

# Korea

# Focus

2024 | Working Paper No. 25

South Korea's Population Aging and  
Pension Reform Plans in Comparison  
with Germany and Sweden

Prof. Dr. Jae-jin Yang



KOREAN  
STUDIES  
FREIE  
UNIVERSITÄT  
BERLIN



The views expressed and conclusions drawn in this series are solely those of the individual authors and do not necessarily represent the positions or views of the Institute for Korean Studies or its employees. The Institute for Korean Studies is not responsible for, nor does it verify, the accuracy of any information contained in this series. The primary purpose of this series is to promote scholarly discourse across geographical and linguistic boundaries.

**Published by: Institut für Koreastudien (IKS), Freie Universität Berlin,  
Otto-v.-Simson-Straße 11, 14195 Berlin. Germany.**

Copyright to papers in this series remains with the authors or their assignees. Reproduction or reposting of texts in this paper can only be done with the permission of the respective author. The proper form for citing working papers in this series is: Name of author or editor, (Year), Title, Working paper, Freie Universität Berlin, Institute of Korean Studies, Berlin.

# South Korea's Population Aging and Pension Reform Plans in Comparison with Germany and Sweden

Jae-jin Yang  
(Professor at Yonsei University)

## I. Introduction

In 2020, South Korea experienced a decline in its total population for the first time in 72 years since 1948. The total population declined to 51.73 million. The number of individuals in the working-age population, which had reached its peak in 2016, experienced a decline of 677,000 over the subsequent five-year period (Statistics Korea, 2022). In the 2019 Prospective Population Projections, Statistics Korea initially projected that the total population would reach its peak in 2028 and subsequently begin to decline in 2029. However, the decline has been accelerated by eight years. The primary causes of this decline are a declining fertility rate and a significant reduction in the number of births. In 2023, South Korea recorded a further decline in its fertility rate, reaching a new record low of 0.72. Furthermore, the number of births has been down to 230,000 for the first time ever, in the 2000s it was still around 400,000.

Most OECD countries are also witnessing a decline in their fertility rates, although the rate of decline is not as pronounced as that observed in South Korea. The influx of immigrants has mitigated the severity of the population decline in many Western countries. Nevertheless, the aging and gradual decline of the productive population are unavoidable. The reduction in the number of individuals within the working-age population presents a challenge to the sustainability of public pension programs, which rely on contributions from future generations in the form of premiums and taxes. In response to this situation, many countries have implemented pension reforms since the 1990s. The aging of the population in Korea commenced at a later point in time than in other developed countries. This may be the reason why the debate on pension reform has only recently been on the rise.

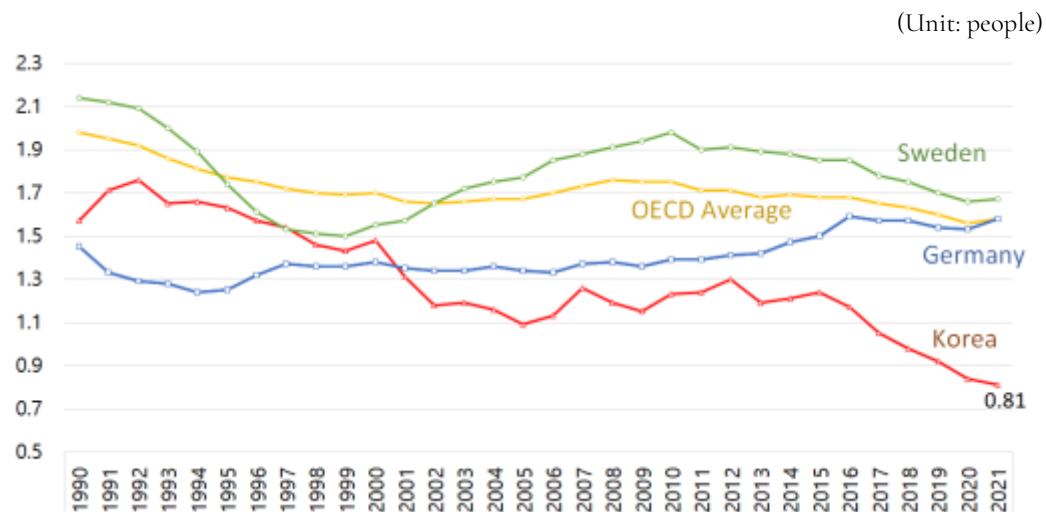
This paper provides an overview of the current demographic situation in South Korea and introduces two pension reform proposals recently put forth by the Yoon Suk Yeol government. One proposal was developed by the National Pension

Financial Calculation Committee of the Ministry of Health and Welfare, while the other was formulated by the Office of the President. Furthermore, an evaluation of these two pension reform proposals will be conducted in light of the experiences of leading pension reform countries. The main comparative evaluation criteria will be Sweden's pension reform in 1999 and Germany's pension reform in 2001-2004.

## II. Aging Population in South Korea

According to Statistics Korea, the total population of South Korea, including both foreign and Korean nationals, exhibited a decline in 2021. This is attributable to a precipitous decline in the number of births. The total fertility rate in South Korea has exhibited a notable decline, from 4.53 in 1970 to 0.98 in 2018. This represents an average annual rate of decline of -3.1%, which is the most rapid rate of fertility decline observed among the 37 OECD countries. For comparison, Germany which has one of the most significant fertility declines in Europe has a decline rate of -0.5%, which is only one-sixth of South Korea's, and Sweden which has a relatively high fertility rate has a decline rate of -0.2%, which is one-fifteenth of that of Korea (Statistics Korea, 2022).

<Figure 1> International Comparison of Total Fertility Rates



Source: OECD.Stat (<https://data.oecd.org/pop/fertility-rates.htm/> accessed Nov.25, 2024)

In 2005 as a response to the declining birthrate, then Roh Moo Hyun government established the President's Committee on the Declining Birthrate and Aging, introducing public childcare, extending maternity leave to 90 days, and expanding the parental leave system. Additionally, the government implemented a multi-child point system for housing applications. These proactive birth encouragement measures facilitated a rebound in the fertility rate, which reached 1.26 in 2007 and remained at 1.2 births until 2015. However, the total fertility rate came down to 1.05 in 2017. The total fertility rate was further down to 0.81 in 2022 and finally 0.72 in 2023. It is one of the lowest rates in the world. In 2023, only 230,000 children were born, down from its peak of 1,060,000 in 1970.

As illustrated in Figure 1, fertility rates in OECD countries have remained relatively stable since the 2000s. Notably, Sweden exhibits a relatively high fertility rate that exceeds the OECD average. Germany has also experienced a rebound in its fertility rate, reaching 1.6.

As a consequence of declining fertility rates and longevity the population is undergoing a rapid aging process. In the year 2000, South Korea was classified as an "aging society," a designation applied when more than 7% of the population is aged 65 or older. In the 18 years that followed, the proportion of the population aged 65 and older rose to 14% by 2018, marking the transition to an "aged society." By 2025, the proportion of the population aged 65 and above will exceed 20%, moving into a "super-aged society." In less than one generation, South Korea will have experienced a rapid transition from an aging society to a super-aged society. What took France 155 years is being accomplished by South Korea in a mere 25 years.

<Table 1> Changes in Elderly Dependency Ratio in South Korea

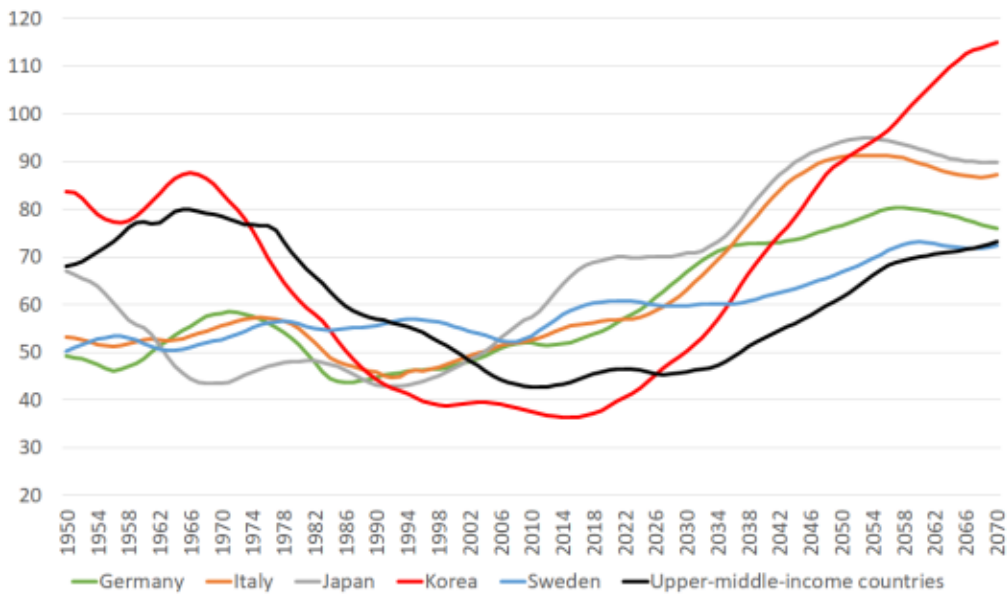
Year	2021	2025	2030	2040
Working-Age Population	37.03 million	35.61 million (-1.42 million)	33.81 million. (-3.22 million)	28.52 million (-8.51 million)
Elderly population (%)	10.04 million (16.6%)	13.12 million (20.6%)	16.2 million (25.5%)	22.68 million (34.4%)
Elderly dependency ratio	23.1	29.7	38.6	60.5

Source: Data from the Advisory Council on Population Aging (Nov. 4, 2022).

A decline in the working-age population has an adverse effect on the overall dynamics of society. The dependency ratio is poised to rise considerably. By the year 2040, the working-age population will be 28.52 million, representing a decline by 8.51 million from the 37.03 million recorded in 2021. Conversely, as already mentioned, the elderly population is experiencing rapid growth, increasing from 16.6% (10.4 million) to 34.4% (22.68 million) of the total population. This results in a notable increase in the elderly dependency ratio. The elderly dependency ratio—the number of individuals aged 65 or older per 100 working age people—is projected to increase from 23.1 in 2021 to 60.5 by 2040 (Table 1). This represents a nearly threefold increase in the dependency ratio over the course of two decades.

<Figure 2> International Comparison of Dependency Ratio: 1950-2070

(Unit: people)



Source: UN (2024)

The international comparison of South Korea's dependency ratio with the other OECD countries reveals that its dependency ratio is currently below that of other countries in comparison. However, by 2026, it is projected to exceed the average of upper-middle-income countries. By the year 2050, it is projected to surpass Sweden, Germany and Italy and rank second in the world. By 2060, South Korea will become the oldest country in the world, surpassing Japan, the current oldest country (Figure 2). If Korea's productive growth is in tandem with that of the

aging population, it will be able to maintain its financial capacity to support the elderly. However, the rate of productivity growth in South Korea has not been significant, and the country has already entered a period of low growth. In recent years, the economy has undergone low economic growth at a rate of about 1%, which is below its potential growth rates.

The demographic shift towards an aging population will have far-reaching implications for every aspect of Korean society. Furthermore, the financial challenges associated with the National Pension and Basic Pension schemes, which rely on future generations' contributions and tax payments to fund pensions, will be significant and far-reaching. This situation necessitates pension reforms.

### **III. Global Pension Reform Trends with a Focus on Germany and Sweden**

In South Korea, as in other industrialized countries, the long-term financial sustainability of pension systems has been called into question due to the aging of the population. South Korea only introduced the National Pension in 1988, which was two generations later than the average for other OECD countries. Furthermore, it is a relatively recent phenomenon that South Korea has become an aging society. Consequently, the pension reform issue is now beginning to attract significant attention. However, most Western industrialized countries, including Germany and Sweden, had made reforms to their pension systems around the year 2000 (Yang, 2024).

Germany, Sweden and Japan imposed a cap on contribution increases at 22%, 18.5% and 18.3% respectively. It was a response to concerns expressed by younger generations about the likelihood of indefinite premium increases. Now most countries levy a maximum contribution rate of 20%, aiming to safeguard intergenerational equity.<sup>1</sup>

<Table 2> Pension reforms in Germany 2001-2024

---

<sup>1</sup> South Korea will also rely exclusively on revenue from contributions of future cohorts to fund the promised pensions after the national pension fund is depleted. At that juncture, the anticipated requisite premiums could reach 35% or more.

- In Germany, the contribution rates have increased consistently since the expansion of the public pension system in 1957. The rate reached 19.1% in 2001. In the absence of pension reform, it was anticipated that premiums would exceed 27% by 2030.
- The 2001 pension reform established a maximum pension contribution rate of 22% by 2030 and modified the pension calculation base with the objective of preventing a significant increase in the contribution rate. Nevertheless, the projected increase to 24.2% in 2030, even with the change in the salary calculation base, necessitated further reductions in pension payments. Consequently, in 2004, a sustainability element was incorporated into the pension value calculation, which considers the ratio of the number of beneficiaries to the number of contributors (i.e. implementation of the automatic stabilizer). Furthermore, the Retirement Age Adjustment Law was introduced in 2007, with the objective of gradually raising the pensionable age from 65 to 67 between the years 2012 and 2029.
- It is expected that the 2001 reforms will result in a reduction of the income replacement rate of public pensions from 52.9% in 2000 to 46.2% in 2025. In order to prevent old-age poverty due to the decline in benefits, the government introduced a new private pension plan, known as a "Riester Pension." In order to induce the voluntary enrollment of the new pension system, the government provides financial subsidy to all enrollees.

Source: Sangho Kim (2014).

As the number of contributors declines, the imposition of a cap on the premium increases compels governments to reduce pension benefits to the ever-expanding pensioners. In the late 1990s, Sweden and Italy introduced defined contribution (DC) plans, which are usually used in private pensions, and establish a 100% correlation between contributions and pension benefits. DC plans mean that benefits are automatically reduced as life expectancy increases.

Germany and Japan retained the traditional defined benefit (DB) system, which, like South Korea's National Pension, guarantees a specified pension benefit regardless of contributions and life expectancy. However, while maintaining DB, they have introduced "automatic stabilizer" that automatically reduce pension amount as the population ages. Similarly, countries such as Finland, the Netherlands, Greece, and Portugal introduced reforms to automatically raise the pensionable age as life expectancy increases. These automatic adjustments are designed to circumvent the political backlash and protests that often accompany pension reforms as seen in France where President Macron's 2023 pension reforms prompted significant public unrest.



&lt;Table 3&gt; The 1999 pension reform in Sweden

- In 1999, Sweden enacted a structural pension reform. The traditional DB pension, ATP, was supplanted by the non-funded defined contribution (NDC) Income Pension and the fully funded defined contribution (FDC) Premium Pension. Additionally, the Basic Pension and supplementary pension were superseded by the supplementary Guarantee Pension.
- The NDC Income Pension establishes a structural link between contributions and benefits, thereby eliminating the issue of an additional financial burden as life expectancy increases. It is impossible even for the NDC to fix the fiscal implications caused by the declining number of contributors. Thus, some measures were introduced to adjust for this, including the injection of the investment returns of the Buffer Fund (equivalent to a four-year pension payment) that was left after the liquidation of the previous ATP pension fund. In the case that the fiscal balance cannot be achieved with the proceeds of the buffer fund alone, an automatic adjustment device—balance index—is introduced to balance the total pension assets and pension liabilities.
- The Premium Pension is a mandatory, fully funded, DC pension. This is paid concurrently with the NDC Income Pension after retirement.
- The Guaranteed Pension is a reformulation of the previous universal, flat-rate basic pension into a selective system with pension benefits, doubling the benefits in comparison to the previous system.

Source: Yang, Jae-Jin (2011)

Due to the increase in life expectancy, the total benefits received from public pensions will remain almost the same. However, the elderly would be financially insecure due to reduced monthly payments and delayed retirement age. In order to address these problems, countries across the globe are encouraging fully-funded DC pension plans (i.e. FDC pensions). In principle, FDC pensions are not affected by demographic changes because such systems are not contingent on premiums or taxes paid by future generations. Such pensions are based on the accumulated assets held in the pension fund. Moreover, the premiums paid are subject to compounding interests, whereby more investment returns are incorporated into the pension assets.

In Sweden, a mandatory contribution of 2.5% of income has been required for a state-administered FDC Premium Pension plan since 1999. In Germany, a non-mandatory FDC pension plan, known as the Riester Pension, has been introduced.

The government offers a basic subsidy with the objective of encouraging participation in the pension plan. Each year, a basic subsidy of €175 for a single person and €350 for a couple is paid, irrespective of income levels. In the Netherlands, Denmark, Switzerland, Australia, and the United Kingdom, there are *de facto* mandatory contributory occupational pensions, which are analogous to Korea's Retirement Pension. They typically cover more than 80% of wage earners and strictly prohibit interim settlements and lump sum withdrawals. The decision to take an annuity rather than a lump sum is strongly encouraged after retirement.

In recent years, the OECD countries leading pension reforms continued to implement reform measures aimed at stabilizing their pension finance (OECD, 2023). In Sweden, the eligibility age for the Guarantee Pension has been increased in two stages. The first stage, which was completed in 2023, raised the eligibility age from 65 to 66. The second stage, which is scheduled to be completed in 2026, will raise the eligibility age to 67. After 2026, the eligibility age will be adjusted automatically in accordance with the average increase in life expectancy each year.

Similarly, Denmark, Estonia, Italy, and the Netherlands have implemented automatic increases in the pensionable age in response to the aging population. France enacted a reform that increased the contribution period by one year, from 42 to 43 years, and the pension age from 60 to 63. In 2023, the Netherlands enacted a legislation that requires a mandatory conversion of its funded DB occupational pensions to FDC plans. The objective is to enhance the portability of pensions in the event of job transitions and to reinforce the sustainability of occupational pensions. Except for Switzerland, the majority of countries that have mandatory occupational pensions have subsequently converted to DC plans.

In addition to fiscal stabilization initiatives, measures are being implemented to enhance income security for the low-income elderly. In 2022, Canada will make a 10% increase in the tax-based Basic Pension for seniors aged 75 and older. Similarly, France, Spain, and Italy are implementing increases to their basic or minimum pensions, with the objective of enhancing the financial security of low-income seniors. Germany is endeavoring to make public pensions mandatory for the self-employed, who have previously enrolled on a voluntary basis, to reduce coverage gaps (OECD, 2023).

In general, many OECD countries, including Germany and Sweden, are implementing reforms with the objective of closely linking contributions and pension benefits and are concurrently reducing pensions in response to population aging. In Sweden, a DC system has been implemented, with contributions and

benefits now aligned. Furthermore, increases in life expectancy are reflected in the pension calculation formula that tends to decrease pension amounts. Similarly, spearheaded by Germany, many countries with the DB system now integrated automatic stabilizers to reflect old-age dependency ratio in their pension calculation and setting pensionable age. At the same time, most countries, including Germany and Sweden, are encouraging funded schemes as a compensatory measure for the *de facto* reduced public pension benefits. Another significant trend is to reduce loopholes in pension coverage and to implement targeted basic pensions for low-income seniors.

#### IV. South Korea's Pension Reform Plans and Evaluation

##### 1. Pension system and financial sustainability

Similar to other OECD countries such as Germany and Sweden, South Korea has a multi-tier old-age income security system. The largest second layer of the system is the traditional pay-as-you-go (PAYG) and defined benefit (DB) National Pension system.<sup>2</sup> The contribution rate is 9% of income, and the income replacement rate is 40% for 40 years of contributions. As of 2024, 22 million people are enrolled in the National Pension and 7 million people, or approximately 50% of the population aged 65 and above, are receiving pension benefits.

<Figure 3> South Korea's multi-tier pension system

4th tier	Personal pensions, housing pensions....
3rd tier	Retirement Pension (or severance pay)

<sup>2</sup> When the National Pension scheme was introduced, the insurance premiums charged exceeded the pension payments. Therefore, prior to the pension system reaching maturity, a magnitude pension fund is accumulating. This is often referred to as a partially funded system. Nevertheless, the accumulated fund will be depleted soon after baby boomers have retired. The financing of the National Pension will be predicated on the intergenerational income transfer thereafter. The National Pension is essentially a pay-as-you-go (PAYG) system.

2nd tier	National Pension
1st tier	Basic Pension

Source: Department of Health and Welfare (2022: 5)

The Basic Pension, located on the first tier of South Korea's multi-tier pension system, is quasi-universal in nature, funded through taxation, and is paid to 70% of the population aged 65 and over with the top 30% excluded. As of 2024, the maximum monthly benefit is 335,000 Korean won (or 250 euro). The estimated cost of the basic pension in 2022 was 20 trillion won (Ministry of Health and Welfare, 2022).

The third tier consists of the Retirement Pension, a statutory FDC pension system.<sup>3</sup> As of December 2022, the total number of members enrolled was 6.84 million, covering 53.3% of the total eligible employees. Employers are obliged to contribute 8.33% of their employees' wage to the Retirement Pension Companies. If an employer does not provide an employee with a Retirement Pension plan, the employer is required to pay the employee a lump sum payment equal to the value of the Retirement Pension. Over 90% of large enterprises with 300 or more employees have enrolled in retirement pension plans. As of December 2021, the fund had reached 295.6 trillion won, with an average annual growth rate of 15% (Ministry of Employment and Labor, 2023).

In addition to the mandatory Retirement Pension, the fourth tier encompasses the FDC personal pension, the asset securitization housing pension, and the farmland pension, which are voluntary pension plans. As of December 2021, only 12.06% of the 1,949.5 million wage earners were enrolled in individual pensions. The participation rate varies by income level. The participation rate is 70.4% for those with an income exceeding 60 million won, but only 4.33% for those with an income below this threshold (Financial Services Commission, 2022).

The financial viability of the National Pension as second tier, the cornerstone of South Korea's multi-tier pension system, is increasingly uncertain due to the adverse demographic trends. The projections made by the National Pension

---

<sup>3</sup> Even DB Retirement Pension plans may also be regarded as FDC in principle, given that the retirement benefits are transferred to the individual IRP upon retirement and benefits are paid solely from the vested pension assets.

Financial Calculation Committee for 2023 were alarming. Without reform, the pension fund will be depleted by 2055. Subsequently, the system will be required to rely exclusively on contributions to fund the promised pension benefits. The projected premium rate necessary to pay benefits is expected to reach 22.7% in 2050, 29.8% in 2060, and 34.9% in 2080. If the current 9% rate is maintained, a budget deficit of 7.2% of the GDP is projected for the year 2080 alone. Additionally, it is projected that annual Basic Pension expenditures will reach 238 trillion won, or 3.1% of the GDP, by 2070 (National Pension Financial Estimation Expert Committee, 2023). In short, the demographic shift towards an aging population presents a substantial challenge to the long-term sustainability of pension financing.

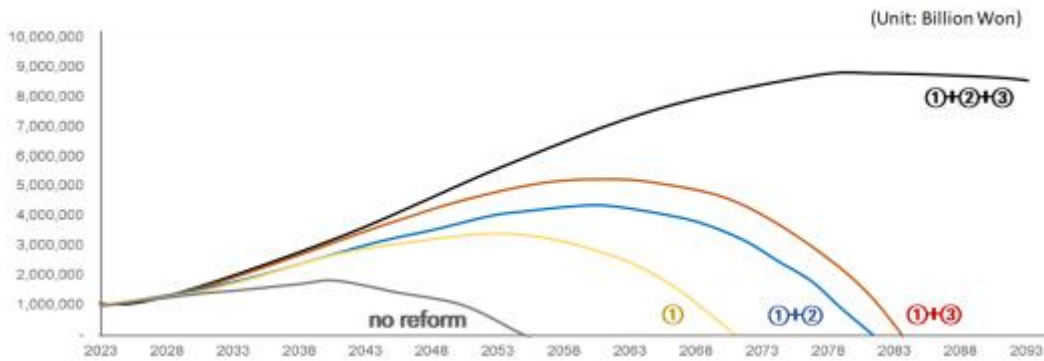
## **2. The Yoon Suk Yeol government's pension reform plans**

### **1) NPFCC's reform plan**

In accordance with the National Pension Act, the Korean government is obliged to convene the National Pension Financial Calculation Committee (hereafter, NPFCC) at five-year intervals. The committee is tasked with conducting long-term projections of pension finances and proposing reform plans to the government with the objective of ensuring financial sustainability. In 2023, the 5th NPFCC was convened and proceeded with the fiscal calculation. As previously stated, the projections indicated that the accumulated pension fund would be exhausted by 2055 and that the premium rate would have to be increased to approximately 35% by 2080 to ensure the payment of promised pension benefits.

The NPFCC undertook a detailed examination of a range of fiscal stabilization measures, including structural reforms. Ultimately, the Committee put forth multiple proposals for a parametric pension reform. The objective of the parametric reform plan is to maintain the national pension system until 2093. This will be achieved by raising the pension age without reducing benefits, increasing the contribution rate, and enhancing the fund's investment returns. Specifically, the NPFCC proposed three reform measures: ① increasing the contribution rate from the current 9% to 15%; ② raising the pensionable age from 65 to 68; and ③ improving the pension fund's investment returns from an average of 4.5% to 5.5% per year.

<Figure 4> Long-term fiscal projections according to reform plans of the NPFCC



Source: Yongha Kim (2023)

The implementation of these three reform measures separately would result in the eventual depletion of the funds. Conversely, the simultaneous implementation of all three measures is projected to maintain the funds until 2093, thereby exerting a considerable fiscal stabilizing effect (Figure 4).

## 2) The Office of the President’s reform plan

President Yoon Suk Yeol has put forth a proposal for a pension reform plan that considers the political acceptability of such an unpopular reform. The reform plan was released on August 29, 2024. The Office's proposal incorporates elements of the NPFCC's reform plan, reinstates certain forms of income security, and prioritizes intergenerational equity.

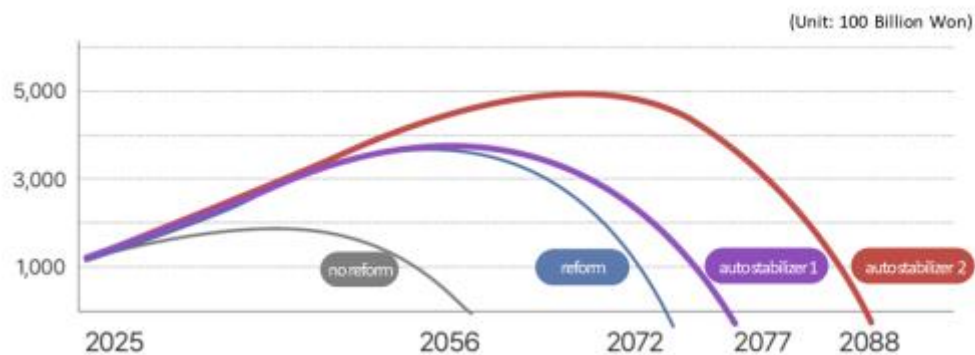
The Office proposed a gradual increase in the contribution rate from 9% to 13%, which is lower than the NPFCC’s 15%, in order to enhance its acceptability to the general public. Additionally, the speed of increase was differentiated by age. To illustrate, the rate increase for 20-year-olds would be 0.25 percentage points annually for 16 years, culminating in a 13% in 2040. In contrast, 50-year-olds would pay an additional 1 percentage point annually for four years, reaching the 13% in 2028. The objective is a gradual increase of contribution rates for younger generations who have to pay for an extended period but a rapid increase for middle-aged and older generations who are nearing the pensionable age. This approach is designed to enhance equity among generations. The Office also proposes to improve the fund’s annual investment return rate by one percentage point, equivalent to an average annual rate of return of 5.5%. Furthermore, the government has indicated its intention to consider the introduction of an

automatic stabilizer to gradually reduce pension benefits in response to the demographic shift towards an ageing population.

Unlike the NPFCC, the Office promised that the income replacement rate would rise from 40% to 42% as contribution rates would increase. The objective of the Presidential Office government is to mitigate public opposition to pension reform. Additionally, the government has announced plans to expand maternity credits and military service credits, as well as to increase subsidy for low income earners' enrollment in the National Pension. In addition, the Office announced that it would increase the basic pension up to 400,000 won with the objective of protecting the low-income elderly and increasing the retirement income of the middle class by revitalizing the Retirement Pensions (Ministry of Health and Welfare, 2024).

The Office of the President considers an automatic stabilizer, after the proposed contribution and income replacement rate increases are completed. If the automatic stabilizer is triggered as early as 2036 when the revenue (excluding fund investment returns) is lower than the pension outgo, it would significantly delay the depletion of the pension fund by 16 years. If triggered belatedly from 2054 when the national pension is expected to start to run a fiscal deficit, it is projected to delay the depletion only by four years (Figure 5).

<Figure 5> Long-term fiscal estimates under the Presidential Office Reform Plan



Source: Ministry of Health and Welfare (2024)

### 3. Evaluation and Alternatives

Neither the NPFCC's nor the Office of the President's pension reform proposals are structural in nature. The proposals do not entail the replacement of DB with DC plans, as exemplified by the Swedish system, nor do they entail the introduction of compulsory, state-administered pensions with FDC principles. Furthermore, they do not attempt to replace the semi-universal Basic Pension with a basic livelihood pension targeted at the low-income elderly. Overall, the two reform plans are more closely aligned with the German pension reform model than the Swedish one.

In contrast to Germany, however, South Korea has a national pension fund with a value of approximately 50% of its gross domestic product (GDP). Therefore, along with revenue from insurance premiums, the returns of the pension fund are utilized to finance pension payments. It accounts for almost half of the total revenue. This differs from the German case. Consequently, both pension reform plans in South Korea have prioritized enhancing the professionalism of fund management and increasing fund management income as a crucial source of fiscal stabilization. This is analogous to the Canada Pension Plan (CPP), which maintains a DB pension but successfully prefunds the CPP and generates massive operating income.

However, it should be noted that, in contrast to the CPP, the Office's reform plan is not designed to perpetuate the fund. Even with the early implementation of automatic stabilizers in 2036, the fund would be depleted by 2088.<sup>4</sup> Nevertheless,

---

<sup>4</sup> The Committee's proposal indicates that the fund would remain capable of sustaining



the reform proposal designed to utilize the income generated by pension fund investments is a commendable one. This is particularly the case during periods of low economic growth.

As demonstrated above, the demographic situation in South Korea is becoming more severe than that of Sweden and Germany. A pension system that is financed through taxation and relies on premiums from future generations is not a viable long-term solution. A funded pension system that does not rely on future generations is the only viable option to ensure the long-term sustainability of the pension system. However, given that the unfunded liabilities of the National Pension amount to 30% of GDP, it is *de facto* impossible to replace the PAYG-DB pension with funded schemes. While Sweden has transitioned from DB to DC plans, it has retained the PAYG system whereby contributions are not accumulated but paid to retirees as an annuity. This is why the country had to transition to an NDC, that is a non-funded DC. To be sure, the transition cost would be too high for a PAYG-DB country to turn to a funded DC plan. What about a NDC plan for South Korea?

However, South Korea, unlike Sweden, has a difficult problem in transitioning to NDCs. The current premium of 9 per cent is not enough to build up a decent pension asset. Contribution rates would need to rise to 15% for an adequate pension. Korea may be able to increase contribution rates. Yet, unlike Sweden, South Korea is facing a steep decline in the working-age population who would pay the premiums. Therefore, people must pay premiums not only for their own pension, but also the premiums of the shrinking workforces in order for the government to pay the promised pension for the elderly. This is why, after the National Pension fund is depleted, contribution rates have to be increased to as high as 35%. Therefore, it is imperative to reduce the PAYG pension, rather than maintain it. Converting to an NDC is not an option for South Korea.

Given the employers' mandatory contribution rate of 8.33% for the Retirement Pension, it is inevitable that the increase in the National Pension's contributions should be capped at 13%-15% and the income replacement rate reduced to 30% accordingly. Furthermore, the pensionable age should be gradually raised to 67 years old, along with a gradual increase in the statutory retirement age. Instead, the pre-funded pension schemes should be strengthened as much as possible. Fortunately, South Korea has the fully funded Retirement Pension with

---

8.4 years of pension payments in 2093, although it is not indefinite.

mandatory employer contributions. It could compensate for the lowered public pension benefits.

Despite the large contributions, the Retirement Pension is subject to frequent early withdrawals and termination upon job change. This results in very low pension savings. In terms of revenue, however, the Retirement Pension is a huge pension program, comparable to the National Pension. In 2022, employers paid 57.2 trillion won as premiums for the Retirement Pension alone. This amount is higher than 55.9 trillion won of the National Pension in the same year. That's a lot of money going into retirement pensions. However, the pension assets are small due to intermediate withdrawals before retirement. That's why more than 90% of people take a lump sum rather than annuity when they retire.

For the Retirement Pension to be a true pension scheme, employers' option for lump-sum retirement allowance instead of the Retirement Pension must be phased out. And more importantly, employees should not be allowed to make early withdrawals so that they can accumulate as much as possible before retirement.

The current Basic Pension is paid to 70% of the elderly population, irrespective of income level. Due to this extensive scope of coverage, the per capita pension benefit is not substantial. As a result, about 40% of the elderly live below the poverty line even after receiving basic pension. As in the case in Sweden, the government should transform the semi-universal Basic Pension into a targeted basic livelihood pension that covers the low-income elderly only but provides decent amount of pension to eradicate poverty in aged population.

In conclusion, despite population aging, if the financial stabilization measures of the National Pension system ensure its sustainability and the Retirement Pension is strengthened, the ordinary people will be able to secure retirement income through the combination of the two contributory pensions. Moreover, the low-income elderly will be able to obtain a retirement income that would enable them to maintain a basic standard of living through the combination of the National Pension and the basic livelihood pension.

## **V. Conclusion**

Over the next four decades, the quality of life for Koreans will be largely determined by the extent to which the elderly population is provided with adequate income security. The present fiscal structure of the National Pension and Basic Pension is predicated on intergenerational income transfer. Many countries, including Sweden and Germany, which have already experienced an aging population, have set limits on the total cost of old-age income security (i.e., capped contribution levels) and made efforts to diversify the cost burden under a multi-tier pension system. In general, traditional public pensions have been made financially sustainable through benefit cuts, while any gaps in old-age income are being compensated for by funded pensions. Basic security for the elderly with low incomes is provided through the general budget, but the targeting of beneficiaries is being strengthened to maximize fiscal efficiency.

The reform plans of the National Pension Fiscal Calculation Committee and the Office of the President do not fundamentally address the unsustainability of pension systems. The reforms neither sufficiently promote funded pensions nor address the needs of low-income seniors. Nevertheless, even if they are a provisional measure to render the pension system more sustainable, it is imperative that the reform acts be enacted without further delay. Even in Sweden and Germany, pension reform did not occur instantaneously or without contention. The success of the reforms was dependent upon the political leadership to navigate the reform process to its fruition. President Yoon Suk Yeol should dedicate his full attention to pension reform same as Roh Moo Hyun did in 2003-2007.

## References

- E-FEN Korea. (2024). "National Health Insurance is not running at a deficit." March 27, 2024.
- Financial Services Commission. (2022). "Report on the work related to the private pension system at the 3rd meeting of the Pension Reform Task Force."
- Kim, Sang-ho. (2014). "Reform of the German National Pension System and Implications: Focusing on the Pension Formula." *Social Security Review*, 30(4), 31-55.
- Kim, Yong-ha. (2023). Presentation at the 5th National Pension Financial Calculation Committee's Public Hearing.
- Korea Economic Research Institute. (2021). "Korea has the fastest average annual rate of population decline and aging among the 37 OECD countries." Press release (March 3, 2021).
- Ministry of Economy and Finance. (2022). "Data from the Low Birth Rate and Population Aging Advisory Council."
- Ministry of Employment and Labor. (2022). "Retirement pension increased by 40 trillion won in one year, reaching a total of 295.6 trillion won." Press release (April 17, 2022).
- Ministry of Employment and Labor. (2023). "Key Contents of the Retirement Pension System and Retirement Pension Statistics." Data from the Statistics Korea Advisory Council.
- Ministry of Health and Welfare. (2024). "The government has started a full-scale discussion on pension reform with a win-win proposal." Press release (September 24, 2024).
- National Pension Finance Calculation Committee. (2023). "Fifth National Pension Financial Calculation Presentation."
- National Pension Financial Estimation Expert Committee. (2023, January). "Fifth National Pension Financial Calculation: Financial Estimation Results."
- OECD. (2023). *Pensions at a Glance 2023*.
- Statistics Korea. (2022). "2021 Population and Housing Census Population Sector Aggregation Results."
- UN (2024), *World Population Prospects*.
- Yang, Jae-jin. (2011). "Understanding and Analyzing Issues in the Swedish Pension System." *Social Science Journal*, 42(1), 105-129.
- Yang, Jae-jin (2024). "Global Trends in Pension Reforms." IBK CEO report (December).