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The Effects of Delayed Mandatory Retirement on Elderly and Youth Employment

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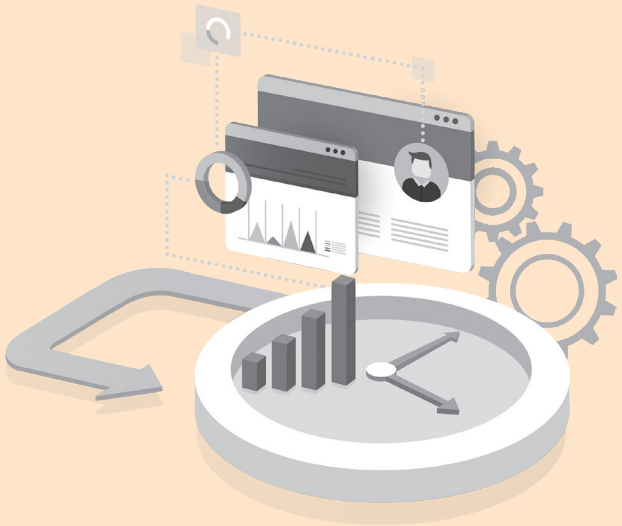


* Adapted and excerpted from Han, Joseph, The Labor Market Impacts of Delayed Mandatory Retirement, Policy Study 2019-03, Korea Development Institute, 2019 (in Korean).

Summary

- The phased implementation of the minimum mandatory retirement age (60) from 2016 has expanded the employment of older workers (55-60) but reduced that of young workers (15-29). The negative effect has been particularly pronounced at large companies or firms with a previously low official retirement age.
  - A difference-in-difference analysis at the establishment level reveals that a 1 person increase in those who could potentially stay owing to the new mandatory retirement age leads to a 0.6 person increase in older workers and a 0.2 person decrease in young workers.
  - The decline in youth employment was marked at establishments with 100+ employees or those whose retirement age was 55 or below before the statutory change.

- These results imply that a gradual approach is required to minimize the negative impact of delayed mandatory retirement, and that additional labor market policies are needed particularly for older workers whose employment is not protected.
  - Increasing the mandatory retirement age is necessary given the rapidly aging population, but the negative impact on employment can only be minimized if it proceeds slowly and in phases.
  - Employment services tailored to older workers should be provided, particularly for those whose retirement age is not guaranteed, and legal standards need to be improved to facilitate the creation of jobs with flexible hours.

1

Necessity and Concerns

- The need to delay retirement is mounting as the population ages rapidly.
  - With the working age population (15-64) on a downtrend since 2018 and total labor force expected to fall within ten years, the participation of senior workers is becoming increasingly important in Korea (Kwon and Cho, 2014).
    - Beyond the quantitative aspect, delaying retirement is even more important if the human capital of older workers is considered.
  - Extending the age of mandatory retirement (MRA, hereinafter), a key policy instrument for delaying retirement in Korea, is a natural way to increase the income and consumption of senior households and to improve the sustainability of the public pension fund.
  - Given that the pension age will be gradually raised to 65, many have argued that the minimum MRA needs to be further extended from the current 60 to minimize the earnings crevasse. Reflecting this situation, the Supreme Court recently raised the maximum working age for physical labor, a key parameter in calculating expected lifetime income, to 65.

- The impact of the extension on actual employment has been a source of controversy, and there is particular concern over the potential impact on youth employment.

- It is widely recognized that the range of workplaces where employment is protected until the mandatory retirement age is limited to the public sector and a very small number of large enterprises. Hence, doubts have been raised over whether extending the MRA will raise the actual retirement age.
- There are also concerns that if a higher MRA leads firms to curtail new hires due to the increased labor costs, it could exacerbate the current job crisis for young people.

■ It is important to take a closer look into past cases in Korea in order to predict the impact of a further extension on the jobs of young and older workers.

- Unlike Korea, in Europe and North America, the extension has been discussed primarily in relation to increasing the pension age.
- Previous literature on the substitution between young and older workers has focused on the question of whether early retirement increases jobs for the young (Gruber and Wise, 2010). But, it is a different question as to whether an extension of the retirement age will diminish the number of jobs for young people.

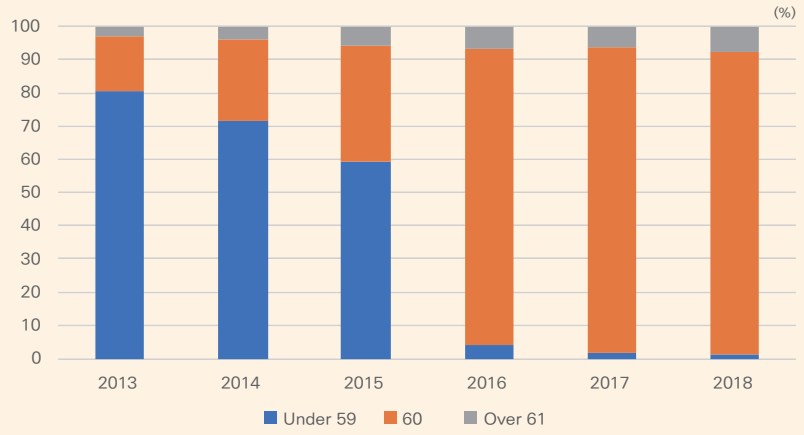
2

Phased Increase in the Mandatory Retirement Age

■ The Act on Prohibition of Age Discrimination in Employment and Elderly Employment Promotion (amended in 2013) mandated the phased increase of the MRA to over 60 starting from 2016.

- It is stipulated that all employers must set the MRA at 60 or above [Article 19 (1)]. If it is set below this age, it will be deemed to be set at 60 nonetheless [Article 19(2)].
- Such amendments were implemented in phases according to the size of establishment.
  - They became effective on January 1, 2016 for workplaces with 300 employees or more, public institutions, and local public enterprises, and on January 1, 2017 for the remaining workplaces and the central and local governments.

[Figure 1] Changes in the Official Retirement Age: 300+ Employees

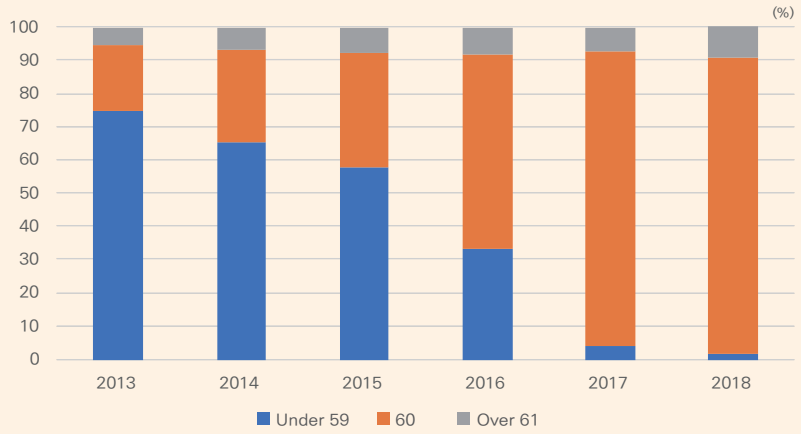


Source: Ministry of Employment and Labor, *Supplementary Survey of the Report on Labor Force Survey at Establishments*, raw data (2013-2018).

■ There were significant establishment-level changes in the official retirement age following the mandate.

- The MRA was distributed mostly at around 55-58 years before 2016, and most establishments changed their MRA in line with the implementation of the revised Act (Figures 1 & 2).

[Figure 2] Changes in the Official Retirement Age: 100-299 Employees



Source: Ibid.

3

Empirical Analysis of the Impact of the Retirement Age Extension

- **This study empirically examines the impact of the increased MRA at the establishment level to draw implications for further extensions in the future.**
  - Using the (Un)Employment Insurance database,[1] this study constructs an establishment-level panel dataset and closely examines the effects of the increased MRA on employment at the establishment level.
  - Assessing the impact of the institutional changes in Korea can provide more accurate information on the effect of further extensions.

- **Focusing on the fact that the benefits of raising the MRA were given to specific birth-cohorts after a certain birth year, the age-specific changes in employment after the extension are closely examined at the establishment level.**
  - For example, workers born in 1957 at establishments of 300+ employees—where the retirement age was 58 before the amendment—retired in 2015 at 58 but those born in 1958 were able to retire in 2018 at 60.
  - This study estimates the relative changes in employment by age at establishments that have a similar number of employees aged 55-60 but more expected beneficiaries (e.g., those born in 1958).

4

Impact to Private Firms

- **The analysis finds that at establishments with 10-999 employees in the private sector, an increase of 1 employee expected to benefit from the extension leads to a 0.6 person increase in older workers (55-60).**
  - <Table 1> presents a statistically significant increase in older workers owing to the extended MRA
    - Growth in older workers can be observed in both large (100+) and small establishments (10-99); although it is relatively more evident in the former.
  - Given that not all expected beneficiaries work until retirement age, the estimated figure could be less than 1.
    - For example, some may choose to retire early for health or family reasons.

1 As of March 2016, 70.6% of all wage earners and 84.2% of full-time wage earners are covered by employment insurance.

<Table 1> Impact of the Extended Retirement Age on Elderly Employment: Private Sector by Establishment Size

Dependent variable: changes in older workers (pre- & post-extension)	(1) Est. with 10-999 employees	(2) Est. with 10-99 employees	(3) Est. with 100-499 employees	(4) Est. with 500-999 employees	(5) Est. with 1000+ employees
Expected increase in older workers after the extension	0.587** (0.056)	0.382** (0.040)	0.501** (0.099)	0.630** (0.087)	1.004** (0.263)
Change in older workers without the extension	0.156** (0.011)	0.215** (0.005)	0.135** (0.013)	0.124** (0.030)	0.190 (0.157)
Year-by-month FE	Y	Y	Y	Y	Y
Establishment FE	Y	Y	Y	Y	Y
N(Obs)	3,137,399	2,865,538	248,482	23,379	15,100
adj. R^2	0.347	0.298	0.322	0.413	0.600

Note: ( ) are standard errors clustered at the establishment level. +p<0.1, *p<0.05, **p<0.01.
Source: Ministry of Employment and Labor, *Employment Insurance DB*, raw data (Mar. 2013-Mar. 2019).

■ Meanwhile, in terms of youth employment (15-29), an increase of 1 older employee expected to benefit from the extension at private establishments with 10-999 employees leads to 0.2 less young workers.

- <Table 2> presents a statistically significant decrease in youth employment due to the extended MRA.
  - The fall in youth employment is particularly marked in large (100+) establishments and much larger establishments with 1,000+ employees, albeit with smaller statistical significance.
- <Table 3> finds a relatively steep drop in youth employment at private firms where the MRA was extended by a large margin.
  - Firms that previously set the MRA at 55 or below experience a significant decline in youth employment (0.4).
  - On the other hand, firms who set the MRA at 58 or above see a moderate decline.

<Table 2> Impact of the Extended Retirement Age on Youth Employment: Private Sector by Establishment Size

Dependent variable: changes in youth employment (pre- & post-extension)	(1) Est. with 10-999 employees	(2) Est. with 10-99 employees	(3) Est. with 100-499 employees	(4) Est. with 500-999 employees	(5) Est. with 1000+ employees
Expected increase in older workers after the extension	-0.221** (0.055)	0.027 (0.036)	-0.188** (0.057)	-0.258* (0.125)	-0.996+ (0.549)
Change in older workers without the extension	0.013 (0.008)	-0.001 (0.003)	0.027* (0.011)	0.000 (0.036)	-0.055 (0.064)
Year-by-month FE	Y	Y	Y	Y	Y
Establishment FE	Y	Y	Y	Y	Y
N(Obs)	3,137,399	2,865,538	248,482	23,379	15,100
adj. R^2	0.254	0.256	0.253	0.256	0.227

Note: ( ) are standard errors clustered at the establishment level. +p<0.1, *p<0.05, **p<0.01.
Source: *Ibid.*

<Table 3> Impact of the Extended Retirement Age on Youth Employment: Private Sector by Previous Retirement Age

Dependent variable: changes in youth employment (pre- & post-extension)	(1) All firms	(2) Firms with previous MRA 55 or below	(3) Firms with previous MRA 56 or 57	(4) Firms with previous MRA 58	(5) Firms with previous MRA 60 or above
Expected increase in older workers after the extension	-0.221** (0.055)	-0.391** (0.086)	-0.231** (0.072)	-0.007 (0.115)	-0.034 (0.238)
Change in older workers without the extension	0.013 (0.008)	-0.147 (0.127)	-0.003 (0.039)	0.013 (0.057)	0.039** (0.014)
Year-by-month FE	Y	Y	Y	Y	Y
Establishment FE	Y	Y	Y	Y	Y
N	3,137,399	75,825	60,209	75,575	139,363
adj. R^2	0.254	0.326	0.152	0.288	0.284

Note: ( ) are standard errors clustered at the establishment level. +p<0.1, *p<0.05, **p<0.01.
Source: Ibid.

5

Impact to Public Institutions

■ Public institutions deserve a separate examination because not only do they vastly differ in terms of management and operation from private firms, but they are under separate employment restrictions that are monitored by the government.

- Public institutions were obligated to hire young people even before the extension.
  - As per Article 3 of the Special Act on the Promotion of Youth Employment, at least 3% (yearly) of the employees at public institutions and local government-owned enterprises must be from the young unemployed population. Those who fail to meet this target are publicly announced, and their performance in terms of hiring young people is reflected in their management evaluations.
- Besides, the peak wage system was implemented in the public sector in 2015.
  - At establishments where the MRA was already 60+, employees have been guaranteed their positions but their wages have been adjusted downwards by three to five years until retirement (Type Ⅰ: guaranteed retirement age).
  - At establishments where the MRA was below 60, extensions have been implemented (to 60) and wages have been again adjusted downwards by the above amount (Type Ⅱ: extended retirement age).
  - Public institutions are incentivized to use accumulated financial resources to hire new employees; at least as many as the increased number of employees who are one year away from retirement or the number of those whose retirement was extended. The new employees hired in this way are not included in the maximum number of workers.

■ Both elderly employment and youth employment at public institutions increased due to the retirement age extension.

- Public institutions with a relatively large number of employees who benefit from the extension see particularly large increases in their elderly employment after the amendment (row 8 Table 4).
  - But, the increase is smaller than that in the private sector.[2)]
- Youth employment also increases considerably at institutions with a relatively large number of employees who benefit from the extension (row 2 Table 4).
  - Since all public institutions are under mandate to increase their new hires using the financial resources they save via the wage peak system, a 1 person increase in older

2 Although it is difficult to directly compare private firms and public institutions, some workers, at least, must have voluntarily changed jobs as their wages under the new MRA combined with the peak wage system was over 10% lower than the peak wage.

employees expected to work beyond the previous MRA leads to a 1 or more increase in youth employment.

- However, there are some negative effects including the reduced employment of middle-aged groups.
  - According to the same analysis on other age groups, employment falls for those in their early 40s (row 5 Table 4). A possible explanation is that there are no new hires to fill the vacancy in this age group due to low priority set by the aforementioned restrictions.

<Table 4> Analysis of the Changes in Employment at Public Institutions by Age

Dependent variable: changes in employment (pre- & post-extension)	(1) △All	(2) △15~29	(3) △30~34	(4) △35~39	(5) △40~44	(6) △45~49	(7) △50~54	(8) △55~60
Expected increase in older workers after the extension	1.556 (1.200)	1.218* (0.513)	0.127 (0.357)	-0.055 (0.310)	-0.577* (0.227)	0.099 (0.439)	0.431* (0.168)	0.403** (0.146)
Change in older workers without the extension	0.099 (0.395)	0.097 (0.163)	-0.081 (0.087)	-0.125* (0.064)	-0.146* (0.058)	0.058 (0.071)	-0.003 (0.058)	0.206** (0.036)
Year-by-month FE	Y	Y	Y	Y	Y	Y	Y	Y
Establishment FE	Y	Y	Y	Y	Y	Y	Y	Y
N(Obs)	7,493							
adj. R^2	0.412	0.322	0.476	0.466	0.480	0.421	0.396	0.379

Note: ( ) are standard errors clustered at the establishment level. +p<0.1, *p<0.05, **p<0.01.
Source: Ibid.

6

How Should We Proceed?

- **Despite the necessity for further extensions of the retirement age, the results of the empirical analysis reveal that an extremely careful approach is needed in the implementation.**
  - A sudden sharp increase in the MRA will pose a huge challenge for private companies, and there will be side effects.
    - When a firm is forced to raise the MRA by several years, it may lead to early retirement or forced resignations.[3] Establishments may even attempt to curtail new hires, diminishing youth employment.
  - As such, even if there is social consensus on the extension, the approach must be phased and gradual to allow the labor market to adjust.
    - It should be noted that changing the management of human resources, which includes designing jobs for older workers, takes considerable time, and that the pension age is increasing by 1 year for every fourth birth year.

- **Active labor market policies should be simultaneously implemented for older workers whose employment is not protected.**
  - Extending the MRA has had the most visible impact on the elderly employment of large private firms while it has had a limited effect on other firms.
    - Early retirement and forced resignation appear to be common practices at small and medium-sized firms. In particular, the MRA is not applied to the majority of non-regular workers.
  - Policies that provide employment services and jobs that meet the specific needs of the senior workforce should be implemented in line with other approaches.

3 This is confirmed in Chapter 4 of Han (2019) where the employment rate of older workers is analyzed using a nationally representative dataset.

- A survey finds that many older workers prefer jobs with flexible working hours (Statistics Korea, 2019).
- Together with employment services that meet such needs, legal standards should be improved to facilitate the creation of quality part-time jobs.

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