

Research in Brief

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Demographic Decomposition of the Recent Rebound in Live Births and Its Implications¹⁾

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After years of decline, the number of births has risen in both 2024 and 2025, raising expectations that births may continue to rise in the long term. Determining whether this increase represents a temporary upswing or a harbinger of a long-term structural shift requires an in-depth demographic analysis.

A time series analysis of birth trends since 2015 has identified a rebound in 2024-2025 following the long-term decline observed through 2023. Our demographic decomposition analysis indicates that the recent increase in births is attributable to demographic shifts—particularly growth in the number of women in their early 30s—and changes in marriage and fertility patterns, reflecting the gradual clearing of the backlog of marriages postponed during the COVID-19 pandemic and increases in marital fertility.

However, the shrinking female population aged 15-49, the increasing age at first marriage and childbirth, and the rising proportion of married couples without children remain factors that may prevent the increase in births from continuing. Therefore, sustaining this momentum in the long term would require continuous monitoring of birth trends and in-depth analysis of age-group-specific dynamics, in order to implement structural changes that create conditions conducive to marriage and childbearing among young adults.

1) This article is an English translation of Issue and Focus No. 468, originally published in Korean in June 2026. The original article, which is based in part on *An Analysis of the Drivers of the Rebound in Live Births in 2024* by Jihye Lee et al. (2025; KIHASA) and incorporates data from the Ministry of Data and Statistics' 2025 Birth Statistics (Provisional), is available at <https://www.kihasa.re.kr/publish/regular/focus/view?seq=75897>. The views expressed in this article are those of the author and may not represent the official views of KIHASA.

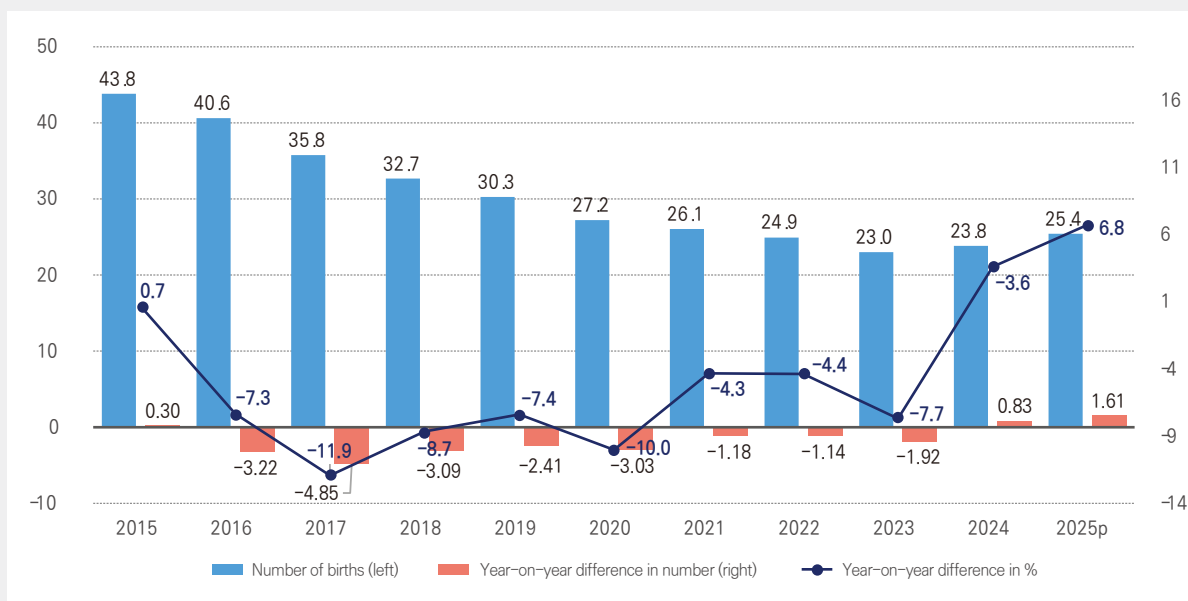
Introduction

After a steep decline since 2015, the number of births increased year on year from April 2024 to February 2026, suggesting the need to examine whether this shift marks the beginning of a sustained upward trend in births.

The number of births reached 238,000 in 2024, an increase of 8,300 (3.6 percent) over the previous year. In 2025, the figure rose to 255,000, a further increase of 16,000 (6.8 percent) year on year. In January 2026, monthly births totaled 26,916, representing an 11.7 percent increase from the same month a year earlier. In February 2026, the number of births was 22,898, a 13.6 percent increase year on year. Taken together, births in January and February 2026 reached a level not seen since the same period in 2020.

The total fertility rate (TFR)—the average number of children a woman of childbearing age (15-49) is expected to have over her lifetime—increased by 0.03 points from the previous year to 0.75 in 2024 and by a further 0.05 points year on year to 0.80 in 2025. Lee et al. (2025) found that the decline in births began to moderate in 2020 and that the increase observed in 2024 reflected a rise in first and second births, driven by growth in the female population aged 30-34 and by what may be a catch-up in marriages and childbirths postponed during the pandemic. The Ministry of Data and Statistics (2025; 2026) also attributes this increase to several factors, including the base effect following the pandemic, the entry of echo-boomers (those born between 1991 and 1995) into the prime marriageable-age group, increases in the number of marriages between August 2022 and May 2023 and between April 2024 and December 2025, changing perceptions of childbirth and marriage, and the effects of current family policies.

[Figure 1] Trends in births, 2015-2025 (in tens of thousands of births, %)



Source: Compiled by the author using data from the Population Trends Survey: Monthly, Quarterly, and Annual Population Trends (Births, Deaths, Marriages, and Divorces), Ministry of Data and Statistics, 2015-2025.

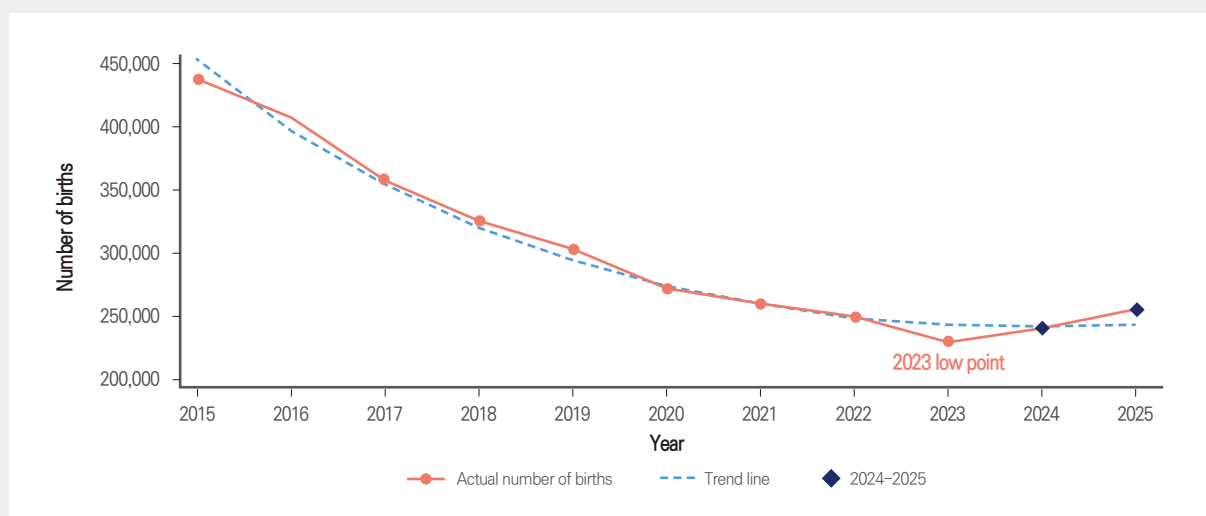
Changes in the number of births 2015-2025: a time-series analysis²⁾

This study employed time-series analysis to assess whether the rebound observed for the period 2024-2025 represents a meaningful deviation from the long-term downward trend in births that began in 2015.

Three models were used: a baseline model covering the 2015-25 trend (Model 1); a model incorporating the exceptional decline in 2023, which resulted in a record-low number of births (Model 2), and a model additionally controlling for marriage counts and the population of women aged 15-49 (Model 3).

Although births have declined since 2015, the curvature of this trend, as indicated by the squared time term, suggests that the pace of the decline has recently slowed. In models incorporating marriage and demographic variables, marriage counts were positively associated with births, implying that the recent rise in births was linked to an increase in marriage counts. Births in 2024-2025 did deviate from a long-term downward trajectory, coinciding with a rise in marriage counts after 2022, yet further observation over the next couple of years will be required before any conclusion can be drawn as to whether the shift indeed represents the beginning of a sustained long-term increase.

[Figure 2] Model-based estimates of trends in birth counts



Source: Compiled by the author using data from "Population Trends Survey: Mid-Year Registered Resident Population by Si/Gun/Gu, Sex, and Five-Year Age Group," Ministry of Data and Statistics, 2015-2025; "Population Trends Survey: Monthly, Quarterly, and Annual Population Trends (Births, Deaths, Marriages, and Divorces)," Ministry of Data and Statistics, 2015-2025; and the age-specific fertility rates by mother's age in Table 2 (p. 4) of "2025 Population Trends Survey: Provisional Birth and Death Statistics" (Press Release), Ministry of Data and Statistics, February 25, 2026.

2) The baseline model uses the logarithm of the number of births as the dependent variable and includes both a linear time trend and a quadratic time-trend term as explanatory variables, in order to examine the declining trend in the number of births and changes in the pace of the recent decline.

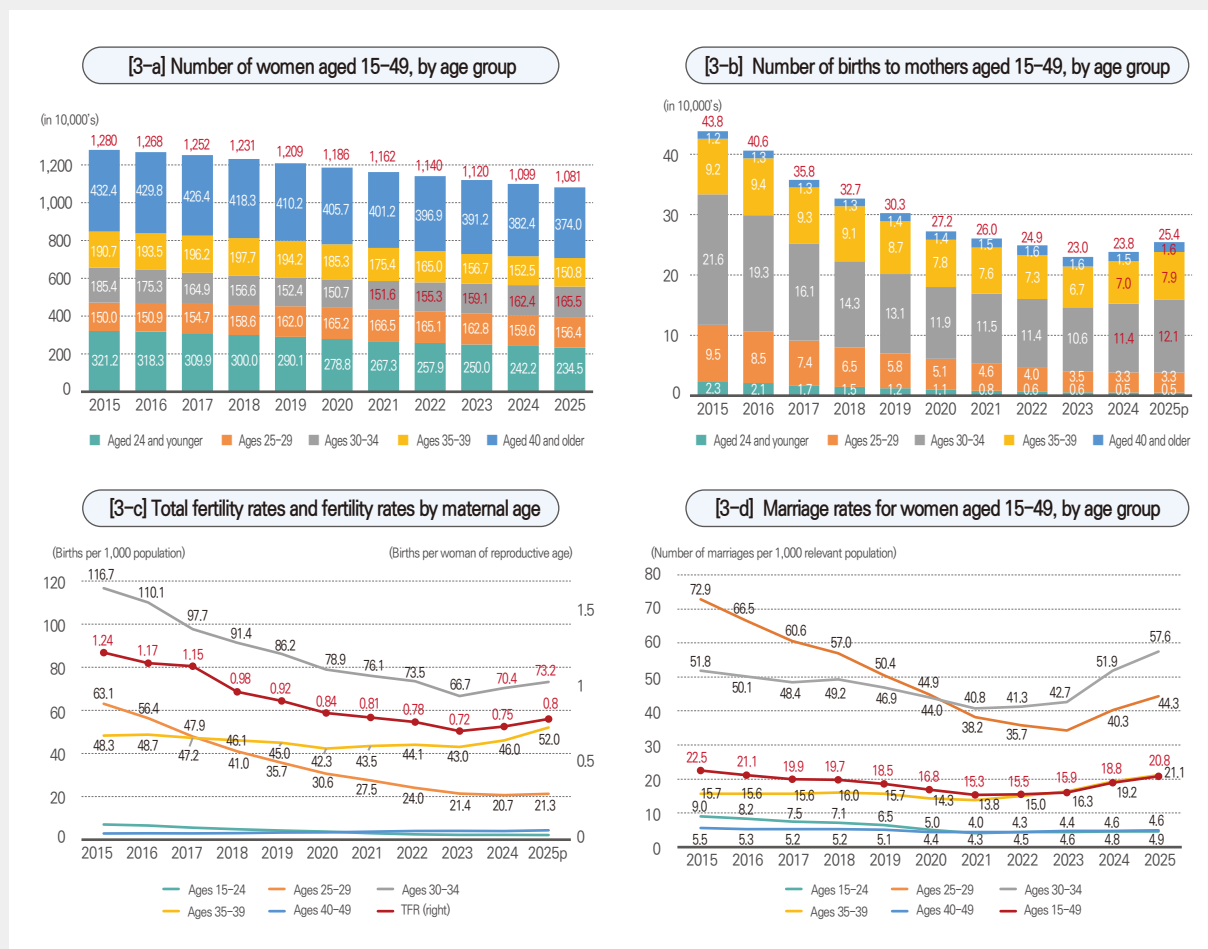
(Baseline model) $\ln(\text{Births}_t) = \beta_0 + \beta_1 t + \beta_2 t^2 + \epsilon_t$

$\epsilon_t \sim i.i.d.N(0, \sigma^2)$

where t denotes the linear time trend, t^2 is the quadratic term included to capture changes in the rate of decline, and ϵ_t is the error term.

The number of births is affected by several factors including the size of the female population aged 15-49, age-specific fertility rates, and age-specific marriage rates. Although the overall number of women of childbearing age has continued to decline, the number of women aged 30-34, the core childbearing-age group that constitutes part of the echo-boom generation—the children of the baby-boom generation—has recently increased, with the result that births among women aged 30-34 have risen by 7.7 percent in 2024 year on year and by a further 6.1 percent in 2025.

[Figure 3] Number of women aged 15-49, by age group; number of births and fertility rates by maternal age; marriage rates by age group (2015-2025)



Note: The total fertility rate (TFR) refers to the expected number of children a woman aged 15-49 would bear over her lifetime. Age-specific fertility rates indicate the number of births relative to the population size of women in each age group.

Source: Compiled by the author using the Ministry of Data and Statistics' Population Trends Survey: Mid-year Resident Registration Population by City/County/District, Sex, and Five-year Age Group (2015-2025); Population Trends Survey: Total Fertility Rate and Age-specific Fertility Rates by Province/Metropolitan City (2015-2024); 2025 Population Trends Survey: Provisional Birth and Death Statistics [Press Release], February 25, 2026, Table 2, p. 4 (Age-specific Fertility Rates by Mother's Age); and Population Trends Survey: Marriage Rates by Province/Metropolitan City, Sex, and Age (2015-2025).

After many years of uninterrupted decline, the age-specific fertility rate (the number of births per 1,000 women in a given age range) rose in 2024-2025. For women aged 30-34, the fertility rate increased by 3.7 points year on year in 2024 and by 2.9 points in 2025. For the 35-39 age group, it increased by 3.0 and 6.0 points, respectively, in those two years. The fertility rate for women aged 25-29, which had been declining through 2024, rose by 0.6 points in 2025.

Marriage rates (marriages per 1,000 population), whose effect on births is seen with a lag of about two years, began picking up in 2022 and returned to their 2020 levels in 2024 and 2025.



Decomposition of changes in births

Demographic decomposition of changes in birth counts among mothers of different age groups

Births declined year on year throughout the period from 2016 to 2023, largely as a result of age-specific fertility declining over many years. After this prolonged decline, however, the number of births increased year on year in both 2024 and 2025.

Total births, defined here as the product of the number of women of each age group within the childbearing-age population and the corresponding age-specific fertility rate (defined as the number of births to women of a given age group divided by the number of women in that age group), are analyzed with respect to year-on-year changes decomposed into the effects of changes in the age structure of the female population of childbearing age and the effects of changes in fertility rates.

The decline in the number of women aged 15–49 is estimated to have reduced births by between 1,000 and 10,000 annually since 2015, and declining fertility rates contributed a further reduction of between 8,000 and 40,000 births per year.

In 2024, the population decline reduced births by 851, while rising fertility increased births by 9,149, resulting in a net increase of 8,298. In 2025, population effects were small relative to the previous year, while rising fertility remained the dominant factor, contributing to an increase of 16,148 births.

Decomposing the effects of changes in population, marriage, and fertility

An extended decomposition distinguishes the effects of population size, marital composition (the proportion of women who are currently married), and fertility rates by marital status. Total births are modeled as a function of the female population, the proportion of women who are currently married, fertility among married women, and fertility among unmarried women. Year-on-year changes are decomposed using logarithmic mean weights³⁾.

The decomposition analysis shows that the increase in births between 2024 and 2025 among mothers aged 25–44 was due primarily to increases in fertility among currently married women in their 30s and to growth in the size of the 30–34 age group. However, despite the recent increase in marriages, the share of currently married women continued to decline, in turn reducing the number of births in 2024.

In 2023, births fell by 18,398 year on year. An increase of 2,639 births attributable to growth in the female population aged 30–34 was more than offset by declines associated with reductions in the share of married women aged 25–34 (-11,249), declines in the female population aged 35–39 (-3,607), and lower fertility among married women in their 30s (-4,737).

In 2024, births increased by 8,499 year on year. Positive contributions came from marital fertility effects among women in their 30s (+14,465), the population effect of women aged 30–34 (+2,224), and nonmarital fertility effects among women aged 25–44 (+2,679). These gains were in part offset by declines attributable to marital composition effects (-8,532) and population structure effects outside the early-30s age group (-2,818).

Births increased year on year by 16,292 in 2025⁴⁾. The increase was primarily attributable to higher fertility among women aged 35–39 (+9,109) and 30–34 (+4,686), together with growth in the female population aged 30–34 (+2,281).

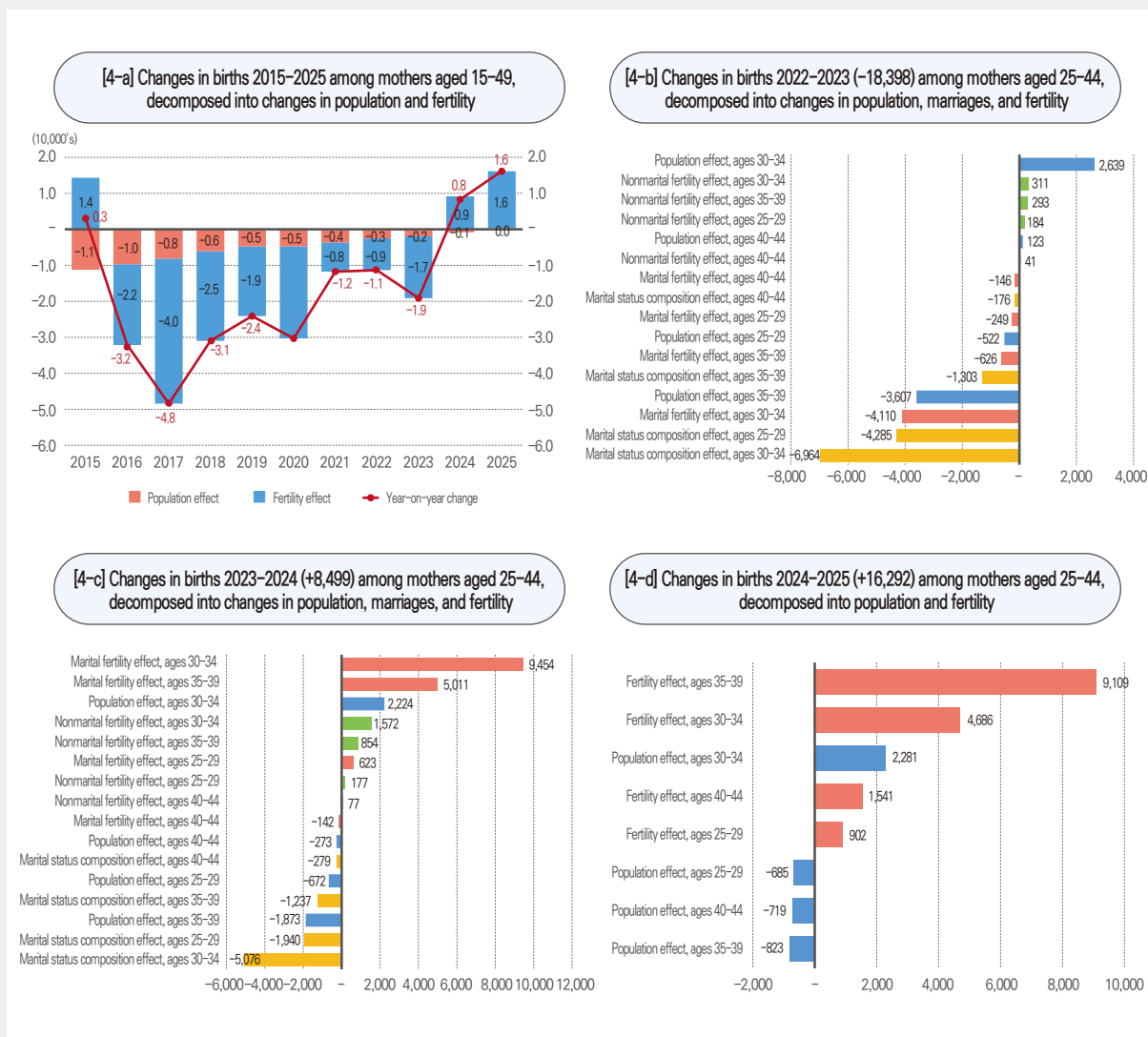
Lee et al. (2025) show that increases in first and second births contributed significantly to the rise in births from 2023 to 2024. This is attributable to the unwinding of a backlog of marriages postponed during the pandemic, which increased the share of newly married couples and led in turn to more first births, and to a recovery in second and higher-order births primarily among households better positioned for childrearing.

$$\begin{aligned} 3) \quad \Delta B &= (L_m + L_n) \cdot \ln\left(\frac{W_t}{W_{t-1}}\right) + L_m \cdot \ln\left(\frac{m_t}{m_{t-1}}\right) + L_n \cdot \ln\left(\frac{1-m_t}{1-m_{t-1}}\right) + L_m \cdot \ln\left(\frac{f_{m,t}}{f_{m,t-1}}\right) + L_n \cdot \ln\left(\frac{f_{n,t}}{f_{n,t-1}}\right) \\ \text{Year-on-year changes in live births} & \quad \text{Population structure effect} \quad \text{Marital status effect} \quad \text{Marital fertility effect} \quad \text{Nonmarital fertility effect} \end{aligned}$$

where W denotes the number of women; m is the proportion married women in the female population; fm is the marital fertility rate; fn is the nonmarital fertility rate; and L represents the symmetric weight based on the logarithmic mean of the values for the previous year (t-1) and the current year (t), as proposed by Canudas-Romo (2003).

4) The 2025 number of births is provisional, and data on the proportion of married women, the fertility rate among married women, and the fertility rate among unmarried women have not yet been released. As a result, it is not possible to produce decomposition results comparable to those for other years. Accordingly, the analysis is presented only in terms of the population structure effect and the fertility rate effect; The 2025 figures are presented as preliminary results intended to indicate the direction of change. They are included in the analysis because 2025 represents a critical point for assessing whether the rebound observed in 2024 was a one-time fluctuation or the beginning of a sustained trend.

[Figure 4] Year-on-year changes in births decomposed into changes in population, marriages, and childbearing



Note: (1) Data on age-specific fertility rates of married women aged 25–44 are available only for 2015, 2020, and 2022–2024. Accordingly, the population–marriage–fertility patterns decomposition analysis is presented only for the 2022–2025 period. For 2025, the proportions married, marital fertility rates, and non-marital fertility rates are unavailable due to data limitations (not yet released). Therefore, the decomposition for 2025 includes only the population structure effect and the fertility rate effect;

(2) In the population–marriage–fertility decomposition analysis, women aged 15–24 and 45–49 are excluded because the number of births to married women in these age groups is relatively small, resulting in greater year-to-year variability.

Source: Author's calculations based on the Population Trends Survey: Births by Province, Sex, Mother's Age (Five-Year Age Groups), and Birth Order, Ministry of Data and Statistics, 2014–2024; Population Trends Survey: Mid-Year Resident Population Registered by City/County/District, Sex, and Age (Five-Year Age Groups), Ministry of Data and Statistics, 2015–2025; 2025 Population Trends Survey: Birth and Death Statistics (Preliminary) [Press Release], Ministry of Data and Statistics, February 25, 2026, Table 2 ("Age-Specific Fertility Rates by Mother's Age"), p. 4; and Age-Specific Marital Fertility Rates, Ministry of Data and Statistics, n.d.

Positive and Constraining Factors for Future Birth Trends

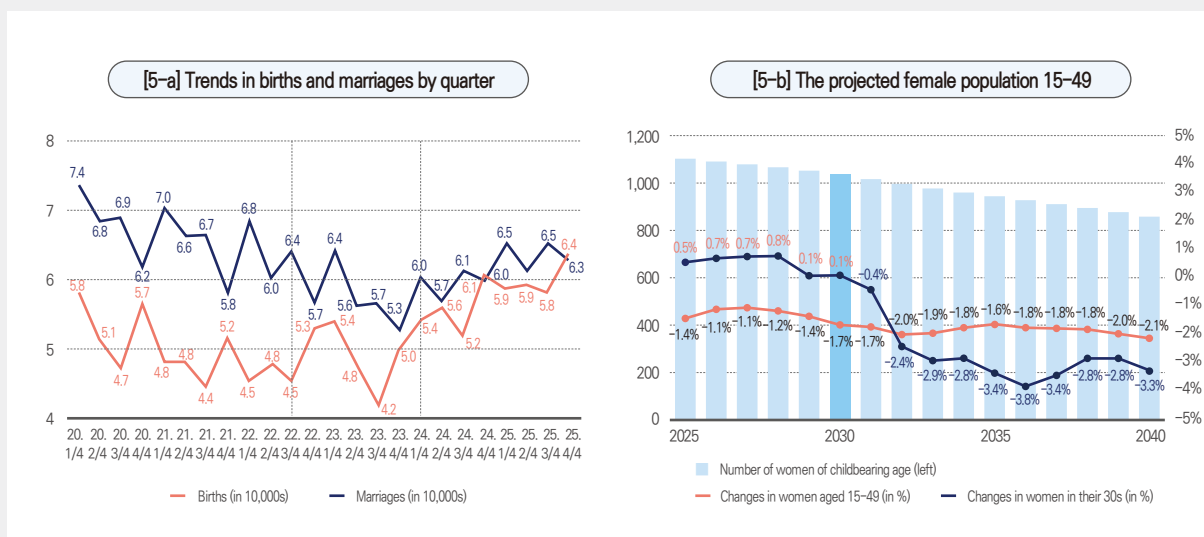
◆ Positive Factors

The rebound in births since April 2024 is likely to continue, at least in the short term, given recent increases in marriages and growth in the number of women in their 30s. This rebound likely reflects a combination of higher fertility among married women in their 30s, growth in the 30–34 age group, catch-up effects from marriages postponed during the pandemic, and favorable base effects. It would be too early to interpret the recent rebound in birth counts as conclusive evidence of a structural reversal in fertility trends. Further observation of both marriage and birth dynamics is needed.

Quarterly marriage counts began to pick up in Q3 2022 but remained volatile, falling to a record low in late 2023. This suggests that the recent uptick in births may be a consequence of a favorable base effect stemming from record-low marriage counts a year earlier, as well as a catch-up surge in marriages postponed during the pandemic.

The number of women aged 30–34—the prime childbearing-age group—is projected to continue increasing until at least 2030. Meanwhile, the continued shrinking of the reproductive-age population (aged 15–49) remains a structural constraint that may offset gains from increases in marriage rates.

[Figure 5] Trends in births and marriages 2020–25 by quarter;
the projected population (2025–2040) of women aged 15–49



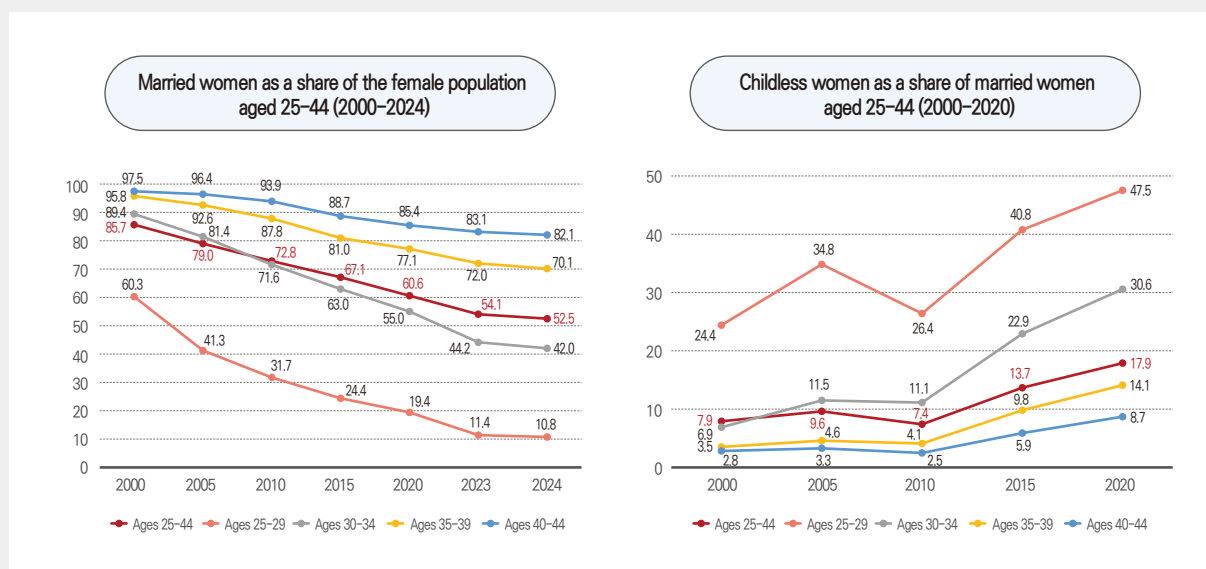
Source: Compiled by the author using the Ministry of Data and Statistics' Population Projections for Korea 1960–2072 (National).

◆ Constraining Factors

A prerequisite for sustaining this rebound over the long term is a comprehensive, granular understanding of the changing female population and its marriage and fertility patterns. The persistent decline in the number of women aged 15–49, delayed marriage and childbearing, and the rising proportion of married couples without children could prevent births from increasing over the long term.

The ages at first marriage and first birth continue to rise. The share of women aged 25–44 who are married (including those who are widowed or divorced) is declining, while the share of married women without children is increasing, even among couples who registered their marriage within the past seven years. It is important to recognize that the link between marriage and childbirth has weakened over time, as evidenced by a growing share of married women remaining childless.

[Figure 6] The proportion of the married among women aged 25–44, 2000–2024; the proportion of the childless among married women aged 25–44, 2000–2020 (in %)



Note: The data for 2000–2020 are based on the Population and Housing Census sample surveys conducted every five years (including both legally married and cohabiting couples; foreigners living with Korean nationals in different categories of household included). The 2023 and 2024 data are based on the Population Register Census (currently married women are legally married Korean nationals). The 2000 and 2010 censuses used a 10-percent sample, while the 2015 and 2020 censuses used a 20-percent sample.

Source: Adapted from Figure 6–3 in Lee, J. et al. (2025).



Concluding remarks

While the recent upswing in births and the TFR appears to represent a meaningful shift, determining whether this rebound will be sustained requires continued observation over the next several years. Indicators that should be monitored include age-specific fertility rates, parity-specific births, number of marriages, the proportion of the population that is married, and cohort fertility rates among married women.

In addition, there is a persistent need for more granular analyses that account for age, marital status, parity, region of residence, income, and employment status, as changes in whole-population averages alone do not distinguish between the groups that drove the fertility increase and those that continue to face barriers to marriage and childbearing.

To sustain the momentum from the growing population of women in their 30s and recent changes in age-specific fertility rates over the long term, it is necessary to improve structural conditions—creating more stable housing and employment conditions for young Koreans, enhancing work-family balance, and expanding support in childcare and childrearing—to better support young people in transitioning to marriage and having children.

References

- Canudas-Romo, V. (2003). *Decomposition Methods in Demography*. University of Groningen.
- Lee, J., Kim, E., Choi, I., & Lee, C. (2025). *An Analysis of the Drivers of the Rebound in Live Births in 2024*. Korea Institute for Health and Social Affairs.
- Ministry of Data and Statistics. Population Projections for Korea 1960–2072 (National). Retrieved March 31, 2026, from https://kosis.kr/statHtml/statHtml.do?orgId=101&tblId=DT_1BPA001&conn_path=I2
- Ministry of Data and Statistics. (2014–2024). Population Trends Survey: Births by Province, Mother’s Age (5–Year Age Groups), and Birth Order. Retrieved March 30, 2026, from https://kosis.kr/statHtml/statHtml.do?orgId=101&tblId=DT_1B81A12&conn_path=I2
- Ministry of Data and Statistics. (2015–2024). Population Trends Survey: Total Fertility Rate and Age-Specific Fertility Rates by Province. Retrieved March 30, 2026, from https://kosis.kr/statHtml/statHtml.do?orgId=101&tblId=DT_1B81A21&conn_path=I2
- Ministry of Data and Statistics. (2015–2025). Population Trends Survey: Marriage Rates by Province, Sex, and Age. Retrieved March 30, 2026, from http://kosis.kr/statHtml/statHtml.do?orgId=101&tblId=DT_1B83A15&mpPrScrlId=20260331124429224_b0069498e0f94828
- Ministry of Data and Statistics. (2015–2025). Population Trends Survey: Mid-Year Registered Resident Population by City/County/District, Sex, and Age (5–Year Age Groups). Retrieved March 30, 2026, from https://kosis.kr/statHtml/statHtml.do?orgId=101&tblId=DT_1B040M5&conn_path=I2
- Ministry of Data and Statistics. (2015–2025). Population Trends Survey: Monthly, Quarterly, and Annual Population Trends (Births, Deaths, Marriages, and Divorces). Retrieved March 30, 2026, from https://kosis.kr/statHtml/statHtml.do?orgId=101&tblId=DT_1B8000G&conn_path=I2
- Ministry of Data and Statistics. (2025, February 26). 2024 Birth and Death Statistics (Preliminary): Policy Briefing [Press briefing video]. Retrieved March 30, 2026.
- Ministry of Data and Statistics. (2026). 2025 Population Trends Survey: Birth and Death Statistics (Preliminary). Press release. February 25, 2026.
- Ministry of Data and Statistics. (2026, February 25). 2025 Birth and Death Statistics (Preliminary): Policy Briefing [Press briefing video]. Retrieved March 30, 2026.
- Ministry of Data and Statistics. Age-Specific Fertility Rates of Married Women. e-Nara Indicators. Retrieved March 30, 2026, from <https://www.index.go.kr/unity/potal/indicator/IndexInfo.do?cdNo=260&clasCd=12&idxCd=H0027>