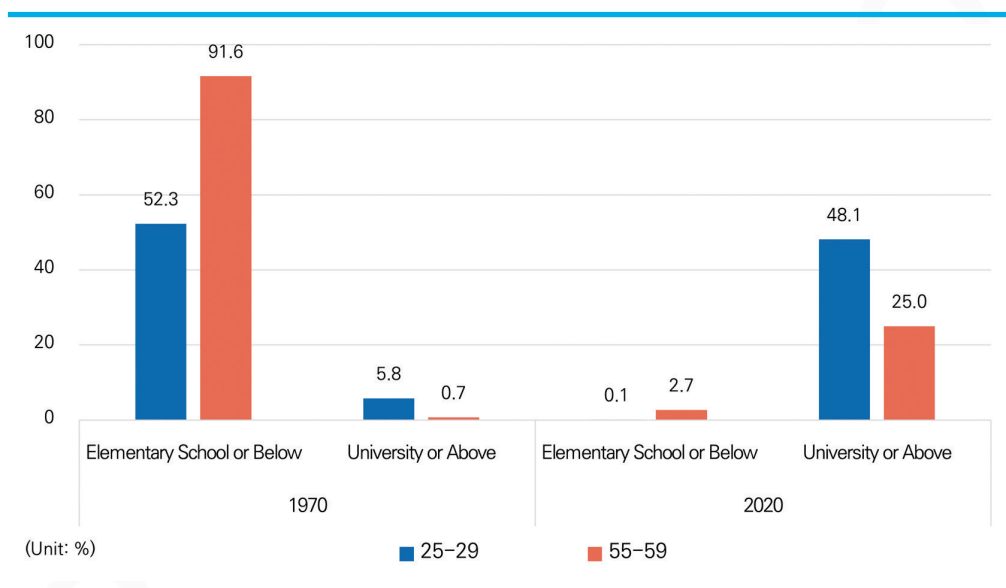


Figure 12-1. Educational Attainment Across Generations (1970-2020)

Note: Foreigners excluded.

Source: Statistics Korea, Population and Housing Census (KOSIS).

In 1970, 91.6% of the parent generation (born 1910-1915) had an educational attainment of elementary school or below, while only 2.2% completed high school and 0.7% attained a university degree or higher. Among the child generation (born 1940-1945), 52.3% completed elementary school or below, 20.1% completed high school, and 5.8% attained a university degree or higher.

By 2020, the educational attainment composition of both parent and child generations had changed markedly. The proportion of parents (born 1960-1965) with elementary school education or below dropped to 2.7%, while those with a high school diploma rose to 52.3%, junior college to 7.7%, and university degree or higher to 25.0%. For the child generation in 2020 (born 1990-1995), the proportion with middle school education or below decreased to around 1%, high school graduates accounted for 31.6%, junior college graduates 19.3%, and those with a university degree or higher reached 48.1%. Over the 50 years, the distribution

of educational attainment shifted dramatically—from a structure where higher education levels corresponded to a smaller share of the population to one where they represented a larger share.

Seoul, the capital where universities are concentrated, played a key role in the spread of higher education. Because opportunity structures related to education and employment have been primarily centered in Seoul, the educational attainment of Seoul's population was higher than that of other regions in both 1970 and 2020.

Generally, higher educational attainment is associated with more active migration (Table 12-6). The proportion of those whose place of birth differs from their current residence at the provincial level (*si·do*) was 34.1% among high school graduates, whereas it was 42.1% among those with a university degree or higher.

Migration to Seoul is even more pronounced. Among high school graduates living in Seoul, 32.5% were born in a different province, while 45.0% of university graduates or higher living in Seoul were born elsewhere. Similar patterns can be observed in the comparison between current residence and that of five years earlier, highlighting the role of higher education and employment in driving migration toward Seoul.

Educational attainment appears to have improved if judged by formal indicators such as graduation rates or degrees. That is, the high concentration of highly educated individuals in Seoul in 1970 gradually spread to regional hub cities by 2020, driven by the expansion of higher education. However, educational disparities between non-capital areas and Seoul persist, and the trend of migration to Seoul for universities education and employment continues.

Table 12-6. Current Residence and Place of Birth by Educational Attainment for Aged 25-29 (2020)

(Unit: persons, %)

Current Residence	Educational Attainment	Population Aged 25-29	Place of Birth				
			Current Residence	Another House in the Same District	Another District within the Same Province	Another Province	North Korea or Foreign Country
Nation-wide	Total	3,579,826	6.1	38.0	11.2	37.8	6.9
	Middle School or Below	60,552	3.2	18.9	5.4	17.1	55.4
	High School	1,169,262	6.1	38.0	10.9	34.1	11.0
	Junior College	674,478	7.3	42.1	12.2	35.3	3.1
	University or Above	1,675,534	5.7	37.1	11.2	42.1	3.8
Seoul	Total	824,786	5.0	39.9	10.2	39.6	5.3
	Middle School or Below	6,379	3.9	33.2	10.0	20.1	32.8
	High School	230,411	5.7	44.2	11.4	32.5	6.2
	Junior College	131,781	6.3	45.0	11.7	34.7	2.4
	University or Above	456,215	4.3	36.3	9.2	45.0	5.2

Source: Statistics Korea, Population and Housing Census, 20% sample microdata.

Over the past 50 years, changes in educational attainment have also occurred within Seoul. The most significant change is the emergence of the southern part of the Han River (*Gangnam*) as the area with the highest proportion of highly educated population replacing the historically dominant northern part. Until 1970, the southern part of the Han River, where both parent and child generations had relatively low educational attainment, experienced a significant rise in educational attainment for both generations by 2020.

This shift corresponds with the development of *Gangnam* as a prestigious school district. In the 1970s and 1980s, the government and Seoul City promoted policies to relocate elite high schools from the northern downtown area to southern *Gangnam* in order to promote urban development. These relocations attracted affluent and well-educated families, boosting access to educational information and private tutoring, intensifying educational competition, and deepening regional disparities in educational environments.

4. Employment Characteristics by Educational Attainment

This section analyzes how disparities in educational attainment are connected to economic activities. Due to limitations in time-series continuity, changes in key indicators are compared mainly between 2000 and 2020.

Between 2000 and 2020, the employment-to-population ratio aged 15 and over increased from 52.1% to 59.6% (Table 12-7). Across all time periods, higher educational attainment is generally associated with higher employment rates. The employment-to-population ratios for high school and college graduates increased by about 5%p between 2000 and 2020. Employment-to-population ratios for those with a middle school education or less declined significantly from 40.0% to 28.9%. This is interpreted as reflecting a sharp decline in the population with middle school education or less, which includes a large proportion of unemployed elderly persons. The employment-to-population ratio gap between high school and university graduates remained largely stable, from 17.5%p in 2000 to 16.8%p in 2020.

Between 2000 and 2020, the proportion of wage workers increased and the proportion

of self-employed decreased across all education levels (Table 12-8). Notably, the proportion of wage workers among high school graduates rose from 66.3% to 73.5% (+7.2%p), and among university graduates from 77.1% to 83.6% (+6.5%p). In both 2000 and 2020, educational attainment was positively correlated with a higher proportion of wage workers.

Although employment-to-population ratios generally increased between 2000 and 2020, the gap between educational status persists. Over time, the labor market structure has shifted toward a decline in the self-employed share and an expansion of wage employment, with both high school and university graduates. Differences in employment status by educational attainment still exist, but the rise in employment-to-population ratios among the highly educated is limited.

Table 12-7. Employment-to-Population Ratio of Population Aged 15 and Over by Educational Attainment (2000-2020)

(Unit: thousand persons, %)

Category	2000			2010			2020		
	Population	Employed	Ratio	Population	Employed	Ratio	Population	Employed	Ratio
Total	35,088	18,276	52.1	38,896	22,020	56.6	43,073	25,653	59.6
Middle School or Below	13,066	5,229	40.0	11,537	4,154	36.0	8,699	2,513	28.9
High School	14,612	7,769	53.2	15,121	8,831	58.4	17,163	10,055	58.6
Junior College	2,533	1,753	69.2	3,917	2,847	72.7	4,965	3,749	75.5
University	4,320	3,054	70.7	7,105	5,175	72.8	10,426	7,866	75.4
Graduate School or Above	556	471	84.6	1,215	1,012	83.3	1,821	1,470	80.7

Note: In 2000, 'employed' includes those who 'worked' and those on 'temporary leave'. In 2010 and 2020, 'employed' includes those who 'mainly worked,' 'worked occasionally,' and those on 'temporary leave'.

Source: Statistics Korea, Population and Housing Census, 10% and 20% sample microdata.

Table 12-8. Employment Status of Employed Population Aged 15 and Over
by Educational Attainment (2000-2020)

(Unit: thousand persons, %)

Category	2000					2020				
	Total	Wage Workers	Self-Employed		Unpaid Family Workers	Total	Wage Workers	Self-Employed		Unpaid Family Workers
			With no Employees	With Employees				With no Employees	With Employees	
Total	18,276	62.3	22.1	6.8	8.9	25,653	77.1	14.4	5.1	3.4
Middle School or Below	5,229	40.1	37.3	3.2	19.4	2,513	58.7	28.0	3.3	10.1
High School	7,769	66.3	20.2	7.1	6.4	10,055	73.5	17.2	5.1	4.1
Junior College	1,753	79.1	10.8	7.2	2.9	3,749	82.2	10.9	4.6	2.3
University	3,054	77.1	9.9	11.3	1.7	7,866	83.6	9.3	5.5	1.5
Graduate School or Above	471	83.0	5.0	11.5	0.5	1,470	85.1	7.4	6.8	0.7

Source: Statistics Korea, Population and Housing Census, 10% and 20% sample microdata.

Over 20 years, educational attainments improved in most occupations (Table 12-9). In 2000, the proportion of individuals with university or higher was below 10% in many occupational groups, including service workers, skilled workers in agriculture and fishery, craft and related trades workers, and elementary workers. By 2020, only skilled agriculture and fishery workers remained below the 10% threshold, while the proportion of individuals with a university degree or higher had increased in most occupational groups. However, the improvement in educational attainment by occupation was not uniform. Although the proportion of university graduates or higher increased significantly among service workers and elementary workers as well, the substantial rise among certain occupational groups (e.g.,

managers and professionals) further widened the gaps between occupations.

A similar trend is evident across major industrial sectors. While most industries showed improvements in educational attainment, some sectors experienced more rapid gains, especially within the service sector with diversification. In 2000, over 80% of workers in agriculture, forestry, and fisheries had only a middle school education or less. The proportion of workers with university degree or higher in the manufacturing, construction, wholesale and retail trade, and accommodation and food service industries did not exceed 20%. By 2020, most industries had university graduates or higher exceeding 20%, except for agriculture, forestry, and fisheries.

Between 2000 and 2020, the service sector experienced both diversification and improvement in educational attainment. In 2020, the proportion of university degree or higher was high in educational services (71.0%), professional, scientific, and technical services (66.5%), and public administration, defense, and social security administration (50.0%). The proportion of individuals with university degree or higher in health and social welfare services increased only slightly from 37.4% to 39.2% over 20 years, while in wholesale and retail trade, accommodation, and food services it rose moderately but remained around 30%.

In summary, although the overall educational attainments of employees have increased, highly educated individuals (university or above) remain concentrated in certain occupational groups, such as professionals and managers. The proportion of individual with a university degree or higher remains low in elementary, craft, and production occupations. While educational attainment has increased throughout the service sector, the gap between knowledge-based industries, like education and professional services, and traditional service industries such as wholesale, retail, accommodation, and food services has widened, deepening internal differentiation within the service sector.

Table 12-9. Distribution of Educational Attainment by Major Industry (2000-2020)

(Unit: Thousand persons, %)

Category	2000					2020				
	Total	Middle School or Below	High School	Junior College	University or Above	Total	Middle School or Below	High School	Junior College	University or Above
Total	18,276	28.6	42.5	9.6	19.3	25,653	9.8	39.2	14.6	36.4
Agriculture, Forestry, and Fisheries	2,414	81.1	16.1	1.3	1.6	1,102	46.4	38.9	5.3	9.4
Manufacturing	3,810	23.3	51.9	9.3	15.4	4,465	7.4	45.8	16.7	30.1
Construction	1,344	28.5	47.1	9.2	15.2	1,674	10.4	49.2	14.4	25.9
Wholesale and Retail Trade	2,896	19.8	53.4	10.4	16.4	3,439	6.8	44.9	15.5	32.8
Accommodation and Food Services	1,369	37.7	50.7	5.6	6.0	2,108	12.2	52.7	13.4	21.7
Professional, Scientific, and Technical Services	800	11.0	32.1	16.1	40.8	1,136	1.3	18.0	14.2	66.5
Business Facilities Management, Business Support, and Rental Services						1,121	14.2	45.9	14.0	26.0
Public Administration, Defense, and Social Security Administration	692	10.8	40.7	13.7	34.7	1,369	10.5	27.1	12.4	50.0
Educational Services	1,115	4.4	16.4	16.1	63.0	1,711	2.7	16.5	9.9	71.0
Health and Social Welfare Services	416	6.4	29.2	27.0	37.4	2,122	10.3	28.4	22.0	39.2

Note: 1) The industrial classification systems for 2000 and 2020 differ. The row categories correspond to the major classification of the 10th Korean Standard Industrial Classification used in the 2020 survey. Only industries with relatively large employment numbers are presented.

2) Except for the aggregation of "Agriculture, Forestry, and Fisheries," no fine adjustments were made to sub-major classifications between 2000 and 2020.

3) In 2020, "Professional, Scientific, and Technical Services" and "Business Facilities Management, Business Support, and Rental Services" were separated; in 2000, these were combined as "Business Services."

Source: Statistics Korea, Population and Housing Census, 10% and 20% sample microdata.

5. Conclusion

The Population and Housing Census is one of the longest-running statistical sources that vividly demonstrates the dramatic changes in educational attainment. In the past, education was a privilege limited to specific social classes, as evidenced by literacy and school enrollment rates. Although compulsory primary education was stipulated in the 1948 Constitution, the illiteracy rate among those aged 13 and over remained high at around 30% in 1960. Literacy was far from universal, particularly among women.

The public education system in Korea has continuously expanded. The government built schools and trained teachers. Motivated by the desire to spare their children from experiencing the sorrow of educational deprivation, the parent generations made tremendous sacrifices through hard work and perseverance. As a result, education has become increasingly accessible as a universal right. Illiteracy rates declined dramatically, and the population structure shifted from one in which higher educational attainment corresponded to a smaller share of the population to one where it corresponds to a larger share.

Education was a driving force behind the remarkable achievement from a colonized and war-torn country into one of the world's advanced economies. At the same time, education has also played a key role in shaping new urban spaces. The policy in the 1970s and 1980s to relocate prestigious high schools from northern Seoul to *Gangnam* vividly illustrates how powerful an engine of social change education has been in Korean society.

With the expansion of educational opportunities, the social meanings of education have changed significantly from the past. Unlike the era when only a very small minority could graduate from university, a university degree no longer guarantees upward social mobility through access to quality jobs. Nevertheless, investment in and competition over education

for the sake of social mobility and reproduction continue, and families still bear heavy economic and psychological burdens. Although educational disparities by gender, region, and class have diminished, they are being reshaped in other forms. While overcrowded classrooms were a major challenge during the period of population growth, the closure of schools—once vital community hubs—has now emerged as a critical issue.

While the specific education-related challenges change over time, the importance of educational items in the census will not diminish. Education remains a vital pillar driving Korean society, and the individual choices and experiences connected to education, along with structural changes in society, will continue to be areas of ongoing attention.

Religion

2025
Census
100th anniversary



1. Introduction

The Population and Housing Census in Korea began collecting data on religion in 1985. Since the religion item is surveyed every 10 years, it has been surveyed four times up to the 2020 census. This chapter examines the size of the religious population and its distribution by sex, age, and region, drawing from the *Ministry of Culture and Public Information* in the 1970s and the Population and Housing Census data from 1985 onwards.

2. Religious Population Before the Population and Housing Census

Before the Population and Housing Census began collecting data on religion, religious population statistics were available in the *List of Religious Corporations and Organizations* compiled by the Ministry of Culture and Public Information. However, since this data was not collected directly by the Ministry but relied on reports from each religious organization, there is room for doubt regarding the accuracy of the data. In 1980, the total religious population was reported as 30.5 million, which is considerably different from the religious

population of 17.2 million in the 1985 census (Table 13-1).

According to the data from 1971 to 1980, Buddhists, Protestants, and Confucianists accounted for the majority of the religious population. The Confucianists were reported as 4.42 million in 1971 and 5.18 million in 1980, but according to the 1985 census data, it appeared as 0.48 million. For other religions as well, significant differences can be found between the reports from religious organizations and the census.

The Buddhists increased by about 74%, from 7.11 million in 1971 to 12.33 million in 1980. This is presumed to be due to the inclusion of 3,337 unregistered temples, but its accuracy is difficult to ascertain.¹⁾

Table 13-1. Trends in Religious Population (1971-1980)

(Unit: persons)

Category	1971	1974	1975	1977	1979	1980
Total	17,958,362	19,613,680	25,276,153	27,367,978	29,614,828	30,497,355
Buddhism	7,106,018	7,985,773	11,972,930	12,906,851	13,390,975	12,329,720
Protestantism	3,217,996	3,463,108	4,019,313	5,001,491	5,986,609	7,180,627
Catholicism	779,000	790,367	1,012,209	1,093,829	1,189,863	1,321,293
Confucianism	4,423,000	4,423,000	4,723,493	4,723,493	4,925,444	5,182,902
<i>Cheondogyo</i>	636,067	718,072	815,385	814,673	1,052,630	1,152,636
Won Buddhism	619,219	681,783	740,362	806,550	904,568	947,993
<i>Daejonggyo</i>	113,720	145,002	128,198	170,631	257,442	316,571
Others	1,063,342	1,406,775	1,864,263	1,850,460	1,907,297	2,065,613

Source: List of Religious Corporations and Organizations by the Ministry of Culture and Public Information (1971, 1974, 1975), Status of Religious Corporations and Organizations (1977), Status of Religious Organizations (1979, 1980).

1) The inclusion of unregistered temples for Buddhism is not at all incorrect. However, such facilities may be difficult to verify or accurately count, raising concerns about data reliability.

The Protestants increased by 123%, from 3.22 million in 1971 to 7.18 million in 1980. According to data from the Ministry of Culture and Public Information, the name for Protestantism changed with each survey, and the issue of confusion regarding the name *Christianity* continued even after religion was included in the census items.

The Catholics also increased by about 70%, from 0.78 million in 1971 to 1.32 million in 1980. Like Buddhists, this trend seems to be due to the inclusion of 1,847 small Catholic churches omitted in previous surveys.

Smaller religious groups also recorded notable growth during this period. *Cheondogyo* increased by 81% from 0.64 million in 1971 to 1.15 million in 1980, Won Buddhism by 53% from 0.62 million to 0.95 million, *Daejonggyo* by 178% from 0.11 million to 0.32 million, and Other Religions by 94% from 1.06 million to 2.07 million. In summary, according to the data from the Ministry of Culture and Information, as the population of every religion increased in the 1970s, the total religious population also increased by 70%, from 17.96 million in 1971 to 30.5 million in 1980.

While the proportion of the religious population has been around 50% in the census since 1985, the data from the Ministry of Culture and Public Information reported significantly higher estimates, at about 80%. Considering the process of data collection and the method of compilation, it is judged that using the results of the Population and Housing Census is more appropriate for the analysis of the religious population.

3. Population and Housing Census on Religious Population

In the Population and Housing Census, religion was surveyed through full field enumeration from 1985 to 2005, and through a 20% sample survey in 2015. The statistics provided by Statistics Korea through KOSIS are limited to Korean citizens. In the 1985 census, the total religious population was 17.2 million (42.6%) (Table 13-2).

Table 13-2. Religious Population Ratio in Population and Housing Census (1985-2015)

(Unit: persons, %)

Category	1985		1995		2005		2015	
	Population	Ratio	Population	Ratio	Population	Ratio	Population	Ratio
Total	40,419,652	100.0	44,553,710	100.0	47,041,434	100.0	49,052,389	100.0
Religious	17,203,296	42.6	22,597,824	50.7	24,970,766	53.1	21,553,674	43.9
Buddhism	8,059,624	19.9	10,321,012	23.2	10,726,463	22.8	7,619,332	15.5
Protestantism	6,489,282	16.1	8,760,336	19.7	8,616,438	18.3	9,675,761	19.7
Catholicism	1,865,397	4.6	2,950,730	6.6	5,146,147	10.9	3,890,311	7.9
Confucianism	483,366	1.2	210,927	0.5	104,575	0.2	75,703	0.2
Won Buddhism	92,302	0.2	86,823	0.2	129,907	0.3	84,141	0.2
<i>Cheondogyo</i>	26,818	0.1	28,184	0.1	45,835	0.1	65,964	0.1
<i>Daejonggyo</i>	11,030	0.0	7,603	0.0	3,766	0.0	3,101	0.0
<i>Daesoon Jinrihoe</i>	-	-	62,056	0.1	34,550	0.1	41,176	0.1
Others	175,477	0.4	170,153	0.4	163,085	0.3	98,185	0.2
Non-Religious	23,216,356	57.4	21,953,315	49.3	21,865,160	46.5	27,498,715	56.1

Note: The ratio is the number of followers of the respective religion divided by the population in that year. Unknown figures are not presented.

Source: Statistics Korea, Population and Housing Census (KOSIS).

In 1995, the total religious population was 22.6 million, an increase of 5.4 million compared to 1985, and the ratio also increased by 8.1%p to 50.7%. By religion, Buddhists (3.3%p), Protestants (3.6%p), and Catholics (2.0%p) increased, while Indigenous religions including Confucianism all showed a decreasing trend. In particular, the decline in Confucianism and *Daejonggyo* was very large. Meanwhile, *Daesoon Jinrihoe* was added as an option in the 1995 census.

In the 2005 census, the religious population increased to 25.0 million, and the ratio increased by 2.4%p compared to 1995. However, the increase was less than that during the 1985-1995 period (8.1%p). While Protestants showed a decrease in the number of followers, Buddhists showed an increase in followers but its ratio to the population decreased by 0.4%p. On the other hand, the number of Catholics increased by 2.2 million resulting in a 4.3%p increase in the ratio to the population.

The biggest change between 2005 and 2015 was a significant decrease in the total religious population. Within 10 years, the religious population decreased from 25.0 million to 21.6 million, a decrease of 3.4 million, and the ratio to the population also decreased by 9.2%p, from 53.1% to 43.9%. The religious population ratio in 2015 is similar to the level (42.6%) recorded in 1985.

Compared to 2005, only the Protestants increased by 1.4%p, while both Buddhists (-7.3%p) and Catholics (-3.0%p) decreased. The decrease in the Buddhist population between 2005 and 2015 was 3.11 million, almost equal to the total decrease in the religious population of 3.42 million.

Census data also allow for analysis of religious affiliation by sex and age. In Korea, the religious population ratio is generally higher for females (Table 13-3). In the 1985 census, the religious population was higher among women, with 8.0 million men (39.3% of men) and 9.2 million women (45.8% of women). In most religions, including Buddhism, Protestantism, and Catholicism, the religious population ratio is higher among women than men.

In 2015, as in previous censuses, the religious population ratio was higher among women. The gender gap persisted and widened by 2015, particularly for Buddhism, Protestantism, and Catholicism.

Table 13-3. Religious Population Ratio by Sex in Census (1985-2015)

(Unit: %)

Sex	Buddhism				Protestantism				Catholicism			
	1985	1995	2005	2015	1985	1995	2005	2015	1985	1995	2005	2015
Total	19.9	23.2	22.8	15.5	16.1	19.7	18.3	19.7	4.6	6.6	10.9	7.9
Male	18.5	21.8	21.5	13.9	14.7	18.3	17.1	17.8	4.2	6.0	10.1	6.9
Female	21.4	24.6	24.1	17.1	17.4	21.1	19.6	21.6	5.1	7.3	11.8	8.9

Note: Each ratio is the number of followers of the respective religion divided by the population in that year.

Source: Statistics Korea, Population and Housing Census (KOSIS).

Table 13-4. Religious Population Ratio by Age in Census (1985-2015)

(Unit: %)

Age	Buddhism				Protestantism				Catholicism			
	1985	1995	2005	2015	1985	1995	2005	2015	1985	1995	2005	2015
Total	19.9	23.2	22.8	15.5	16.1	19.7	18.3	19.7	4.6	6.6	10.9	7.9
0-9	9.5	11.3	13.2	6.0	14.1	19.3	19.9	20.4	3.8	5.6	9.7	5.7
10-19	15.0	18.3	17.7	8.4	18.1	22.5	20.4	22.1	4.4	7.2	11.7	6.9
20-29	18.6	19.4	19.3	9.6	17.3	19.7	17.9	17.6	4.9	5.8	11.2	7.3
30-39	25.2	24.7	19.6	11.6	17.9	20.0	17.7	18.6	5.7	7.0	9.8	7.7
40-49	30.3	31.5	26.6	15.6	14.9	20.0	17.7	19.5	4.9	8.0	11.3	7.4
50-59	31.5	34.7	31.7	22.0	12.8	16.7	17.8	19.1	4.3	6.3	12.0	8.8
60-69	30.4	34.5	34.1	26.0	13.0	16.0	16.9	20.6	4.5	6.2	10.8	10.1
70+	28.0	30.5	31.1	25.5	12.4	17.5	18.2	21.3	4.4	6.8	11.5	9.9

Note: Each ratio is the number of followers in the respective age group of the religion divided by the population in that age group in that year.

Source: Statistics Korea, Population and Housing Census (KOSIS).

Age-specific patterns in the religious population are as follows (Table 13-4). In the 1985 census, the Buddhist ratio was highest in the 40-69 age group, and the Protestant ratio was relatively high in the 10-39 age group. Catholics were evenly distributed across age groups compared to Buddhists and Protestants. In 2015, the Buddhist population ratio was highest in the 60s (26.0%), followed by those aged 70 or older (25.5%). The Buddhists ratio decreased in all age groups except 0-9 years, peaking in 1995.

The Protestant ratio at 2015 was highest in the teens (22.1%), followed by those aged 70 or older (21.3%), and the 60s (20.6%). The Protestants increased in all age groups except the 20s (-0.3%p) compared to 2005, showing a contrasting trend to the decrease in the Buddhists.

The Catholic ratio at 2015 was highest in the 60s (10.1%), followed by those aged 70 or older (9.9%), and the 50s (8.8%). Compared to 2005, the ratio decreased in all age groups in 2015. The decrease in the ratio of religions other than Protestantism across all age groups is related to the increase in non-religious individuals.

Changes in the non-religious population between 2005 and 2015 were significant among those aged below 50 (Table 13-5). The increase in the proportion of non-religious individuals exceeded 10.0%p in all age groups below 50. Furthermore, in 2015, non-religious individuals outnumbered the religious across all age groups below 40, and especially among those aged below 30. The increase among those aged 60 and older was relatively small.

Table 13-5. Change in Non-Religious Population by Age in Census (2005-2015)

(Unit: Thousand Persons, %, %p)

Age	2005		2015		Changes (2015 - 2005)
	Population	Ratio	Population	Ratio	
Total	21,865	46.5	27,499	56.1	9.6
0-9	3,112	56.1	3,027	67.5	11.4
10-19	3,204	49.0	3,436	62.0	13.0
20-29	3,697	50.4	3,874	64.9	14.5
30-39	4,232	51.6	4,517	61.6	10.0
40-49	3,449	43.0	4,795	56.8	13.8
50-59	1,895	36.9	3,939	49.3	12.4
60-69	1,295	36.3	2,054	42.3	6.0
70+	983	36.6	1,856	41.8	5.2

Note: Each ratio is the number of non-religious persons in the respective age group divided by the population in that age group.

Source: Statistics Korea, Population and Housing Census (KOSIS).

4. Conclusion

This chapter analyzed the trend in religious population from the 1985 census, which first included questions about religion, up to the 2015 census. The religious population ratio in Korea increased from 42.6% in 1985 to 53.1% in 2005, but then sharply decreased to 43.9% in 2015. While the three major religions—Buddhism, Protestantism, and Catholicism—account for the majority of the religious population in Korea, the order of prevalence has changed. As of 2015, Protestants became the largest group, followed by Buddhists and Catholics.

The religious population ratio was higher among women, which was a common phenomenon across all three major religions. The religious population ratio by age shows slight differences across religions. As of 2015, Buddhism was most prevalent among older adults, Protestantism showed both youth and elderly engagement, and Catholicism was relatively evenly distributed by age.

According to the results of the 2015 census, the proportion of non-religious individuals in Korea is 56.1%, among the highest in the world. However, since the increase in non-religious individuals in the census first occurred in 2015, it remains uncertain whether this trend will continue in the future.

Population Policy

2025
Census
100th anniversary



1. Introduction

Population policy targets demographic processes such as births, deaths, and immigration. Population policies are generally categorized into three broad areas: birth control policy, population dispersion policy, and immigration policy. Birth control policy aims to influence population size and structure by inducing changes in fertility behavior and relevant factors. Population dispersion policy aims to influence the regional distribution of the population, while immigration policy involves managing the inflow of foreign nationals to adjust both the size and composition of the population. This chapter covers birth control policy and immigration policy.

2. Birth Control Policy

1) Population Control Policy (1962–1995)

(1) Family Planning Projects

The population growth rate in the post-liberation period (1949–1955) averaged 1.1%

annually, but it surged to 3.0% between 1955 and 1960 due to the post-war baby boom. When the government established the *First Five-Year Economic Development Plan (1962–1966)* in 1961, it viewed the high population growth as a hindrance to economic development and introduced the *Family Planning Program* in November 1961. The initial phase of the program focused on promoting the use of contraception, with the government providing contraceptives free of charge. The program was further strengthened to promote the ideal image of smaller families, such as campaigns encouraging the birth of only one child. Efforts to counter son preference were also accompanied.

In 1966, the government set the total fertility rate (TFR) targets as part of its population policy. The targets were 2.3 children by 1986, 2.1 by 1988, and 1.8 by 1995, and the annual population growth rate target was set at 1% by 1993 (Economic Planning Board, 1981; Economic Planning Board, 1986). As these targets were successfully met, the TFR target was abolished in 1989 (Economic Planning Board, 1986).

(2) Regulatory and Compensatory Policy

As the baby boomers entered their reproductive age in the 1980s, the number of births was expected to increase. The previous family planning projects, relying primarily on awareness-raising campaigns, became insufficient to curb population growth.

In the *Fifth Five-Year Economic and Social Development Plan (1982–1986)*, the government moved up the target year for achieving a 1% population growth rate from 2000 to the early 1990s to quickly address socio-economic pressure caused by population growth (Moon, 1991). The government shifted from an approach focused on disseminating contraceptives to one emphasizing social policy. As part of this transition, 49 policy measures promoting one-child families were adopted in 1981 (Lee et al., 2005).

These measures included both regulatory and incentive-based approaches. For example,

civil servants' eligibility for child education and family allowances was limited to those with two or fewer children. Tax exemptions for education subsidies were capped at two children. To encourage sterilization after the birth of two children, the government provided additional incentives, such as priority access to livelihood loans and long-term housing loans, as well as eligibility for National Housing, which refers to state- or publicly-subsidized housing under the *Housing Act*.

2) Population Quality Improvement Policy (1996-2004)

Since the TFR in Korea fell below the population replacement level in 1983, it remained stable at 1.5–1.7 until the mid-1990s. As low fertility persisted, the Ministry of Health and Welfare launched the *Population Policy Development Committee* in February 1995. Based on the committee's recommendations, the government abolished the *Population Growth Reduction Policy* in June 1996. Instead, it began promoting the *Population Quality Improvement Policy* to address qualitative demographic issues, labor shortages, and structural challenges such as growing number of older adults. The policy aims to address issues stemming from decades of state-led fertility control.

Reproductive health was undermined by the long-term implementation of fertility control measures. One of the most notable issues was the prevalence of illegal abortions, which significantly threatened women's reproductive health. Combined with a deeply rooted preference for sons, this also contributed to a distorted sex ratio at birth.

The Population Quality Improvement Policy prioritized enhancing reproductive health, preventing abortions, correcting the imbalanced sex ratio at birth, and promoting family health and welfare. Specifically, it aimed to prevent the distortion of the sex ratio at birth caused by a preference for sons by imposing stricter penalties for illegal prenatal sex determination.

The government also reorganized previously adopted birth control policies (Ministry of Health and Welfare, 1997). For instance, the dissemination of contraceptives was discontinued, and family size restrictions were removed from the eligibility criteria for subsidies and National Housing.¹⁾

Population projections released in 1996 raised concerns about the decrease in the economically active population due to the continued low fertility and population aging (Lee and Cho, 2000). In response to immediate labor shortages, the government implemented measures to promote women's labor force participation, expand job occupations suitable for older adults, and develop post-retirement employment programs. These measures included strengthened income security, expanded home care services, and enhanced leisure programs for older adults.

During the *Population Quality Improvement Policy* period, the TFR continued to decline, and Korea entered an ultra-low fertility society in 2002 with the rate falling to 1.18. Nevertheless, rather than establishing a comprehensive response to the fertility decline, the efforts remained limited to the health and welfare sectors. As a result, Korea lost the opportunity to halt the declining fertility rate and fell into a *trap of low fertility*.

3) Low Fertility and Aging Society Policy (2005-)

As the fertility rate continued to decline, the government enacted the *Framework Act on Low Birth Rate in an Aging Society* in 2005 and established a national committee under the direct authority of the President. Based on this, the master plan began to be formulated.

The *First Master Plan (2006–2010)* specified the goal of recovering the fertility rate to the OECD average for a sustainable society. The *Second Master Plan (2011–2015)* aimed to gradually recover fertility rates and the *Third Master Plan (2016–2020)* set a target of

1) Previously, benefits were provided for up to 2 children.

reaching a TFR of 1.5 by 2020. In contrast, the *Fourth Master Plan (2021–2025)* emphasized quality of life over viewing individuals merely as units of labor and productivity, setting a goal of social innovation in response to gender equality and demographic changes.

Although the visions and goals of the *Master Plans* have evolved over time, the policies to achieve them have remained largely consistent—focusing on reducing the economic burden on childbearing families, improving childcare services and health care, and promoting work-life balance.

The causes of low fertility are connected to various areas such as employment, housing, education, and welfare. However, the *First Master Plan* did not include these structural problems within its policy scope. The government subsequently recognized the limitations of childcare-focused measures alone and began to address broader social issues across various sectors.

To reduce the financial burden on families with children, the government implemented a range of fiscal measures. These included reductions in automobile taxes for larger families and key programs such as the *National Pension Childbirth Credit* (2008), the *Child Care Tax Credit* (2015), and the *Child Benefits* (2018).

To reduce the housing cost burden for multi-child families, priority eligibility for housing supply was expanded in 2010. In 2024, the eligibility was extended from families with three or more children to those with two children. Furthermore, loan restrictions for home purchases and *Jeonse* deposits were gradually eased, and loan interest rates were lowered according to the number of children. In public rental housing, new types were introduced specifically for families with multiple children, and the maximum tenancy period for newlyweds with children was extended.

To support infertility treatment, the government began subsidizing the cost of in-vitro fertilization in 2006 and male infertility treatment in 2007. In 2018, infertility leave was introduced, and its duration was gradually extended. In the 2020s, age limits on assisted

reproductive treatment subsidies were removed, and the number of covered treatment cycles was expanded.

To enhance access to childcare and early childhood education, care and education programs for infants and young children were reformed into universal, cost-free services opened to all children. The childcare infrastructure was steadily augmented. Since 2006, basic subsidies have been provided to private childcare centers to offset the gap between standard childcare costs and parent-paid fees, thereby improving the quality of services. At the same time, the government continued to expand the provision of public childcare centers in response to increasing demand. The government set a goal of raising the availability rate of public childcare to 50% by 2025.

Policies related to workplace childcare facilities were also introduced. In 2006, the *Child Care Act* was amended to strengthen the mandate for establishing such facilities. Penalties for violations were also reinforced, such as public disclosure of non-compliant employers and imposition of fines.

Since 2006, home-visit childcare services have been provided to meet irregular and temporary care needs. Recently, the management and training of childcare providers have been systematized to enhance the quality of public childcare services.

As employment forms became more diverse, demand grew for flexible and tailored childcare services. In response, policies were introduced to expand part-time childcare, increase extended-hours services, and establish full-day classes in kindergartens. Households not using childcare facilities were provided with a childcare allowance. Various infant-related subsidies—such as those for daycare, part-time care, and in-home care service—along with allowances for at-home care were integrated and reorganized into a single infant allowance (parent allowance), allowing parents more options.

As part of low fertility measures, the government has strengthened work-life balance policies. Since 2006, maternity leave for 90 days has been paid through employment

insurance for certain workers. It has also been available for fixed-term and dispatched workers whose contracts expired during their leave. In 2007, paternity leave was introduced to encourage male participation in childcare, and leave days were gradually increased.

In 2021, maternity leave began to be provided to female workers not covered by employment insurance, including non-standard workers. The government started supporting a maternity allowance (before and after childbirth) of 500,000 KRW per month for 3 months to various non-standard workers.

The government gradually expanded the eligible age of children for parental leave from under 1 year old to under 9 years. Parental leave benefits were increased from a fixed amount of 200,000 KRW per month to 500,000 KRW per month, and were converted to a proportional system in 2011. The benefit level gradually increased from 40% of ordinary wages to 80%.

In 2014, *Father's Month* was introduced to promote paternity leave. Under this system, the parental leave allowance for the second parent is increased when both parents use leave sequentially for a child. In 2016, the incentive period was extended to 3 months and the criterion for multi-child families was broadened from families with three or more children to those with two. The maximum amount of benefits was also gradually increased.

In 2008, flexible work arrangements such as reduced working hours for childcare, flextime, remote work, and compressed workweeks were also institutionalized. From 2016, reduced working hours during pregnancy became mandatory in all workplaces.

3. Immigration Policy

Immigration policy is formulated to manage cross-border migration. It encompasses the regulation of migrant inflows, stays, and social integration—all of which are directly related to population policy. In Korea, a shift in the direction of immigration policy began to appear after the *Second Master Plan for Low Birth Rate and Aging Society*.

The *Second Master Plan* included a goal of actively attracting outstanding foreign talent through a more open immigration policy. The *Third Master Plan* outlined tasks for establishing criteria for migration and policy priorities. The direction of immigration policy is shifting from relying on short-term migrant labor towards supporting the long-term stay and settlement. The social integration of immigrants who stay long-term or obtain permanent residency is becoming increasingly important.

1) Immigrant Attraction

(1) Employment-based Immigrants: Science and technology workers

Foreign professionals eligible to work in Korea are those granted visa statuses for Short-Term Employment (C-4), Professor (E-1), Foreign Language Instructor (E-2), Research (E-3), Technological Guidance (E-4), Professional (E-5), Culture and Entertainment (E-6), and Specific Ability (E-7). Among these, the workforce in the fields of science and technology or high-tech industries is actively sought after. In other fields, employment-based immigration is permitted only after qualification reviews on the replacement levels for domestic labor, academic background, career, and earnings.

For the attraction of immigrants in the field of science and technology, the focus in the late 1960s was mainly on overseas Koreans and Korean expatriate professionals. It expanded to foreign scientists and engineers in the 2000s. Support for attracting an international workforce in the high-tech sector began in earnest during this period.

Since 2014, special visas—such as the Gold Card and IT Card—have been issued to outstanding STEM workers, granting them preferential treatment in employment and visa status. In 2023, the *Fast-Track Program for Global Talents in Science and Technology* was introduced, guaranteeing a 5-year stay upon recommendation by a university president after obtaining a graduate degree in a science and engineering-specialized university and research institute. It also allows recipients to obtain permanent residency or nationality within just 3 years if certain criteria, such as research performance, are met.

(2) International Students and Investors

A comprehensive plan to attract international students began with the *Study Korea Project* in 2004. Initially, the focus was on quantitative expansion. However, as issues such as high dropout rates, unauthorized employment, and visa overstays became social problems, the plan shifted to a qualitative approach in 2008, focusing on strengthening management and support.

Qualitative management of international students was institutionalized through the standardization of processes ranging from selection and academic support to scholarships, employment assistance, and recruitment promotion. The management of international students' stay has been facilitated by easing regulations, such as relaxing financial capacity standards, increasing permitted hours for part-time work, and allowing low-skilled foreign workers to concurrently engage in study.

To boost balanced regional development and the competitiveness of small businesses,

the *Immigrant Investor Scheme for Real Estate* (IISRE) was implemented in 2010 and the *Immigrant Investor Scheme for Public Business* (IISPB) in 2013. Both schemes allow the acquisition of permanent residency after maintaining the investment for 5 years or more. The *Startup Korea Special Visa* grants visas to foreigners with a bachelor's degree or higher who have established a company and obtained a certain score. It grants permanent residency after three years of stay to those who invest at least 300 million KRW or employ 2 Korean citizens for 6 months or more.

2) Immigrant Settlement

In 1993, unskilled foreign labor visas (E-8, E-9, E-10, H-2) were introduced through the *Industrial Trainee System for Foreigners*. However, due to poor working conditions, human rights issues, high turnover rates, and visa overstays, it was revised into the *Training & Employment Program* in 1997, allowing a one-year stay as a laborer after 2 years of training. However, as the problems remained unresolved, the *Employment Permit System* (EPS) was introduced in 2003. The system is divided into two distinct pathways: the general EPS for general foreigners and the special EPS (Visiting Employment System) for foreign nationality Koreans.

The general EPS, through agreements with sending countries, allowed non-professional employment (E-9) foreign workers to stay for 3 years (extendable by 1 year and 10 months). The stay period under the general EPS was extended to 5 years in 2009, then to 9 years and 8 months in 2012. Since 2022, special non-professional workers with long-term services have been allowed to stay for over 10 years.

In 2002, the *Employment Management System* was introduced, allowing the employment of foreign nationals of Korean descent invited by domestic relatives, limited to certain service sectors. The system was integrated into the *Special Employment*

Permit System in 2004. In 2007, the work and visit (H-2) visa was introduced, providing employment opportunities to Foreign Nationality Koreans without domestic ties. To protect employment opportunities for Korean citizens, a visa issuance quota and a construction employment certification system were introduced in 2009 to limit the influx of workers from overseas. Since 2010, opportunities for overseas Koreans with an H-2 visa to change their status to Overseas Korean (F-4) have been expanded. In 2023, regulations on the issuance of construction employment were abolished.

The seasonal worker program for short-term employment (C-4) up to three months has been actively promoted since 2017. Local governments receive applications from farms, and the Ministry of Justice forms a consultative body with relevant ministries to approve the scale of the influx.

In response to concerns that the skilled international workforce under the specific activities (E-7) may replace domestic employment opportunities, the size of their admission and changes in visa status have been deliberately controlled. The skilled worker points system (E-7-4) allows long-term foreign workers—who have been employed for more than 4 years within the last 10 years under unskilled visas—to continue working in Korea by changing their visa status. This system primarily targets sectors such as agriculture/livestock/fisheries, small manufacturing companies, and construction companies.

Since 1993, the government has implemented policies for overseas Koreans, encompassing both foreign nationals of Korean descent and Korean citizens residing abroad. In 1999, the *Act on the Immigration and Legal Status of Overseas Koreans (Overseas Korean Act)* was enacted to institutionalize a preferential approach for overseas Koreans. The overseas Korean (F-4) visa status granted under the act allows for a 2-year stay, which can be extended, as well as re-entry and departure without permits. Furthermore, they hold equal rights with Korean citizens in most occupations, financial transactions, etc. The scope of *the Overseas Korean Act* has expanded inch by inch. Marriage immigrants are granted

the F-6 visa, and foreigners entering Korea for family reunification are granted the F-1 or F-3 visas. With the increase in international marriages, the *Nationality Act* was amended in 1998 to allow foreigners who married a Korean citizen to acquire Korean nationality only after residing in Korea at least 2 years after marriage. Since the early 2000s, growing concerns over human rights issues in international marriage brokerage have led to enhanced government regulation and oversight.

The Korean government acceded to the *Convention Relating to the Status of Refugees* in 1992 and established provisions such as the recognition and cancellation of refugee status in the *Immigration Act* in 1993. In 2008, the *Immigration Act* was amended to allow humanitarian stay permits for refugee applicants who were not recognized as refugees but needed complementary protection. In 2012, the *Refugee Act* was enacted, including provisions for the *Refugee Resettlement System* for those seeking to resettle. Since the introduction of the act, the number of refugee applicants have been increasing.

3) Social Integration

Since 2009, the government has introduced the *Social Integration Program* for immigrants. The program provides essential education to help participants adapt to Korean society and become self-reliant, covering topics such as the Korean language, culture and society, and constitutional values.

Support for the social integration of immigrants includes assistance with daily life information, Korean language and social adaptation education, vocational training, and support for employment and starting a business. According to the *Multicultural Families Support Act*, services are also provided in areas such as family counseling, marital and parenting education, domestic violence prevention, health care, childcare and education, and public awareness of multicultural families.

Various programs have been conducted for domestic students, teachers, and parents to enhance their understanding of cultural diversity. To help science and technology professionals and advanced industry technology professionals adapt, support is provided for settlement environments, such as children's education, housing, and healthcare. Cultural diversity policy is incorporated in the *Master Plan for Immigration Policy* and the *Master Plan for Multicultural Family Policy*.

The permanent residency was introduced in 2002 as one of the visa statuses. Individuals with permanent residency (F-5) are granted most civil rights, including the right to work or re-enter without permits. Furthermore, through the amendment of the *Public Official Election Act* (2005) and the *Residents' Voting Act* (2004), F-5 visa holders have the right to vote in local referendums as well as the right to vote for local council members and heads of local governments.

The number of foreign residents with permanent residency increased from about 10,000 in 2004 to 160,000 in 2020. As of June 2023, approximately 70% of the 182,000 permanent residents are overseas Koreans (Ministry of Justice, 2023).

4. Conclusion

Over the past 60 years, population policy in Korea has undergone significant transformations. The policy aimed at birth control during the 1960s–1980s, then promoted quality improvement from the mid-1990s, and shifted towards encouraging childbirth from the mid-2000s. Immigration policy was included as a major policy in the mid-to-late 2000s. The *1st Master Plan for Immigration Policy*, established in 2008, marked a shift toward a more comprehensive approach that extended beyond the employment of foreign labor to encompass social integration. In 2010, the *1st Master Plan for Multicultural Family Policy* was launched to support the integration of marriage immigrants and their families. It is only since the 2020s that the integration of immigrants has been seriously considered as a long-term strategy for addressing population decline.

Population policy requires continuous effort to change direction promptly based on constant analysis of the current situation. The Population and Housing Census is fundamental evidence regarding demographic change. Just as it has until now, the census will continue to serve as a vital guide for population policy in addressing emerging challenges.

《Books and Articles》

Bureau of Statistics, *Korean National Statistical Yearbook*, 1953.

Cho, E. J., “Population Statistics and State Formation: The 1960 and 1966 Population Censuses of the Republic of Korea”, *Korean Journal of Sociology*, Vol.48 No.5, 2014, pp.137-172.

_____, “Statistics and Knowledge-Making Practices: Focusing on the ‘Statistical Advisory Group’ (1958-1963) in South Korea”, *The Korean Journal for the History of Science*, Vol.38 No.1, 2016, pp.213-238.

Choi, E. Y., and Park, Y. S., “Analysis of Fertility Differentials by Socioeconomic and Characteristics Region”, in *Research Report for the Second Half of 2009*, Vol.3, Statistics Research Institute, 2009, pp.176-264.

Choi, H. J., *A Study on the Change in Religious Population in Korea*, Seoul Theological University Press, 2011.

Economic Planning Board, *The Fourth Five-Year Economic Development Plan*, 1976.

_____, *The Fifth Five-Year Economic and Social Development Plan (1982-1986): Population Sector*, 1981.

_____, *The Sixth Five-Year Economic and Social Development Plan (1987-1991): Population Sector*, 1986.

Holden, C., “Why Do Women Live Longer than Men?”, *Science*, Vol.238 No.4824, 1987, pp.158-160.

Ishi, Y., “Future Population Projection of Korea: 1960-1980”, *Hakodate University Journal*, Vol.5, 1970, pp.207-239.

Kim, D. S., “Reconstruction of the South Korean Population during the U.S. Military Government Period”, in *Social Change and History in Korea under the U.S. Military Government Period*, Vol. 1, Hallym University Press, 1999.

Kim, H. S., Jeon, G. H., Lee, S. S., Kim, G. E., and Kim, M. H., “A Study on the Expansion of Survey Items and Administrative Data for the 2025 Population and Housing Census”, Statistics Korea,

2021.

- Kim, M. K., *Population and Housing Census in Korea*, Statistics Korea, 2018.
- Koo, H. M., “Exploring Spatial Characteristics of College Entrance and Job Migration”, *Journal of the Korean Urban Geographical Society*, Vol.21 No.3, 2018, pp.109-122.
- Korea Institute for Religious Society Research, *Korean Religion Yearbook: Vol.4, 1996-1997*, Korean Institute for Religious Society Research, 1997.
- Kwon, T. H., *Demography of Korea: Population Change and its Components 1925-66*, Seoul National University Press, 1977
- Kwon, T. H., and Kim, D. S., *Understanding Population*, Seoul National University Press, 2002.
- Laaribi, A., and Peters, L., *GIS and the 2020 Census: Modernizing Official Statistics*, ESRI Press, 2019.
- Lee, H. Y., and Lee, S. M., “The Influence of New Town Development on the Changes of the Migration and Commuting Patterns in the Capital Region”, *Journal of the Korean Geographical Society*, Vol.43 No.4, 2008, pp.561-579.
- Lee, S. I., Khang, Y. H., Yun, S., and Jo, M. W., “Rising Rates, Changing Relationships: Caesarean Section and its Correlates in South Korea, 1988–2000”, *An International Journal of Obstetrics & Gynaecology*, Vol.112 No.6, 2005, pp.810-819.
- Lee, S. S., and Cho, N. H., *Implementation Status and Future Directions of the UN Programme of Action on Population and Development*, Korea Institute for Health and Social Affairs, 2000.
- Lee, S. S., Cho, N. H., Baek, H. J., and Son, S. J., *Population Changes in North and South Korea and Socio-Demographic Policy Tasks upon Unification*, Korea Institute for Health and Social Affairs, 1999.
- Lee, S. S., et al., *Causes of Low Fertility and Policy Responses*, Korea Institute for Health and Social Affairs, 2005.
- Lee, S. U., “The Development of Imperial Japan’s Labor Mobilization System in Korea in the 1930s-40s”, Doctoral Dissertation, Yonsei University, 2003.
- Lim, D., Park, S. H., and Song, I., “Secular Trends in Sex Ratio at Birth by Birth Order in South Korea, 1981–2017”, *Journal of Health Informatics and Statistics*, Vol.46 No.1, 2021, pp.117-123.
- Ministry of Health and Welfare, *Health and Welfare White Paper*, 1997.
- Ministry of Justice, *Monthly Statistics of Immigration and Foreign Policy: June 2023*, 2023.
- Ministry of the Interior and Safety, “The number of foreign residents living in Korea reaches 2.26 million, accounting for 4.4% of total population, the largest number ever”, 2023.11.08.
- Moon, H. S. (ed.), *30 Years of Population Policy*, Korea Institute for Health and Social Affairs, 1991.

- Park, K. S., “Population Dynamics of Korea during the Colonialization Period(1910-1945)”, *Korean Journal of Population Studies*, Vol.32 No.2, 2009, pp.29-58.
- Park, M. G., and Seo, H. C., *Colonial Power and Statistics: The Statistical System and Census of the Government-General of Korea*, Seoul National University Press, 2003.
- Statistics Korea, *The Population of Korea*, 2002.
- _____, *A Great History of Numbers: History of Korea Statistics – Social Statistics*, 2015.
- _____, *A Study on Improving the Identification Numbers of Basic Administrative Units and the Delineation of Enumeration Districts*, 2017.
- _____, *Population Census Statistical Information Report*, 2020.
- _____, *Statistical Work Manual: Map Construction for Population and Housing, and Agriculture, Forestry, and Fisheries Census*, 2021.
- _____, *2022 Social Survey Results*, 2022.
- _____, *2023 Proposal Request for the Statistical Geographic Information System(SGIS) Improvement Project*, 2023.
- Trewartha, G. T., and Zelinsky, W., “Population Distribution and Change in Korea 1925-1949”, *Geographical Review*, Vol. 39 No. 1, 1955, pp.1-26.
- UN DESA, *Principles and Recommendations for Population and Housing Censuses*, United Nations, 2017.
- _____, *Methodology Report: World Population Prospects 2022*, United Nations, 2022.
- Yang, J. A., “The System and Characteristics of the Census Act in the Imperial Japan’s Force Occupation Period”, *Legal Theory & Practice Review*, Vol.11 No.2, 2023, pp.115-144.
- Yang, S., Khang, Y. H., Chun, H., Harper, S., and Lynch, J., “The Changing Gender Differences in Life Expectancy in Korea 1970–2005”, *Social Science & Medicine*, Vol.75 No.7, 2012, pp.1280-1287.
- Yoo, H. L., and Kim, G. T., “History of Korean Statistics Administration: Institutional Changes & Major Activities”, *Korean Review of Organization Studies*, Vol.5 No.2, 2008, pp.1-29.
- Yoo, S. H., Hayford, S. R., and Agadjanian, V., “Old habits die hard? Lingering son preference in an era of normalizing sex ratios at birth in South Korea”, *Population Research Policy Review*, Vol.36 No.1, 2017, pp.25-54.

Ministry of Culture and Public Information, List of Religious Corporation and Organizations (1971, 1974, 1975).

_____, Status of Religious Corporations and Organizations (1977).

_____, Status of Religious Organizations (1979-1980).

Ministry of Education, Annual Report on Education Statistics (1970-2020).

OECD, Family Database.

Statistics Korea, Population Projections (2022).

_____, Life Tables (1970-2023).

_____, Population and Housing Census (1925-2020).

_____, Vital Statistics (1970-2022).

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