

# “Lowest-low Fertility” & Gender Inequality: Japan from a Comparative Perspective

By Yoshikuni Ono and Fumiya Uchikoshi

## Introduction

Low fertility is one of the most fundamental demographic challenges in modern society. Scholars have paid close attention to so-called “lowest-low fertility”, which refers to a designate situation where the total fertility falls below 1.3, well below the replacement level (2.1) (Goldstein et al., 2009). Among the economically advanced countries, the lowest-low fertility is particularly pronounced in three groups of countries: East Asia, and Eastern and Southern Europe. In this short note, we discuss theoretical expectations regarding the role of gender context in understanding cross-national variation in fertility in both low-fertility and relatively high-fertility countries, with a specific regional focus on Japan. We also briefly describe the strategies employed to empirically evaluate these theoretical expectations.

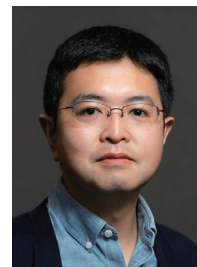
## A Theoretical Foundation: Second Demographic Transition

A leading theory explaining sub-replacement fertility trends is the Second Demographic Transition (SDT). This theory emphasizes a transition from material to post-material value (self-realization and autonomy) as a consequence of societal development. Under the SDT framework, individuals with “untraditional” norms and individualistic values pursue higher-order needs and choose multiple forms of living arrangements (Lesthaeghe, 2010). During SDT, fertility and nuptiality are increasingly less connected, and thus there has been an increase in cohabitation, non-marital childbearing, and divorce.

There are some critiques of this theory (see Zaidi and Morgan, 2017 for a review). Of specific relevance to the Japanese case are the following two points. One is that the religious secularization and the post-materialist culture discussed in the theory are rooted in the liberal individualism that is dominant primarily in Western societies (England, 2010), so it is an open question whether this theory is applicable to non-Western contexts. Indeed, subsequent research has not necessarily provided evidence to support this argument, for example, in the Japanese context (Atoh, 2001; Raymo, 2022). In particular, non-marital childbearing rates have been very low, which reflect the tight link between marriage and fertility in Japan (and other East Asian contexts) (Raymo et al., 2015). Although the trends towards “less family” are evident in Japan, recent studies suggest, for example, that the decline in marriage is mainly driven not by



*Author Yoshikuni Ono*



*Author Fumiya Uchikoshi*

normative change, but more by structural sources, including growing economic uncertainty, limited opportunities to meet potential partners, and persistent gender division of labor (Raymo et al., 2021; Raymo, 2022). Second, a theoretical expectation derived from the SDT is a continuous decrease in the fertility levels, or more generally speaking, trends towards “less family” influenced by the emphasis on individualism (Esping-Andersen and Biralli, 2015). In contrast to this expectation, however, some wealthy countries have seen a reversal trend in the TFR. These countries are typically located in Northern Europe, and demographers have begun to explore possible mechanisms that might explain this reversal.

## Theory of Gender Equity

Another highly cited, and relatively recent, theorization of regional variation in fertility decline emphasizes the role of gender context (e.g., gender relationships, gender discrimination, gender attitudes, and policies). In this context, McDonald’s (2000, 2009) gender equity theory provides a compelling framework to understand the very low levels of fertility in Southern Europe and East Asia. This theory emphasizes tensions between improving women’s economic opportunities and sustaining gender-inegalitarian family institutions. On the one hand, women, like men, have increased their access to higher education and labor market participation. On the other hand, however, they also still face unequal demands in the home, including norms and obligations that expect them to play a central role in childcare and housework. When faced with the dilemma that a potential future family role conflicts with their aspirations as individuals, women are forced to choose between career and family. This theory has been tested by empirical studies, which generally support the argument. For example, the association between female labor force participation and fertility levels shifted from negative to positive over the period from 1970 to 1997 in OECD countries, with speculation that these countries adopted a more flexible work environment for women (Rindfuss et al., 2003). However, the association has also been found to differ significantly across

countries, for example, between Southern Europe and Anglo-Saxon nations. The cross-national variation in the relationship suggests that institutional arrangements may play a key role in understanding low levels of fertility in economically rich countries.

### Japan's Puzzle: Very Low Fertility Despite Friendly Family Policies

If family-friendly policies are important to mitigate the tension between family and work, the Japanese case provides an interesting puzzle. Compared to other countries, Japan's family policies are characterized by relatively generous parental leave for mothers and high-quality childcare, yet Japan's fertility levels are among the lowest. To solve this puzzle, Boling (2008) compared Japan and France, which have differing fertility rates (1.98 v 1.29) despite their family-friendly policies.

Boling argues that it is not only institutions that matter, but also whether cultural expectations activate or hinder these institutional arrangements. Specifically, she pointed out the important role played by the cultural norm of the "ideal worker" in Japan. In such cultural norms, workers, especially those in permanent positions, are expected to demonstrate their commitment to the company as core members of the organization. In exchange for relatively rich corporate welfare arrangements, their working hours tend to be extremely long from a comparative perspective.

As such, scholars have argued that the Japanese labor market has been built on the assumption that men play the role of breadwinner committed to the company rather than the family, and women play the role of homemaker expected to devote themselves to their children and home (Osawa, 1993). With childcare centers usually not open for long, having both parents work full-time is not considered a feasible option, even for well-educated and wealthy couples (Brinton and Oh, 2019). The cultural expectations force working women in Japan to choose between having a good job and having children

### Theory of Gender Revolution

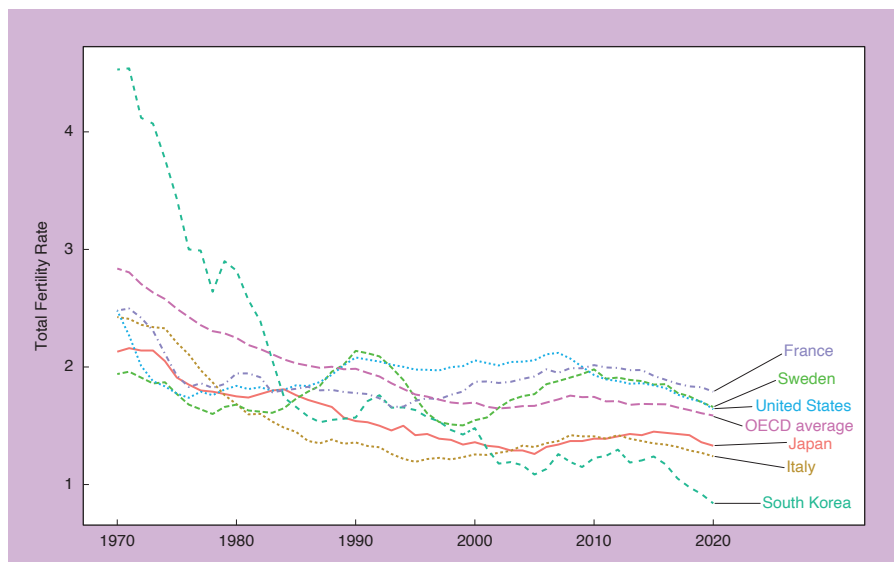
As we highlighted above, studies have shown that women's participation in the labor market is no longer a signal of low fertility. This is especially the case for some Northern European countries, where fertility levels have been rising in recent

years. In particular, Sweden has seen a dramatic reversal trend in fertility rates from the late 1990s to the late 2000s, as the [Chart](#) shows.

While the gender equity theory provides a theoretical foundation for understanding the relationship between women's labor market opportunities and low fertility, it is not a theory specifically developed to explain these changes. In response to the recent reversal trends of fertility in some rich countries, the Gender Revolution Theory proposed by Goldscheider et al. (2015) has gained considerable attention in demography in recent years. This theory focuses on structural changes in gender relationships in the public and private spheres.

According to Goldscheider et al., the gender revolution has two phases. In the first phase, when women's participation in the labor market started to rise, there was a delay in marriage, a decrease in the probability of marriage, a delay in childbearing, and an increase in divorce. This trend towards "less family" is what the SDT predicted as we discussed earlier (Esping-Andersen and Billari, 2015). In the second phase, however, the relationship between women's labor participation and these demographic behaviors has gradually weakened or even reversed. In European countries today, especially in Nordic countries like Sweden, the fertility rates are also higher in countries with higher women's labor participation. Goldscheider et al. also pay attention to the importance of changes in men's domestic roles. Specifically, they argued that men's increased involvement in housework and childcare contributes to family stability and higher fertility. As such, the Gender Revolution Theory

CHART  
**Fertility trends in selected OECD countries 1970-2020**



Source: OECD Family Database

focuses not only on fertility but also on other family dimensions, particularly changes in gender relations that transform the logic of fertility behaviors.

As we discussed earlier, the SDT theory initially attempted to explain the very low fertility in Western countries by focusing on religious secularization and post-materialist culture. However, this theory may dismiss potentially important sociocultural characteristics in non-Western countries. In contrast, the Gender Revolution Theory focuses on gender inequality in the public and private spheres, a perspective that seems applicable to affluent countries, including Japan and East Asia in general.

### Theoretical & Empirical Assessment of the Theory

As we noted earlier, the Gender Revolution Theory emphasizes the role of a structural shift toward gender-egalitarian regimes, but the changes are largely attributable to individual behavior (women's labor force participation, greater access to higher education, and men's increasing involvement in the private sphere). In that sense, as Riley (1999) argued, this theory may ignore the socio-institutional basis of gender. Comparing aggregate individual behavior across countries with different institutional contexts may inhibit clear empirical analysis. For example, it is skeptical of Goldscheider's emphasis on women's labor force participation as a key indicator for understanding fertility changes. Women's labor force participation in Japan, for example, outpaced that of the United States in 2014. If Goldscheider's prediction is correct, women's labor force participation should increase in the US, but the rate has not shown an upward trend. It is difficult to say, however, that gender inequality in Japan is much smaller than in the US in many respects (persistent gender wage gap, father's lower rate of taking parental leave, and men's lower contribution to housework).

In addition, focusing only on aggregate information ignores contextual features that might be distal for low fertility. Although Goldscheider et al. (2015: 222) argued that "there is growing evidence that men's increasing involvement in homemaking and childcare may potentially increase fertility. Such evidence has been found in countries with ultra-low fertility", this is still only one side of the coin. Research provides mixed support for the relationship between a father's involvement and a fertility transition. A father's contribution to childcare has a positive effect (but depends on the mother's employment status) on the likelihood of having a second child in Spain, but not in Italy (Cooke, 2009). Also, women's fertility intentions are affected by inequality in the division of household work only if they work long hours or have children (Mills et al. 2008). Although evidence has been mixed within each country, cross-national comparative studies have supported the expectation derived from the Gender Revolution Theory (Han and Brinton 2022). While men's contribution to housework is positively associated with the

transition to a second birth among dual-earner households in Japan (Nagase and Brinton, 2017), the ideal worker norm characterized by long work hours and intensive commitment to the workplace impedes the realization of more gender-egalitarian arrangements (Brinton and Oh, 2019).

Although Goldscheider et al. (2015) briefly discussed the growing class inequality, another skeptical view stems from the fact that family trends are not converging even within a single country. Sociologists have argued that family formation is increasingly stable among highly-educated couples and vice versa among less educated ones, or "diverging destinies" – a term coined by McLanahan (2004). The Gender Revolution Theory does not clearly reconcile the gap between their argument and the sociological literature on family adaptation to demographic change. This is likely because the Gender Revolution Theory originates from the Swedish experience, where income inequality is not high under the strong welfare regime. One variant of this gender-based theory proposed by Esping-Andersen and Billari (2015) explicitly incorporated this perspective when discussing how social stratification changes the diffusion process of newly formed normative expectations.

### Japan in Comparative Perspective

Mixed support for the theory may be due to different institutional contexts in those low and ultra-low fertility countries. Brinton et al. (2018), for instance, examine the gap between desired and actual fertility rates in four rich countries – Sweden, the US, Spain, and Japan – and focus on the role of gender inequality, as Goldscheider et al. (2015) did. Although they share the same research interests, they approached this question qualitatively, as opposed to comparing quantitative measures in each country. Their analysis of interviews with married couples reveals that the influence of gender inequality on fertility intention varies across institutional contexts. In Japan, most women tacitly accepted the unequal division of labor and did not mention the lack of a husband's housework share as a reason for constraining their intention. This finding is supported by their analysis of male interviewees among full-time couples, showing that they are likely to have gender-egalitarian attitudes but their long work hours prohibit the husband's contribution to housework (Brinton et al., 2018). In contrast to the Japanese case, in Spain, couples emphasized high levels of economic uncertainty as a condition for maintaining a full-time work arrangement for both partners. In these lowest-low fertility countries, gender inequality does not play the role that the Gender Revolution Theory would have expected. Rather, the institutional contexts, possibly combined with gender inequality, create their perceptions of the gap between desired and actual fertility.

## Immigration: Last Resort?

Most low-fertility countries, including Japan, are economically affluent countries and thus have a substantial number of immigrants from developing countries. In this context, demographers as well as policymakers are interested in the role that immigrants play in increasing fertility. Some demographers argue that the native-born population, which is considered the majority in a given society (e.g., non-Hispanic white Americans), may be replaced in the future by the immigrant population. An implicit assumption behind this hypothesis is that immigrants tend to have higher fertility than the native population. Indeed, some countries, such as those in Western Europe and the US, are experiencing an increase in immigrant populations, and their relatively high fertility may be causing what demographers call the “Third Demographic Transition” (Coleman, 2006).

Immigrant higher fertility has also attracted close attention from policy researchers, who often hope that the immigrant population will help solve not only labor shortages but also the problems of population decline and aging. Some consider that immigrant fertility could play an important role in solving Japan’s population problems. However, in contrast to these somewhat naïve expectations regarding the role of immigrant fertility, the immigrant population in Japan tends to have lower fertility than their native counterparts. One recent study using the 2010 Japanese census has found that immigrant fertility tends to be actually lower than that of the native population with the exception of immigrants from Vietnam (Korekawa, 2013). This study suggests that Japan is a country where it is difficult for anyone, even immigrants, to have and raise children. One lesson from such a seemingly surprising finding is that policymakers need to think carefully about how to reduce the cost of childbearing for women who are likely have to choose between family and work in the Japanese labor market as an immediate measure to mitigate the impact of low fertility in Japan.

## Discussion

In this short note, we have reviewed several major theoretical explanations for the lowest-low fertility in some wealthy countries. In their framework, Japan is only beginning to experience the gender revolution. As Esping-Andersen and Billari (2015) pointed out, the key to understanding cross-national variation in the changing relationship between women’s economic opportunities and fertility lies in the initiation of change by some external shock (the introduction of family-friendly policies) and the diffusion of new normative expectations about the family. Given that Japan has been characterized by relatively generous family policies, we speculate that the main obstacle to achieving gender parity and a recovery of fertility levels is likely to be the slow change in people’s attitudes toward the gender division of labor. We should also emphasize that

Japan’s rigid labor market structure, characterized by lifetime commitment with a company, serves as the institutional basis for the family model of male breadwinner and female homemaker.

While these theories help us to consider the case of Japan’s low fertility from a comparative perspective, a few cautious remarks need to be made. First, because the theory implicitly asserts that developed countries converge on a gender egalitarian regime (specifically, Sweden), it assumes that fertility trends are associated with social development. This assumption is very similar to what Thornton (2001) calls “development idealism”, characterized by the propositions that modern families are good and modern individuals are free and equal. One possible critique of the Gender Revolution Theory is the assertion that we must be cautious about linking gender equality and fertility reversal trends, assuming that all gender unequal countries will converge to a situation like contemporary Sweden.

Second, the argument about the shift from “less family” to “more family” (Esping-Andersen and Billari 2015) or the gender revolution “strengthening families” (Goldscheider et al. 2015: 208) can overlook important family diversity. While there is an implicit assumption in these gender-focused theories that equal relationships between men and women make families more stable and cohesive, the focus on gender inequality between men and women in the private sphere may ignore other types of families, such as single-parent families and same-sex couples. Especially in highly stratified societies, it is an empirical question whether the gender revolution produces equal family stability across the different segments of the socioeconomic spectrum. An alternative scenario would be that there is a divergent pattern of family formation according to socioeconomic status, which may be reinforced by the stratified gender revolution. Indeed, several studies have provided evidence consistent with this expectation. Family stability and gender egalitarian practices are concentrated in well-resourced families, while disadvantaged families are still characterized by instability and traditional family norms.

## Conclusion

Demographers have attempted to theorize global trends in fertility. While the SDT explains why fertility rates have fallen below the replacement levels, it cannot explain the recent reversal trend in fertility in some wealthy countries. The Gender Revolution Theory has emerged as an alternative theory to explain the reversal trends. The theory’s most fundamental contribution to the demographic transition is its application of the gender equity theory (McDonald, 2000, 2009) to explain trends in fertility. That being said, this theory is to be criticized both theoretically and empirically as we discussed earlier. Yet the empirical expectations provided by the theory are clear and easily testable, so future studies will still benefit from

examining the trends in low fertility in Japan while referring to this theoretical framework.

## References

- Atoh, Makoto. 2001. "Very Low Fertility in Japan and Value Change Hypotheses." *Review of Population and Social Policy* 10(1): 1–21.
- Boling, Patricia. 2008. "Demography, Culture, and Policy: Understanding Japan's Low Fertility." *Population and Development Review* 34(2): 307–26.
- Brinton, Mary C., Xiana Bueno, Livia Oláh, and Merete Hellum. 2018. "Postindustrial Fertility Ideals, Intentions, and Gender Inequality: A Comparative Qualitative Analysis: Postindustrial Fertility Ideals, Intentions, and Gender Inequality." *Population and Development Review* 44(2): 281–309.
- Brinton, Mary C., and Eunsil Oh. 2019. "Babies, Work, or Both? Highly Educated Women's Employment and Fertility in East Asia." *American Journal of Sociology* 125(1): 105–40.
- Coleman, David. 2006. "Immigration and Ethnic Change in Low-Fertility Countries: A Third Demographic Transition." *Population and Development Review* 32(3): 401–46.
- Cooke, Lynn Prince. 2009. "Gender Equity and Fertility in Italy and Spain." *Journal of Social Policy* 38(1): 123–140.
- England, Paula. 2010. "The Gender Revolution: Uneven and Stalled." *Gender & Society* 24(2): 149–66.
- Esping-Andersen, Gøsta, and Francesco C. Billari. 2015. "Re-Theorizing Family Demographics." *Population and Development Review* 41(1): 1–31.
- Goldscheider, Frances, Eva Bernhardt, and Trude Lappegård. 2015. "The Gender Revolution: A Framework for Understanding Changing Family and Demographic Behavior." *Population and Development Review* 41(2): 207–39.
- Goldstein, J. R., Sobotka, T., & Jasilioniene, A. (2009). The End of "Lowest-Low" Fertility? *Population and Development Review*, 35(4), 663–699.
- Han, Sinn Won, and Mary C. Brinton. 2022. "Theories of Postindustrial Fertility Decline: An Empirical Examination." *Population and Development Review* 48(2): 303–30.
- Korekawa, Yu. 2013. "Foreign Women's Fertility in Japan: An Analysis by Micro-data of the Japanese Population Census." *Jinko Mondai Kenkyu* (Japanese Journal of Population Problems). 69(4): 86–102. (In Japanese)
- Lesthaeghe, Ron. 2010. "The Unfolding Story of the Second Demographic Transition." *Population and Development Review* 36(2): 211–51.
- McDonald, Peter. 2000. "Gender Equity in Theories of Fertility Transition." *Population and Development Review* 26(3): 427–39.
- McDonald, Peter. 2009. "Explanations of Low Fertility in East Asia: A Comparative Perspective." Pp. 23–39 in *Ultra-low fertility in Pacific Asia: Trends, Causes and Policy Issues*, edited by G. W. Jones, P. T. Straughan, and A. W. M. Chan. Routledge.
- McLanahan, Sara. 2004. "Diverging Destinies: How Children Are Faring Under the Second Demographic Transition." *Demography* 41(4): 607–27.
- Mills, Melinda, Letizia Mencarini, Maria Letizia Tanturri, and Katia Begall. 2008. "Gender Equity and Fertility Intentions in Italy and the Netherlands." *Demographic Research* 18: 1–26.
- Nagase, Nobuko, and Mary C. Brinton. 2017. "The Gender Division of Labor and Second Births: Labor Market Institutions and Fertility in Japan." *Demographic Research* 36: 339–70.
- Osawa, Mari. 1993. *Kigyo Chushin Shakai Wo Koete [Beyond the Firm-Oriented Society]*. Jijitsushinsha (in Japanese).
- Raymo, James M. 2022. "The Second Demographic Transition in Japan: A Review of the Evidence." *China Population and Development Studies*.
- Raymo, James M., Hyunjoon Park, Yu Xie, and Wei-jun Jean Yeung. 2015. "Marriage and Family in East Asia: Continuity and Change." *Annual Review of Sociology* 41(1): 471–92.
- Raymo, James M., Fumiya Uchikoshi, and Shohei Yoda. 2021. "Marriage Intentions, Desires, and Pathways to Later and Less Marriage in Japan." *Demographic Research* 44: 67–98.
- Rindfuss, Ronald R., Karen Benjamin Guzzo, and S. Philip Morgan. 2003. "The Changing Institutional Context of Low Fertility." *Population Research and Policy Review* 22(5/6): 411–38.
- Riley, Nancy E. 1999. "Challenging Demography: Contributions from Feminist Theory." *Sociological Forum* 14(3): 369–97.
- Thornton, Arland. 2001. "The Developmental Paradigm, Reading History Sideways, and Family Change." *Demography* 38(4): 449–465.
- Zaidi, Batool, and S. Philip Morgan. 2017. "The Second Demographic Transition Theory: A Review and Appraisal." *Annual Review of Sociology* 43(1): 473–92. **J.S**

Yoshikuni Ono is a professor of Political Science at Waseda University, a faculty fellow at the Research Institute of Economy, Trade and Industry, and a research director at the Tokyo Foundation for Policy Research. He completed his Ph.D. in political science at the University of Michigan. Before joining Waseda, he held academic positions at Tohoku University and the International University of Japan. His work has appeared in the *American Journal of Political Science*, *Journal of Politics*, *Political Behavior*, *Political Science Research and Methods*, *Public Opinion Quarterly*, and other journals.

Fumiya Uchikoshi is a Ph.D. candidate at the Department of Sociology and Office of Population Research, Princeton University. His research interests include social stratification and family demography. He received his M.A. in Sociology from the University of Tokyo in 2017 and his bachelor's degree from the University of Tokyo in 2015. His work has been published in *Demography*, *Demographic Research*, and *Research in Social Stratification and Mobility*, among other outlets.