# Healthy Aging and Labor Market Participation in Korea

Andresa Lagerborg and Hoda Selim

SIP/2025/148

IMF Selected Issues Papers are prepared by IMF staff as background documentation for periodic consultations with member countries. It is based on the information available at the time it was completed on October 31, 2025. This paper is also published separately as IMF Country Report No 25/309.

**2025** DEC



#### IMF Selected Issues Paper

Asia and Pacific Department

#### Healthy Aging and Labor Market Participation in Korea Prepared by Andresa Lagerborg and Hoda Selim

Authorized for distribution by Thomas Helbling
December 2025

*IMF Selected Issues Papers* are prepared by IMF staff as background documentation for periodic consultations with member countries. It is based on the information available at the time it was completed on October 31, 2025. This paper is also published separately as IMF Country Report No 25/309.

**ABSTRACT:** This paper investigate whether health improvements among Korean older workers influence their labor market outcomes, such as the decision to supply labor or to retire. The findings reveal that better health increases the probability of participating in the labor force and postponing retirement. Overall, the results suggest that healthy aging has increased the labor supply of older individuals in Korea by around 1.9 percentage points per year during the 2006-20 period. Reforms to promoting employment of elderly workers can boost labor supply and help mitigate the adverse effects of ageing on the labor market.

**RECOMMENDED CITATION:** Lagerborg, Andresa and Hoda Selim. 2025. "Healthy Aging and Labor Market Participation in Korea." IMF Country Report No. 25/148. International Monetary Fund, Washington, D.C.

JEL Classification Numbers:	J11, J14, J26
Keywords:	Population aging; demographic change; healthy aging; Korea labor markets
Author's E-Mail Address:	alagerborg@imf.org; hselim@imf.org

#### **SELECTED ISSUES PAPERS**

## Healthy Aging and Labor Market Participation in Korea

Republic of Korea

Prepared by Andresa Lagerborg and Hoda Selim<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> The authors thank Rahul Anand for insightful comments on an earlier draft and Tommy Lee for excellent research assistance.

### HEALTHY AGING AND LABOR MARKET PARTICIPATION IN KOREA<sup>1</sup>

#### A. Introduction

- 1. Korea is one of the fastest ageing countries in Asia and the world due to a longer life expectancy and declining fertility rates. The share of the elderly population 65 years and older has risen rapidly since the mid-1990s increasing from less than 6 percent to about 20 percent in 2024. With these trends, Korea is expected to become a "super-aged society" by 2026 (Figure 1).<sup>2</sup> Korea's rising old-age dependency ratio is estimated at about at 27.5 in 2024, almost double that of Asia. Rapid ageing in Korea is driven by both longer life expectancies and declining fertility rates. Life expectancy is among the highest in the world at 84 years and the fertility rate is well below the replacement rate of 2.1 and among the lowest at 0.72 in 2023 (Figure 1).
- 2. Rapid ageing in Korea has begun to place some strain on labor supply that has been somewhat mitigated by improving labor force participation of females and elderly workers. Labor market pressures can be assessed by examining working-age population (WAP) and participation rates. Peaking in 2018, Korea's working-age population has been contracting by 0.5 percent per year on average between 2019 and 2024 and Korea is projected to lose 30 percent of its WAP by 2050 (Figure 2). For now, labor force participation rates, at close to 65 percent, remain high compared to advanced economies. Increasing participation rates since the 1980s reflect rising FLFP which increased from 43 percent to 56 percent in 2024. Notwithstanding this improvement, FLFP remains well below that of males which is close to 73 percent (Figure 2).
- 3. However, Korea has been experiencing "healthy aging". Healthy ageing is evidenced by steady global improvements in a wide range of health indicators over successive birth cohorts (IMF, 2025a).<sup>3</sup> Gruss and others (forthcoming) provide evidence that Korea experienced larger health improvements than its regional peers between 2006 and 2022. During 2000-21, Koreans gained additional years of healthy life, free from chronic diseases, which contributed to better life expectancy (Figure 3).<sup>4</sup> While the UN defines elderly individuals as those aged 65 years and older, the analysis in this paper focuses on individuals aged 50 or 55 years and older depending on data availability. This is because Koreans typically retire in their early fifties, well before they reach the official retirement age, yet often remain active in the labor market.

2

<sup>&</sup>lt;sup>1</sup> Prepared by Andresa Lagerborg and Hoda Selim. Tommy Lee provided excellent research assistance. The authors thank Rahul Anand for insightful comments on an earlier draft.

<sup>&</sup>lt;sup>2</sup> The WHO and UN define a "super-aged society" as a society in which more than 21 percent of the population is 65 years or older.

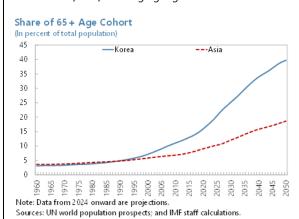
<sup>&</sup>lt;sup>3</sup> Findings for a sample of 41 countries suggest that, on average, the cognitive health of a 70-year-old individual in 2022 was approximately equivalent to that of a 53-year-old in 2000 (IMF, 2025a).

<sup>&</sup>lt;sup>4</sup> For example, on average, the grip strength of a 70-year-old Korean individual in 2022 was approximately equivalent to that of a 60-year-old in 2006 (Gruss and others, forthcoming).

- 4. Healthy ageing could help mitigate adverse effects of ageing on the labor force. Some empirical studies have shown that declining WAP due to ageing may reduce labor supply, labor productivity, and output growth (Gagnon and others, 2021). These adverse effects occur as workers' productivity tends to decline with age due to deteriorating physical and cognitive capacities (Truxillo et al., 2015). However, other research suggests that longer life expectancy has been associated with health improvements, which could prolong the participation of elderly workers in the labor market and enhance their productivity-- thereby mitigating the decline in labor supply. Geppert et al. (2019) show that healthy ageing can reduce the negative impact of ageing on GDP by up to 5 percentage points over a 30-year period in OECD countries. Similarly, IMF (2025a) finds that healthy ageing could increase the likelihood of labor force participation of elderly workers, potentially boosting global output growth by about 0.6 percentage point over the next 25 years, offsetting nearly three-fourths of the demographic drag during that period.
- 5. This paper, based on Lagerborg and others (forthcoming), investigates the role of "healthy aging" in affecting labor market participation decisions in Korea. Specifically, it investigates whether improvements in health among elderly workers have enhanced their ability and willingness to remain engaged in the labor market—for example, influencing their decisions to enter the labor market or postpone retirement. To enable causal analysis, the paper employs a two-stage least square (2SLS) instrumental variable approach, using the development of certain chronic diseases as proxies for exogenous health variations. The analysis also explores the effects of health improvements on labor market participation decisions by age group, gender, education, and income levels. This research complements existing findings, such as OEDC (2024), which suggests that increasing employment rates for elderly individuals could increase total employment by 8 percent by 2070, and ADB (2024), which estimates a potential GDP increase of about 1.5 percent. Other work from Lee and others (2020) shows that aging has positive effects on labor productivity in Korea particularly when elderly workers are working in information and communication technology (ICT) industries.
- 6. The remainder of the paper is divided as follows. Section II presents some key stylized facts, including trends and patterns of labor force participation and employment of elderly workers. Section III provides the empirical strategy and findings of the effect of improved health on labor market outcome among elderly individuals—such as the decision to participate in the labor force or to retire. The last section provides policy recommendations aimed at promoting the employment of elderly workers.



Korea is one of the fastest aging regions in Asia



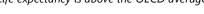
Its age-dependency ratio is almost double that in Asia

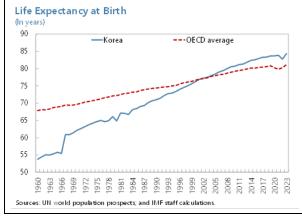
#### Selected Economies: Old-Age Dependency Ratio



Sources: UN world population prospects; and IMF staff calculations.

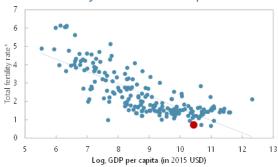
Life expectancy is above the OECD average





And fertility rates are low compared to income levels

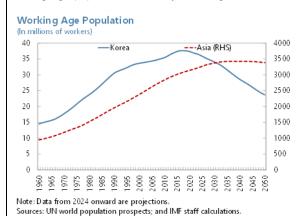




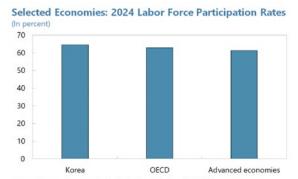
Note: Total fertility, rate is defined as the expected number of children a woman who survives to the end of the reproductive age span will have during her lifetime. Sources: World Bank world development indicators; UNI world population prospects; and IMF staff calculations.

#### Figure 2. Labor Supply

Working-age-population is already declining

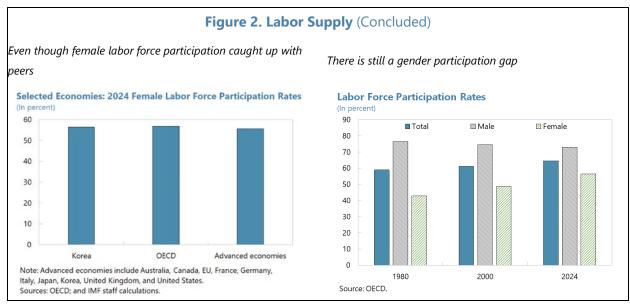


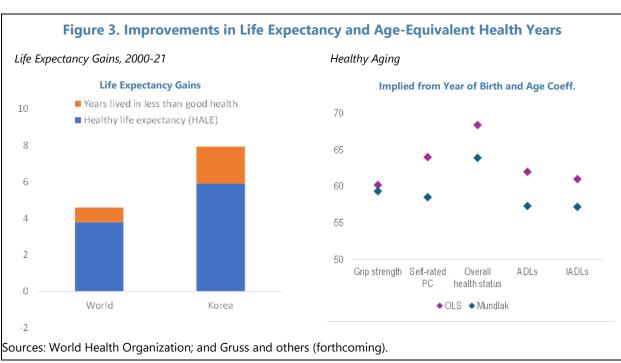
Labor force participation remains slightly higher than peers



Note: Advanced economies include Australia, Canada, EU, France, Germany, Italy, Japan, Korea, United Kingdom, and United States.

Sources: OECD; and IMF staff calculations.

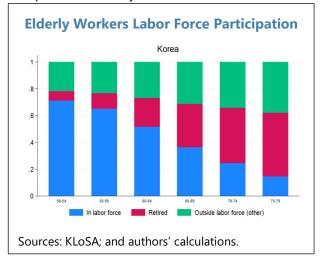




#### **B. Stylized Facts**

7. Labor force participation and employment of elderly workers in Korea have risen significantly over the past decade. Labor force participation of elderly workers increased from

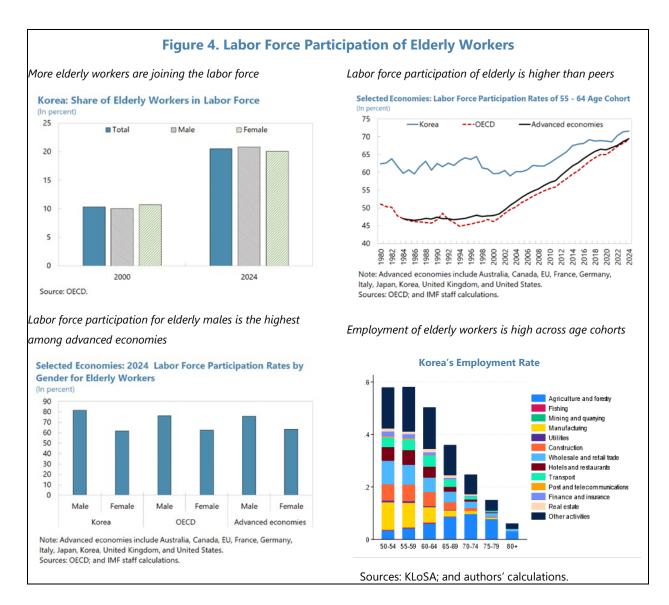
62 to 72 percent between 1980 and 2024 and their share in the labor force nearly doubled since 2000 reaching 20 percent and (Figure 4). These rates are higher than in other advanced economies. Micro survey data also show that elderly workers in Korea remain in the labor force well into their late seventies (Figure). Participation rates have risen for both males and females; however, despite rapid increases among females, the overall labor force participation rates for elderly female workers remains generally lower. Employment of elderly workers currently accounts for 20 percent of



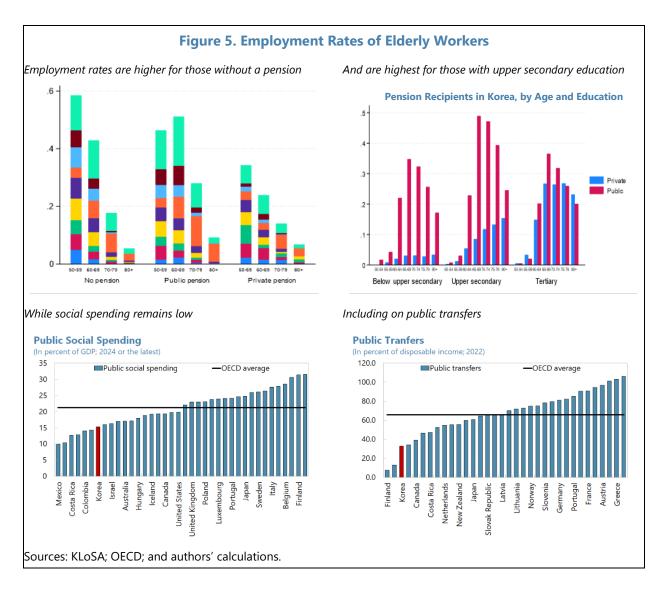
total employment. Employment rates were about 64 percent in 2022, well above the OECD average of 52 percent, with rates for the 65+ and 70+ age cohorts being double and triple the OECD average, respectively. Micro survey data also shows that employment rates are highest for individuals in their 50s but decline to around 45 percent and 20 percent for those in their 60s and 70s, respectively (Figure 4).

**8. Structural labor market rigidities in Korea, namely the seniority-based wage and promotion systems, lead to premature retirement**. These systems reward workers for each additional year of service regardless of performance, creating a disconnect between wages and productivity. As wages tend to increase with the number of years of services, severance payments become very large, making elderly workers more costly for employers. To reduce labor costs, employers often encourage early retirement before the statutory retirement age of 60, with many workers retiring before the age of 55 --well-below the mandatory retirement age and legal pension eligibility age (OECD, 2022 and Lee and Cho, 2022). These costs also act as a disincentive for hiring new elderly workers.

<sup>&</sup>lt;sup>5</sup> In Korea, there is evidence of a negative effect of the seniority-based wage system on employment of elderly workers (Korea Development Institute, 2011).

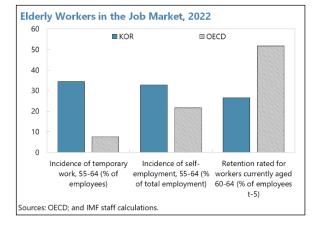


9. Elderly workers face income constraints because of limited old-age benefits. Retired workers are entitled to receive pension starting at the legal eligibility age of 63, implying they are not eligible to receive any pension until this age unless they are enrolled in voluntary contribution systems. Moreover, many workers face income shortfalls between their early retirement in their mid-fifties and the pension eligibility age. During this gap, OECD (2022) shows that work income for the elderly accounts for less than 50 percent of their total earnings, which is about half of the OECD average. Public transfers (including pensions) to the elderly in Korea also the fourth lowest among OECD countries, accounting for about 33 percent of their income, compared to 66 percent in other OECD countries). There is also evidence from micro surveys that employment rates for non-pensioners are higher than pensioners, though a portion of the pensioners continue to work past retirement (Figure 5). These trends may suggest that social safety nets are inadequate in Korea. In fact, public spending on social protection, notably on pensions, labor markets and other support, in Korea, at 15 percent is among the lowest in OECD.



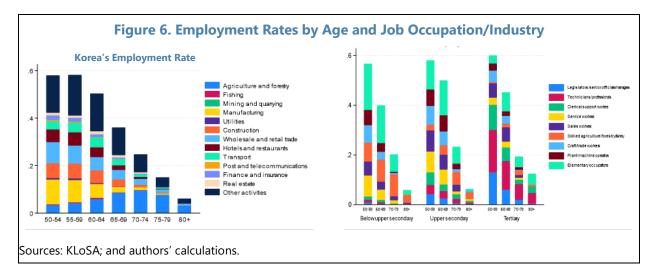
#### 10. Labor market duality, a key feature in labor markets in Korea, disproportionately

affects elderly workers. This duality is evident in the clear segmentation between regular and non-regular employment, with an increasing share of workers employed in part-time, temporary jobs, or other low-wage jobs, that offer fewer benefits and less job security. Because elderly workers are forced to retire prematurely and benefits are inadequate, most elderly Korean workers seek employment in these types of non-regular jobs. In fact, Korea has one of the highest shares of non-regular workers among OECD countries – a pattern that is particularly pronounced among



elderly workers. In fact, elderly workers are more likely to be employed in temporary work or be self-employed across all education profiles (Figures). Also, only about 25 percent of elderly workers

are likely to remain in the same job for over 5 years compared to the OECD average of about 50 percent, suggesting high job insecurity. These types of jobs are perceived to provide much-needed flexibility despite their disadvantages. Some employers also tend to favor employing elderly workers in non-regular jobs to circumvent rigid employment regulations, which restrict employee dismissal or require costly mandatory severance payments because of the prevalence of a seniority-based pay system (Tam and Xu, 2024).



- 11. Elderly workers also tend to earn less than their younger counterparts. Korean elderly workers tend to work in low productivity jobs after retirement. These jobs are largely concentrated in primary occupations/industries— a fact that holds true even for individuals with tertiary education, highlighting skills mismatch (Figure 6). As a result, the household income with a head over 60 years tends to be 40 percent lower than those headed by younger people. These may receive higher social transfers than other households, but this additional income tends to be lower than the salaries they earned prior to retirement (OECD, 2018).
- 12. Korea's work culture characterized by long working hours and limited flexibility in work arrangements may discourage elderly workers from joining the labor market. Despite a sustained decline since 2010, the average annual hours worked per worker in Korea remains among the highest among OECD economies in 2024.<sup>6</sup> These long working hours can have particularly harmful effect on elderly individuals' health and may discourage them from joining the labor market or compel them to accept low-quality jobs.

#### C. Empirical Estimation

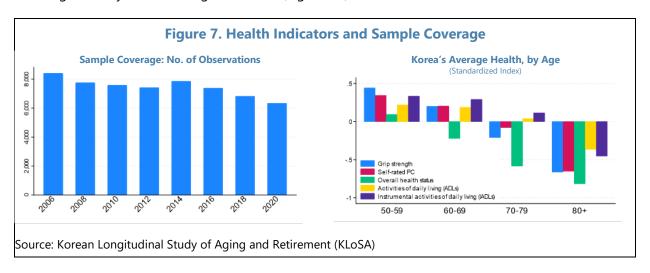
13. The empirical analysis estimates the effect of better health on labor market status among elderly individuals—such as the decision to participate in the labor force or to retire. It follows a two-step approach: (i) using an OLS regression to study the association (correlation) between health and labor market indicators, and (ii) a two-stage-least-squares (2SLS) regression to

<sup>&</sup>lt;sup>6</sup> This indicator can be found on <u>Hours worked OECD</u>.

address potential endogeneity concerns—such as reverse causality, where labor market participation may influence individuals' health—and attempt to capture causal effects. The specification estimates the effect of each health indicator ( $H_{i,t}$ ) on each labor market indicator ( $LMI_{i,t}$ ), one at a time, while controlling for a vector ( $\mathbf{Z}_{i,t}$ ) of individual socio-economic characteristics (age, gender, education, log household wealth), and a time trend (t) or time fixed effects (as a robustness check). The 2SLS identification strategy rests on the assumption that at least some chronic disease cases—those not explained by individuals' socioeconomic factors or health behaviors—can be considered exogenous shocks to health. Thus, the specification also controls the key behavioral risk factors of chronic diseases: smoking, poor nutrition, physical inactivity, and excessive alcohol use. The estimated regression equation can be written as follows:

$$LMI_{i,t} = \beta_0 + \beta_1 H_{i,t} + \boldsymbol{\theta} \boldsymbol{Z}_{i,t} + \beta_2 t + \varepsilon_{i,t}$$

14. The analysis uses survey data on elderly individuals' health, socio-economic characteristics, and labor market status from the Korean Longitudinal Study of Aging and Retirement (KLoSA). A variety of physical health indicators are considered: (i) measured grip strength (in kilograms), and (ii) self-reported information about overall health status, the ease of performing activities of daily living (ADLs), and ease of performing instrumental activities of daily living (IADLs) - which are summarized into a principal component (PC). For comparability, the health indicators are standardized to have a zero mean and unit standard deviation, with higher values indicating better health (Figure 7a). In addition, the analysis draws on self-reported data on individuals' health behaviors (exercise, smoking, and drinking habits and body-mass index), the incidence of 10 chronic diseases<sup>8</sup>, socio-economic characteristics (age, gender, education, household wealth), and labor supply (dummy variables for participating in the labor force and being retired). In total, the data includes around 60,000 observations for individuals aged 50 and above from eight survey waves during 2006-2020 (Figure 7b).



<sup>&</sup>lt;sup>7</sup> Physical health indicators are obtained from Korean Longitudinal Study of Aging and Retirement (KLoSA).

<sup>&</sup>lt;sup>8</sup> The chronic diseases include high blood pressure, arthritis, heart disease, diabetes, psychological disorders, cataracts, cancer, lung disease, stroke, and urinary incontinence,

#### **Empirical Results**

- **15. OLS** results show that better health is found to influence elderly individuals' labor supply decisions at the extensive margin. OLS estimates indicate that better physical health—both measured and self-reported—is associated with a higher likelihood of labor force participation and a lower probability of retirement among elderly workers in Korea (Table 1). These estimates should be interpreted as correlations, given the potential endogeneity between health and labor market outcomes that could bias OLS estimates. Using a 2SLS approach, individuals' health is first instrumented proxied by the incidence of chronic diseases, which is assumed to be exogenous to labor market behavior after controlling for socio-economic characteristics and health-related behaviors. The first-stage regressions confirm that chronic disease incidence is a strong instrument for physical health across all measures (Table 1).
- **16. IV** results suggest that healthy aging has increased the labor supply of elderly individuals in Korea by around 1.9 percentage points per year during 2006-20. The second stage regressions show that exogenous improvements in health significantly increase labor force participation and reduce retirement rates. More specifically, improvements in overall health could increase labor force participation by about 19 percentage points over a 10-year period and reduce retirement by broadly the same magnitude, with larger effects found for grip strength. Notably, the estimated effects from the IV approach are substantially larger than those from OLS regressions, stressing the importance of tackling potential endogeneity. Results are also robust to controlling for year and individual fixed effects (Table 2). Gruss and others (forthcoming) also show that the impact of improved health on labor market status for Korea are substantially stronger than for other Asian countries. Altogether, these results provide strong evidence that improved health can boost labor supply and are consistent with the notion that Korea's elderly employment constraints stem mainly from labor demand rather than labor supply.

<sup>&</sup>lt;sup>9</sup> Gruss and others (forthcoming) rescale estimations from the 2SLS regressions to represent effects of a 1-decade health improvements on labor market outcomes (dividing health measures by 10 times the coefficient on the year of birth in a regression that estimates the annual improvements in health across birth cohorts).

<sup>&</sup>lt;sup>10</sup> Given the proven similarity of results for labor force participation and retirement probability (see Table 1), Tables 2 and 3 focus on the former.

<sup>&</sup>lt;sup>11</sup> This can also be inferred from the result that health is found to have no significant effect on unemployment probability (conditional on participating in the labor force).

	(1)	(2)	(3)	(4)	(5)
		_	Self	reported he	alth
			Overall		
	Grip	Self-	health		
	strength	reported PC	status	ADLs	IADLs
OLS					
Labor force participation (dummy)	0.056***	0.080***	0.072***	0.059***	0.073***
	(0.007)	(0.007)	(0.006)	(0.005)	(0.006)
Retired (dummy)	-0.042***	-0.068***	-0.065***	-0.048***	-0.062***
	(0.006)	(0.007)	(0.005)	(0.006)	(0.007)
IV: 2nd Stage					
Labor force participation (dummy)	1.013***	0.287***	0.196***	0.493***	0.559***
	(0.144)	(0.037)	(0.020)	(0.091)	(0.095)
Retired (dummy)	-0.938***	-0.266***	-0.181***	-0.456***	-0.518***
	(0.124)	(0.033)	(0.021)	(0.077)	(0.083)
IV: 1st Stage					
Chronic disease	-0.326***	-1.334***	-2.021***	-0.751***	-0.666***
	(0.050)	(0.094)	(0.052)	(0.108)	(0.089)
Weak IV F-statistic	43	202	1496	48	56
Socio-economic controls	Yes	Yes	Yes	Yes	Yes
Lifestyle controls	Yes	Yes	Yes	Yes	Yes

Table 2. Korea: Effect of Healtl Individuals—		obability of La stness to Add			n of Elderly	
	(1)	(2)	(3)	(4)	(5)	
			Self-reported health			
		_	Overall			
	Grip	Self-	health			
	strength	reported PC	status	ADLs	IADLs	
Baseline	1.013***	0.287***	0.196***	0.493***	0.559***	
Robustness to additional control	s					
Year FE	1.054***	0.291***	0.199***	0.499***	0.566***	

0.165\*\*\*

0.164\*\*\*

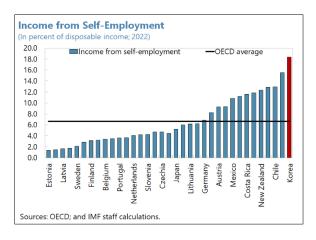
0.687\*\*

Robust standard errors in parentheses

Individual FE

### 17. The impact of health on elderly individuals' decisions to participate in the labor market are found to be heterogeneous according to their socio-economic

**characteristics**. The analysis also explores the effects of health on labor market participation for elderly individuals by different age groups, genders, as well as education and income levels. The findings indicate that better health increases the likelihood of joining the labor market for elderly workers with the effects being stronger for relatively younger age groups (the 50-59 age group vs. elderly groups),



0.232\*\*\*

0.240\*\*\*

males, and lower-education and lower-wealth individuals (Table 3).<sup>12</sup> In fact, an improvement in overall health of workers in their fifties and sixties increases their probability to join the labor force by about 15-20 percentage points over a decade. Regarding gender, the effect is nearly twice as strong for men compared to women, suggesting men's labor supply decisions are more sensitive to health status. The results also show a stronger likelihood of healthier elderly individuals with lower education levels joining the labor market relative to those with tertiary education, possibly reflecting the need to work out of necessity, especially that the share of income from self-employment to total income of elderly people in Korea is the largest in the OECD. Finally, there is also evidence that the probability of joining the labor market because of better health is higher for the poorer quintiles, consistent with the notion that lower levels of income are associated with working out of necessity.

<sup>\*\*\*</sup> p<0.01, \*\* p<0.05, \* p<0.1

<sup>&</sup>lt;sup>12</sup> The results hold for all health indicators except the overall health indicator.

	(1)	(2)	(3)	(4)	(5)		
			Self-reported health				
		Self-					
	Grip	reported	Overall				
	strength	PC	health	ADLs	IADLs		
Age							
50-59	1.172***	0.391***	0.194***	1.082***	1.110***		
60-69	0.892***	0.348***	0.210***	0.675***	0.751***		
70-79	0.891***	0.221***	0.205***	0.307***	0.346***		
80-89	0.517***	0.115***	0.183***	0.125***	0.160***		
Gender							
Female	0.584***	0.248***	0.155***	0.449***	0.529***		
Male	1.301***	0.348***	0.263***	0.561***	0.623***		
Education							
< Upper secondary	0.926***	0.301***	0.218***	0.503***	0.540***		
Upper secondary	1.580***	0.340***	0.215***	0.623***	0.737***		
Tertiary	0.210	0.107	0.072	0.164	0.254		
Wealth							
Quintile 1 (lowest)	2.190**	0.367***	0.295***	0.602***	0.610***		
Quintile 5 (highest)	0.800**	0.219***	0.122***	0.437**	0.600**		
Socio-economic controls	Yes	Yes	Yes	Yes	Yes		
Lifestyle controls	Yes	Yes	Yes	Yes	Yes		

#### **Policy Recommendations**

18. Promoting employment of elderly workers can boost labor supply and help mitigate the adverse effects of ageing on the labor market. In Korea, healthy ageing is influencing older individuals' decisions to continue to remain in the workforce as they grow older. Adequate policies can thus boost voluntary labor supply and offset possible growth slowdown from ageing. There is a need to expedite structural reforms aimed at increasing the employment of older workers and removing barriers impeding their attractiveness as employees. As highlighted in Tam and Xu (2024), there is a need to balance different economic and social considerations in the design of these reforms. In particular, the design and implementation of the work hours reform should balance the needs of workers and enterprises, ensure sufficient dialogue with stakeholders, and be clearly communicated.

**19. Reforms to improve the flexibility of the labor market, which should benefit elderly workers, are underway**. The reforms include more flexible working hours, switching to a performance-based pay system, and tackling labor market duality. The announced working hour reform in March 2023, which envisaged reducing restrictive regulations on weekly working hours while limiting overtime over longer time intervals, faced pushback from younger workers. The authorities are working on a revised reform proposal, incorporating public opinion from a recent survey. Detailed plans are still being formulated in the other two reform areas. This section outlines both short and long-term reform areas that can boost labor supply from elderly workers.

#### **Short Term**

- **20.** Raising the statutory retirement age can retain elderly workers longer in the labor force. The current retirement age was set at 60 after a reform in 2016 and the authorities' plan to raise the retirement age to 65, which should help mitigate the decline in the labor force. However, Korea's statutory retirement age would remain below that in many OECD countries. The pension eligibility age (set at 63 and expected to increase to 65) is also the lowest in the OECD. OECD (2024) has estimated that increasing the pensionable age to 68 years by 2035 could increase total employment by 14 percent and in GDP by 12 percent by 2070. Longer term reforms of the pension system are also essential for enhancing the fiscal sustainability of the pension fund.
- 21. Relatedly, abolishing the gap between the mandatory contribution age (60) and legal pension eligibility age (set at 63) could enhance the income of elderly workers. This would ensure that retired workers continue to benefit from their pensions even if they retire early. It would make them less susceptible to accepting irregular work or other low-quality jobs. By improving the quality of jobs, they can access where the full potential is used, elderly work can boost economy wide productivity.
- 22. The introduction of more flexible work arrangements and age-friendly working conditions would allow elderly workers to work at a more adequate pace. Such arrangements (for example through remote work or part-time work) could delay the decision of elderly workers to retire, thus boosting labor supply. They could also allow elderly workers to combine work with their activities such as participating in further training to enhance their productivity or caring for their household. They can also mobilize those with limited ability to work long hours because of health problems. Ensuring that the working conditions are adequate in order to minimize job strain, occupational diseases and work accidents for the elderly workers can also be useful.
- 23. The reskilling and upskilling of elderly workers would make their hiring more attractive. Access to the vocational training that is designed to deliver the needed skills is critical. Facilitating job matching opportunities in addition to employment counselling and guidance services in order to identify elderly workers who need reskilling or upskilling before starting their job search would also be useful. Policies that encourage lifelong learning can improve the employment prospects of elderly workers.

24. In particular, improving the digital skills of elderly workers would improve their employability and facilitate their job mobility. Elderly workers are at a disadvantage compared to younger workers with respect to their digital skills, which poses new challenges for their employability. As Korea is highly exposed to artificial intelligence (AI), advanced digital skills (including IT, information-processing, and problem-solving skills) have a direct bearing on labor markets. <sup>13</sup> Jobs in low-technology sectors, where many elderly workers are employed, are more at risk of displacement because of automation. Elderly individuals often have difficulties learning certain types of new skills or adapting to new work environments (Cazzaniga et al., 2024). In Korea, they seem to be less adaptable to job mobility, as evidenced by their lower likelihood of finding reemployment after being unemployed and there is some evidence that they might encounter significant difficulties in adapting to job reallocation driven by AI (IMF, 2025b).

#### Long Term

- 25. A more adequate employment protection legislation (EPL) can address labor market duality which is impeding the hiring of elderly workers. Employment protection for regular and permanent workers in Korea is stronger than the OECD average, with very restrictive regulations on individual dismissals (Tam and Xu, 2024). Restrictive EPL is identified as a key driver for labor market duality in Korea (Schauer, 2018). Tam and Xu (2024) estimate that major EPL reforms for regular workers during economic expansions increases both output and employment by about 5 percent on average over the medium term. More flexible employment protection could be considered. Meanwhile, regulation and social protection for non-regular and self-employed work remains largely inadequate. Reforms to expand employment or social protection for these two groups, including expanding unemployment insurance should be pursued.
- 26. Reforming the seniority-based wage system is needed to ensure elderly workers continue to work until the mandatory retirement age. This reform is a much-needed complementary measure aiming at raising the retirement age. Reforming the seniority-based system would strengthen the link between productivity and wages and reduce the large labor costs on the employers, which may discourage early retirement and allow elderly workers to remain in their regular jobs longer.

-

<sup>&</sup>lt;sup>13</sup> For more information on AI in Korea including impact on labor market, please see IMF (2025b).

#### References

- Asian Development Bank (ADB). 2024. Aging Well in Asia. ADB Development Policy Report. May 2024.
- Cazzaniga, Mauro; Florence Jaumotte; Longji Li; Giovanni Melina; Augustus J. Panton; Carlo Pizzinelli,; Emma Rockall, and Marina M. Tavares. 2024. "Gen-Al: Artificial Intelligence and the Future of Work". IMF Staff Discussion Note SDN/2024/001. Washington, DC: International Monetary Fund.
- Gagnon, Etienne, Benjamin K. Johannsen, and David López-Salido. 2021. "Understanding the New Normal: The Role of Demographics." *IMF Economic Review 69 (2): 357–90*.
- Geppert, Christian; Yvan Guillemette, Hermes Morgavi and David Turner. 2019. "Labor Supply of Older People in Advanced Economies: The Impact of Changes to Statutory Retirement Ages." OECD Economics Department Working Papers No. 1554
- Betrand Gruss, Eric Huang, Andresa Lagerborg, Kemal Ozhan, Diaa Noureldin Gruss and others. 2025. Can Healthy Aging Boost Labor Supply? Evidence from Korea. Forthcoming
- IMF. 2025a. "The Rise of the Silver Economy: Global Implications of Population Aging." Chapter 2 of the IMF WEO: April 2025. Washington, DC: International Monetary Fund.
- \_\_\_\_\_\_. 2025b. Republic of Korea: 2024 Article IV Consultation Press Release, Staff Report and Statement by the Executive Director for the Republic of Korea. IMF Country Report No. 25/41. Washington, DC: International Monetary Fund.
- Korea Development Institute. 2011. "Paradigm Shift for Building a Virtuous Cycle of Growth and Employment." Korea Development Institute (KDI), KDI Publishing, Sejong.
- Lee, Tai and Joonmo Cho. 2022. "Unintended consequences of the retirement-age extension in South Korea." *Asian Pacific Economic Literature*: Volume36, Issue1: pp.105-12.
- Lee, Jong-Wha, Eunbi Song, Do Won Kwak. 2020. "Aging labor, ICT capital, and productivity in Japan and Korea." *Journal of The Japanese and International Economies*. Volume 58 (2020) 101095.
- Schauer, Johanna. 2018. "Labor Market Duality in Korea." IMF Staff Working Paper WP/18/126. Washington, DC: International Monetary Fund.
- OEDC. 2024. OECD Economic Surveys: Korea 2024, OECD Publishing, Paris.
- OECD. 2022. OECD Reviews of Pension Systems: Korea, OECD Reviews of Pension Systems, OECD Publishing, Paris.
- OECD. 2018. Working Better with Age: Korea, Ageing and Employment Policies, OECD Publishing, Paris.
- Tam, Stella and Cindy Xu. "Advancing Labor Market Reforms in Korea." IMF Staff Working Paper WP/24/183. Washington, DC: International Monetary Fund.