



Commentaries on the Signature Project: "Addressing Labor Shortages Due to Low Birth Rates and Aging Population in the APEC Region"

What We Need to Do to Overcome Korea's Ultra-low Fertility Rate

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SUMMARY

- In Korea, the number of births has declined: 406,000 in 2016 (TFR 1.17), 327,000 in 2018 (TFR 0.98), and 230,000 in 2023(TFR 0.72).
- There are many issues that have led to Korea's low fertility rate, among them being (1) the widespread career interruptions experienced by female workers in their 30s due to childbirth and childcare, making stronger policy interventions to promote male participation in childcare imperative; and (2) the changes in parents' allocation of time to secure work-life balance as industrial diversification has resulted in greater employment flexibility, necessitating a higher level of adaptability in Early Childhood Education and Care (ECEC) services.
- It is important to create a social culture in which parents who want to care (or to have more time) for their children can freely take advantage of childcare policies and have more flexible working hours.

Korea's plummeting total fertility rate

In 2013, the annual number of births was 436,000 (TFR 1.19). Since then, the number of births has steadily declined, reaching 406,000 in 2016 (TFR 1.17), 327,000 in 2018 (TFR 0.98), and 230,000 in 2023. As a result, the total fertility rate has fallen to 0.72.¹

¹Statistics Korea, Population Trends Survey, various years; Korea Institute of Child Care and Education, 2022 Major Statistics on Infants and Young Children (requoted).

Table 1 Live births and total fertility rates (2014~2023)²

Year	2014	2015	2016	2017	2018
Live births	435,435	438,420	406,243	357,771	326,822
Total fertility rate	1.21	1.24	1.17	1.05	0.98
Year	2019	2020	2021	2022	2023
Live births	302,676	272,337	260,562	249,186	230,028
Total fertility rate	0.92	0.84	0.81	0.78	0.72

Source: Korean Statistical Information Service (KOSIS), Population. Vital Statistics (Live Birth, Death, Marriage, Divorce). Live Births, Total Fertility Rates. https://kosis.kr/statHtml/statHtml.do?orgId=101&tblId=INH_1B8000F_01&conn_path=I2 (Accessed on June 4, 2025).

Note: The total fertility rate (TFR) refers to the average number of children a woman is expected to give birth to over her lifetime.

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The gender issue in employment

When distinguishing between males and females, the increase in employment rates so far has been almost entirely due to the increase in the female employment rate. The male employment rate has not changed much since the 1960s, exceeding 70% and in fact showing a slight downward trend since the 2000s. In contrast, the female employment rate started at a very low level, just half that of males, and has continued to

² Ibis.

rise until recently. The female employment rate is currently (as of April 2025) low at 55.1%³, but it is expected to continue upward in the future.⁴ Despite the increase in the female employment rate, there were gender gaps in employment rates by age group. The employment rates of both males and females increase with age in their 10s and 20s. However, after their 30s, male and female rates show significantly different patterns. Male employment rates continue to climb until men reach their 30s and then maintain a high level of about 90% until men enter their early 50s. However, female rates peak around 70% at ages 25–29, decline to their lowest point at ages 35–39, and then began to move up again as women enter their 40s.⁵

The decline in employment rates for females in their 30s indicates the widespread occurrence of career interruptions mainly due to childbirth and childcare. These can be reduced by easing the difficulties of striking a balance between work and family. In Korea, the simultaneous rise in female employment and decline in birth rates suggest that many females still face significant challenges in balancing work and family life. For example, a particularly pressing issue is that maternity and parental leave are legally guaranteed but are still difficult to utilize in practice.

According to the Ministry of Employment and Labor, the number of males taking parental leave steadily increased from 17,662 in 2018 to 29,041 in 2021. However, there remains a significant gender gap in the utilization rates of parental leave. A survey⁶ found that, while 37.2% of mothers utilized parental leave, only 10.6% of fathers did so.⁷ Additionally, the average parental leave duration was 17.8 months for mothers and 9.5 months for fathers, indicating that mothers took leave for approximately eight months longer than fathers.

³ KOSIS, 'Labor Force Survey', https://kosis.kr/statHtml/statHtml.do?orgId=101&tblId=DT_1DA7001S&conn_path=I2 (June 10, 2025)

⁴ Kye, Choi, Kwon, et al., *Population Report 2024*. Korean Peninsula Population Institute for Future, 2024.

⁵ Ibis.

⁶ Nayoung Kim, Yoon Kyung Choi, Hee Sue Kim, *2018~2022 Childrearing Policy Analysis and Outcome Evaluation (V): Focusing on 2021~2022 Policies*. Korea Institute of Child Care and Education, 2022.

⁷ Similar findings were reported in the *2021 National Childcare Survey: Childcare Center Report*. Ministry of Health and Welfare & Korea Institute of Child Care and Education, 2021.

Transformations of industrial structure and work-life balance

Meanwhile, Korea's industrial structure is undergoing significant transformations with the rise of knowledge-based and information and communications technology (ICT). At the same time, various forms of employment, including non-regular work, platform-based employment, and small-scale self-employment, are continuously increasing. As of August 2023, non-regular workers accounted for 8.12 million (37.0%) of the total 21.95 million wage earners, marking an increase from 33.0% in 2018. Of these, workers in special types of work – artists, delivery workers, golf caddies, etc. – totaled 553,000 (6.8%)⁸. Workers in these industries face particular obstacles in accessing legally-guaranteed childcare support systems such as childcare leave. With industrial diversification leading to greater employment flexibility, parents' allocation of work-life balance time is also changing, necessitating a higher level of adaptability in ECEC services.

Policy interventions to encourage male participation in childcare

Fathers' desire to participate in childcare is on the rise. The government should set higher utilization rate targets for childcare-related leave policies, ensuring that the uptake of parental leave among men continues to grow through active government-led initiatives. Stronger policy interventions are therefore needed to promote male participation in childcare. The number of men taking parental leave has steadily increased, but there remains a significant gender gap in the utilization rates of parental leave.

Need for more childcare support policies reflecting diversified working hours

Childcare support policies related to working hours should be expanded in accordance with employment type, allowing parents to choose the option that best fits their

⁸ Hur, Jai-Joon, Changes and Responses to the 4th Industrial Revolution in Jobs. Labor Review, 144.

circumstances⁹. To achieve this, customized policies must be enhanced to support parents with varying work arrangements. For example, full-time wage-earning dual-income parents should receive greater support in utilizing not only parental leave but also reduced working hours for childcare. For self-employed or non-wage-earning dual-income parents, policies should be modified to increase accessibility to part-time childcare support. Meanwhile, part-time wage-earning dual-income parents, who are often not covered by employment insurance and therefore cannot take parental leave, require alternative support measures that should be continuously discussed and developed¹⁰. As employment structures become increasingly diverse, the occupational status and physical work environments of parents with young children are also becoming more varied. This necessitates flexible childcare support policies that can adapt to these changes¹¹.

Aging of the working population

As the working-age population declines, labor market conditions are rapidly evolving. Based on future population projections, the 30-44 age group is expected to shrink from 10.7 million in 2025 to 6.83 million in 2050. An analysis of ECEC workforce trends suggests that not only will securing sufficient personnel remain challenging, but the aging of the workforce will also likely continue. Examining the age distribution of childcare teachers, the proportion of those in the 30-44 age group declined significantly between 2015 and 2021, while the proportion of teachers aged 45 and older increased. In 2013, the 26-30 age group accounted for the largest share of childcare teachers at 33.7%. However, by 2019, those aged 40 and older had become the largest group, comprising 44.1% of the workforce¹².

⁹ Nayoung Kim, Yoon Kyung Choi, Hee Sue Kim, *2018~2022 Childrearing Policy Analysis and Outcome Evaluation (V): Focusing on 2021~2022 Policies*. Korea Institute of Child Care and Education, 2022.

¹⁰ Ibis

¹¹ Nayoung Kim, JaYeon Kim, Yoon Kyung Choi, *A plan to activate a mutually beneficial workplace daycare center within the knowledge industry center*. Korea Institute of Child Care and Education, 2023.

¹² Kwon-hyung Lee, Jong-in Choi, A Study on the Improvement of Turnover Rate of Child Care Teachers at Private Daycare Centers. *K Business Management Journal*, 5(2).

The high number of elderly childcare workers seemingly implies unavoidable difficulties in securing manpower after their retirement. Considering that childcare workers now require a higher level of expertise than ever before, we should not overlook the fact that a shortage of workers with sufficient specialized education and experience may be inevitable in the near future. Nevertheless, the digital education innovation and customized education being promoted by the Ministry of Education should make it easier for relatively young teachers to adapt and utilize this education in the field, so the aging of childcare workers should be continuously and carefully observed.

Trends in child health

Beyond changes in the sizes of the infant and young child populations, trends in child health must also be closely monitored. As of December 2022, the number of registered infants and young children with disabilities stood at 9,234. Of these, 2,738 were enrolled in kindergartens and 2,022 attended childcare centers, and the number of registered children with disabilities utilizing such institutions has been steadily increasing (Ministry of Education, 2023). Additionally, attention should be given to children at risk of developmental disabilities, i.e., those who do not currently have a diagnosed disability but may experience difficulties in educational institutions or develop disabilities if they do not receive appropriate educational services¹³. A survey conducted among teachers¹⁴ asked whether they had observed changes in the frequency of children at risk of disabilities. 67.5% of respondents indicated that such cases had increased, with similar responses from teachers in both kindergartens and childcare centers. Therefore, teachers need at least a minimum of training in special care for disabled infants and toddlers. Moreover, greater efforts should be undertaken to train teachers who can provide special care to disabled infants and toddlers.

¹³ Park, Che-Hui, Hwang, Soon-Young, Cha, Se-Jin, The Actual Situation of Disorder Diagnosis's Referral Process and Screening for At-risk Children and Awareness of Early Childhood Teachers, *Journal of Educational Innovation Research*, 31(1).

¹⁴ Kang, Eun Jin, Kwon, MeKyung, Park, Changhyun et al., *Comprehensive Measure for Early Screening and Support for Children At Risk for Developmental Disabilities in Early Childhood Education and Care (I)*. Korea Institute of Child Care and Education, 2022.

Securing sufficient and efficient government budget allocation for ECEC

In line with the government's policy direction of assuming greater public responsibility for child-rearing, policy development and implementation should continue at both the central and local government levels. Naturally, government financial support for this field will expand in future. In other words, changes in socioeconomic conditions have also reshaped societal perceptions of children's value, leading to an increasing emphasis on raising fewer children while ensuring higher-quality care. Given the persistent parental demand for high-quality ECEC services, demand for effective policies related to childrearing support continues to rise even amid declines in the infant and young child populations¹⁵, and government financial support in this sector is likely to expand rather than shrink. To meet growing parental expectations for high-quality childcare, for example, efforts must be made to enhance the professionalism of teachers and staff in kindergartens and childcare centers. Consequently, securing sufficient funding for ECEC and ensuring its efficient allocation will be essential.

Conclusion

While expanding institutional childcare support is crucial in coping with the growing number of dual-income households, it is ultimately and equally important to create a societal culture in which parents who want to care (or to have more time) for their children can freely use childcare policies and have more flexible working hours. By doing so, Korea could progressively shift away from a long working hour culture, creating a more balanced work-life environment for all.

To ensure high-quality human capital in the future in the face of the low birth rates that most APEC economies are experiencing, appropriate care and education from early childhood is very important. To this end, better childcare and education curricula must be created through more active exchanges among APEC economies. There is a notable lack of personnel exchange in the field of early childhood care and education, so economies should actively promote exchanges such as training programs for educators

¹⁵ Nayoung Kim, Keun Jin Kim, Hee Sue Kim, *Childcare and Education Finance in the Local Government*. Korea Institute of Child Care and Education, 2018.

and interactions among students majoring in related fields through intergovernmental agreements and similar initiatives.