

Expanding Tuition Support is Sustainability : Low Fertility Rates and High Tuition Fees in Korea and Japan

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Abstract

In Korea and Japan, fertility rates are very low and the population in the two countries is declining. The causes for low fertility rates are very complex. Under the environments, limited countermeasures can't solve the problem. In Korea and Japan, high tuition fees are one of the factors impacting low fertility rates and declining populations. There needs to be more attention paid to securing stable higher education budgets to alleviate burdensome tuition fees in Korea and Japan. Most of all, higher education policies in Korea and Japan for free higher education must be discussed from the perspective of making their societies sustainable.

1. Problem

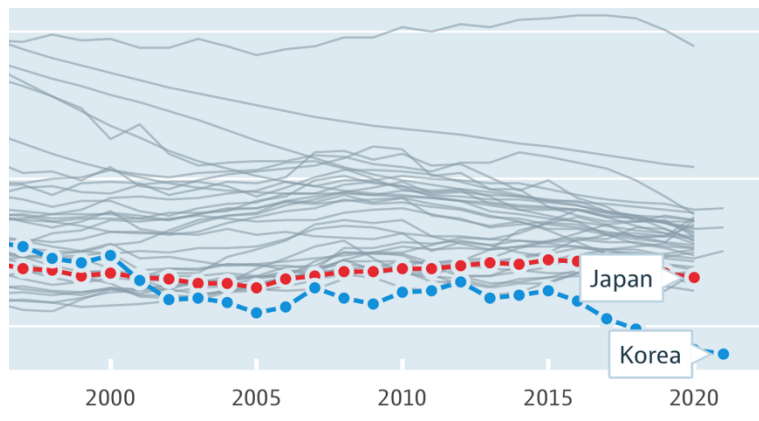
Low fertility is a result of a complex set of social, economic, and cultural factors. One common comparison is between Korea and Japan because they have similar social, economic, and cultural factors, and they both have very low fertility rates.

Figure 1 shows that, in 2021, Korea already had the lowest fertility rate (0.808) in the OECD countries and the second lowest in the world, based on data on expected births per woman. In Seoul, the fertility rate was even lower, at 0.626. In Korea, the proportion of those aged over 65 of the total population is expected to rise from 17.5% in 2022 to 46.4% in 2070, compared to the expected world average at 20.1% in 2070. In 2072, the median age of the world's population will be in their late 30s, but the median age in Korea is expected to exceed 60 years old already in 2060, and 62.2 years old in 2070, compared to 48.9 years old in Europe in 2070. That means the population will increase 29%. In other

words, it is expected that after 50 years, Korea will become the country with the oldest population (Statistics Korea, 2022).

In comparison, the fertility rate in Japan is over 1.0, but still low (1.30). While Korea's population has been declining since 2021, Japan's population has been on the decline since 2008. In 2022, the population over 65 years old was 29.1% of the total population in Japan. This is expected to rise from 29.1% in 2022 to 35.3% in 2040 and 38.4% in 2065 (Ministry of Internal Affairs and Communication, 2022), which means the population of young workers have declined.

Figure 1 Fertility Rate (Japan and Korea)



Source : OECD Website <<https://data.oecd.org/pop/fertility-rates.htm>>

2. Previous Literature

2.1 Causes of Low Fertility

People in Korea and Japan do not want to get married. According to the statistics from the Korean Women's Development Institute, 55.2% of men and 64% of women in Korea answered, “marriage is burdensome,” while in Japan, it was 39.9% and 32.3%, respectively (A group of reporters in The Mainichi Shimbun, 2022). In Korea, the average age of the first marriage was 33.4 years old for men and 30.6 years old for women, and in Japan, that was 31.2 years old for men and 29.6 years old for women (A group of reporters in The Mainichi Shimbun, 2022).

One of the most significant causes of low fertility is academic credentialism. Kim and Choi (2017) pointed out that economic factors and factors related to childcare and education environments are responsible for the low fertility rates. Korean people want their children to graduate from universities, and even prestigious universities, because academic credentialism is prevalent and the labor market environments are also deeply based on that, which acts as a negative macro factor to fertility rates. People who married complain of 'the reality that it is difficult to raise even a single child' for economic reasons, and some of them choose intentionally not to have babies (Kim and Choi, 2017).

According to Bloomberg (2022), another one of the causes of low fertility is a women's social and economic burden. The baby resignation rates are the highest at -11.7%p in Korean and Japan in the world. Korea's share of employed women drops the most in OECD between 25 and 29, and Japan's share of that drops the second at -8.0%p in OECD between the ages. Even more, insecure jobs await women after raising kids. Over 30% of women aged between 55 and 64 get insecure jobs in Korea, which is the highest in the OECD countries. In Japan, approximately 30% of women aged between 55 and 64 get insecure jobs, which is the second highest in the countries (Bloomberg, 2022).

According to a group of reporters in The Mainichi Shimbun (2022), another one of the causes of low fertility is men's economic burden to getting married. When heterosexual couples get married in Korea, men usually have to buy a house for them to live in. They also point out that other factors include the lack of childcare facilities and the low participation rates of men in housework.

To summarize, the causes of the low fertility rates are complex such as women achieving higher levels of education, burdensome housework, conservative family views, the polarization of the labor market, academic credentialism, difficulties in getting a job, and housing costs.

But in Korea, according to the Korea Institute for Health and Social Affairs survey, the biggest reason for low fertility rates is economic instability (40%), while the second biggest reason is the

burden of childcare and education expenses (20%). Economic instability is caused by labor market structures with other factors. In particular, the wage gap between large companies and small and medium sized enterprises (SMEs) is big, with that of SMEs only taking up 60% of that of large companies in Korea. Twenty years ago, it was around 70%, but it has gotten worse (A group of reporters in The Mainichi Shimbun, 2022). Similarly, the rise in the number of irregular workers has made many Japanese economically weak since the 1990s (Matsuda, 2022).

Table 1 Causes of Low Fertility Rate in Japan and Korea

Education	Family	Employment	Policy
Women's increased higher education	women's excessive domestic work(the highest in OECD) Conservative family views	Polarization of labor market structure	Poor childcare services
Educational environment			
Academic credentialism	Housing costs	High unemployment	
Burdensome cost to raise a child			

In a society where academic credentialism is prevalent such as Korea and Japan, the problems of the labor market structures are connected to severe competition for university entrance exams. Therefore, the environments make parents get burdened with private education costs. Especially in Korea, police cars drive students who have the possibility of being late on the day of the university entrance exam, and even planes are banned from taking off and landing during English listening time across the country. Many students are forced to study from early morning, for example, 7 AM, until late night such as 11 PM in their school every day. In regions where the Ordinance of Student Rights has been proclaimed, that 'forced' self-study has been banned, in Seoul since 2011, but in other many regions, especially high school students still have been forced to do the 'self-study' from early mornings to late nights every day. They go to school to study even on vacation. These are not weird things at all in Korea. The past in

their teenagers is not a good memory for many Korean parents, which also may be connected on low fertility rates because their children also have to do that in their teenagers.

2.2 Education Expenses

Of all the causes of low fertility rates, the economic burden of children's education and childcare has been cited as the main cause (World Without Worries about Shadow Education (WWWSE), 2014; Kim and Choi, 2017), while educational attainment and labor market conditions act as macro-constraining factors. Married people complained of the reality that it is difficult to raise even a single child, and some people chose 'intentionally childless'.

According to the results of the 'National Fertility and Family Health Survey' published in 2013 by the Ministry of Health and Welfare and the Korea Institute for Health and Social Affairs, it is estimated that the total cost until one child graduates from university is about 389,644,000 won (approximately 290,893 dollars). In addition, it was found that private education expenses account for the largest share of child support expenses (Kim, Woo, and Choi, 2016).

In another research by Shinhan Bank (2022), Korean families spent about 6,000 dollars in the year 2021 on education for each middle or high school student (Bloomberg, 2022). Many students usually go to private test-prep schools, called Hagwons, to get in prestigious universities.

According to Kim, Woo, and Choi (2016), as a result of examining which factors of education expenses have a more visible effect on the fertility rate in Korea, it was found that tuition fees and private education expenses have the greatest influence on fertility rates. Therefore, it was found that policies to reduce the burden of education expenses can be effective fertility policies including expanding tuition fee support.

When asked about the reason why married childless households between the ages of 20 and 44 responded that they had no intention of having children, 35.9% of them indicated 'I want to live financially affluently', and 25.4% of them indicated 'burdensome childcare and education costs'. It was found that 6 out of 10 people

are reluctant to have children because of economic burden in Korea (Maeil Business Newspaper, 2019).

As a result of a survey by the Korea Institute of Child Care and Education in Korea asking to mothers who have 3-year-old children about whether they want to have children in the future and the reasons why they don't have those plans, 72.7% of the respondents answered, "no plan", and 36.4% responded that it is because of "the burden of education and child-rearing expenses".

In addition, according to the results of a survey on the perception of low fertility rates by the Ministry of Health and Welfare of Korea for 2,000 people, 60.2% of respondents answered that the main cause of the low fertility is "the burden of childcare and education expenses", which tends to increase as they have more children (World Without Worries about Shadow Education (WWWSE), 2014).

These education cost problems seem more severe in Korea than in Japan, but the burden is still heavy in Japan. According to the 2009 White Paper on Education, Culture, Sports, Science and Technology (Special Feature: Educational Standards and Educational Expenditure in Japan), the average costs of education for a household are approximately 10,000,000 yen (approximately 72,265 dollars) to raise their child from public kindergartens to national university, and if all of the educational institutes from kindergarten to university are private, it will be about 23,000,000 yen (approximately 166,255 dollars) (Watanabe, 2022).

2.3 Problems of Prior Research and Policy

According to a study by Kim, Woo, and Choi (2016), university tuition and private education expenses among educational expenses have the greatest impact on fertility rates. It points out that policies to lower education costs can be effective to raise fertility rates, and in particular, the low fertility phenomenon can be alleviated to some extent only when an education policy is implemented to control private education expenses that are a great burden for households (Kim, Woo and Choi, 2016).

However, the result doesn't mean that private education expenses are the only cause of the low fertility rates even though

the proportion of private education expenses is larger than other causes. Therefore, only solving the problems of private education expenses is not effective in decreasing the burden of education expenses. It is because the burden of higher education costs is also heavy for many people in Japan and Korea. Furthermore, the low fertility rates result from complex and various causes. Nevertheless, previous studies have not focused on the burden of higher education costs in relation to low fertility rates, although Kim, Woo, and Choi (2016) mentioned it briefly.

3. Present Policy

3.1 Current Policy on Low Fertility

The total budgets of the ‘4th Basic Plan for Low Fertility and Aging Society’ (‘21~ ‘25) by the Korean Government are 46.7 trillion won and 23 trillion won of that was for the housing budget in 2021. It was only 1.79% of GDP for public expenditure on family policies, such as child allowances and childcare services in Japan in the year 2017, which was 26th out of 37 OECD countries. Even more, it was 2.4% of the GDP for public expenditure on primary and secondary education in Japan in the year 2018, which was 35th out of 37 countries (A group of reporters in The Mainichi Shimbun, 2022). For the past 10 years, Korea and Japan have been preparing countermeasures for the problem of public support policies to try to solve the low fertility rate problems. But it does not seem effective. Korean and Japanese governments need to pay more attention to the impact of the cost of education, and even more, that of higher education.

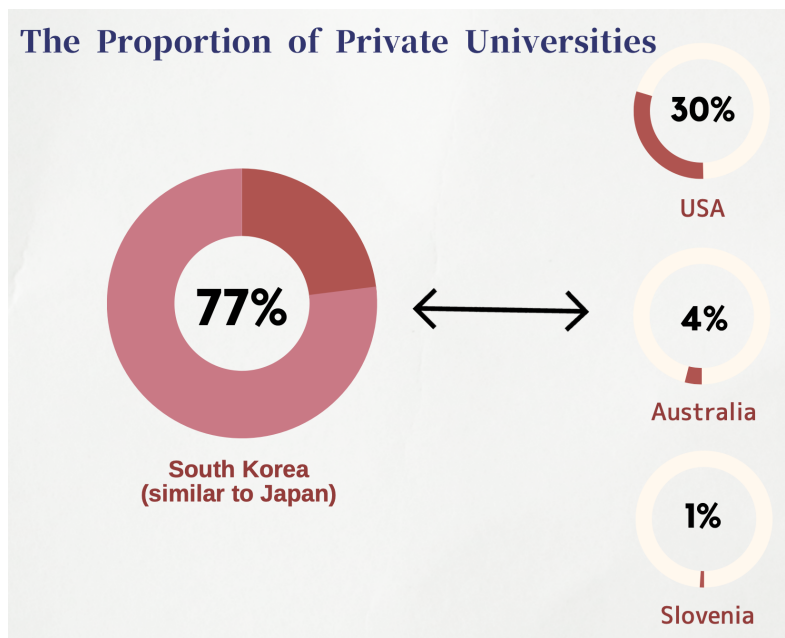
3.2 Why Higher Education Policy?

There are some policies focused on education in the two countries to alleviate these educational expenses, but that is not on higher education specifically. In the two countries, public support policies in education mainly focused on childcare, which are free childcare policies from 2012 in Korea and 2019 in Japan. However, that is not very effective, which is the reason raising children in

Korea and Japan is longer than in western countries (A group of reporters in The Mainichi Shimbun, 2022). Although the governments have implemented the policies, fertility rates are still dwindling in the two countries. Especially in Korea, the average age at first work experience is remarkably late in the world. That was 30.9 years old in 2018, 27.3 years old in 2008, and 25.1 years old in 1998 (Incruit, 2020). That means it is significantly more burdensome for Korean parents to raise their children for around 30 years since their children were born. On the other hand, the period of childcare support policies is only a short portion of the entire period to raise their children until they get a job.

Furthermore, in Korea and Japan, parents usually pay for their children’s tuition fees because the government’s policies are based on the principle that families are responsible for paying tuition fees for their children (‘The beneficiary payment principle’). Even more, the proportion of private universities in Japan and Korea is remarkably high in the world.

Figure 2 The Comparation on Proportion of Private Universities on Each Countries



Adapted from: Korea Higher Education Research Institute, 2021

Figure 2 shows that 76.7% of Japan and 77% of Korea are private universities, whereas, in the United States, Australia, and Slovenia, that is 30%, 4%, and 1% respectively in 2011 (Korea

Higher Education Research Institute, 2021). That means that the majority of students had no choice but to study in private universities, which are more expensive than public universities. Tuition fees of private universities are approximately twice that of public universities in Japan and Korea. Therefore, only implementing childcare policies without free higher education policies cannot be effective in raising fertility rates.

3.3 Change in the Past 10 Years

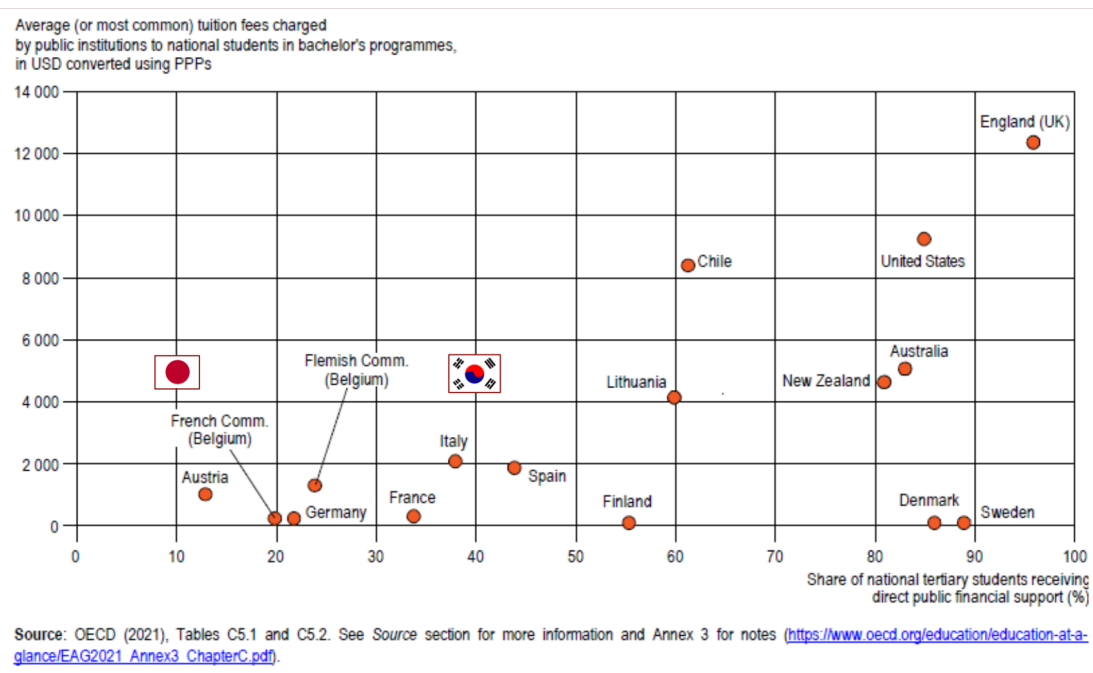
The governments in Japan and Korea must make tuition fees gradually free by Article 13 of the International Covenant on Human Rights A. In particular, it was 10 years ago that the Japanese government withdrew its reservation for the article 13-2(b), (c), in 2012. Nonetheless, the present Japanese government's grant policy (大学等修学支援事業) is limited to low-income classes and have low aid rates at 10-15%. One of the governments' tasks is to expand the support to the middle class (Watanabe, 2022).

On the other hand, in 2011 in Korea, large-scale and continuous movements called the 'half-price tuition fees movements', had taken place to demand expanding tuition fee support across the country for several months. As the result of these movements, there were changes to the government's higher education policies, and many people paid attention to these problems. Since then, the revised policies have continued to expand the tuition fee support policies for about 10 years. In 2012, Korean government started a grant-type national scholarship (국가장학금), expanding it to middle classes, more specifically, until the upper 8 of 10 classes. Scholarship budgets of total higher education budgets was 400 billion won (approximately 304.2 billion dollars) in 2008, but it was expanded to 4300 billion won (approximately 3279 billion dollars) in 2018 (So, 2020).

Even more, from 2022, the tuition fees are free for students after second children in their families with more than 3 children. The total average of tuition fees has been approximately halved, and aid rates have decreased 40% (Watanabe, 2022).

However, in Japan and Korea, the costs of higher education are still high, and the support policies are limited enough to be classified as ‘high tuition fees-low support by scholarships’ in OECD countries (Watanabe, 2022; Tago (Yoon), 2022a, 2022b). Most of all, high tuition fees have not decreased (Tago (Yoon), 2022b).

Figure 3 Japan and Korea are classified as 'high tuition fees and low supports by scholarships'



Source: Watanabe, 2022(2)

According to **Figure 3**, ‘Tables C5.2 and C5.2’ by OECD (2021), Japan and Korea are ‘high tuition fee-low support’ countries, even in 2021. However, the figure does not include the data on private university tuition fees, and as written above, in Japan and Korea, private universities account for approximately 80% in contrast with other countries, which have tuition fees that are about double that of national universities. Therefore, combining the data of private universities, Japan and Korea will move up more, and then it will become clearer that the two countries are classified as ‘high tuition fee-low supports’ countries.

Table 2 Percentage of Tuition Fee for Annual Income of Household by 10 Income Level in Korea (Won, %)

Year / Level	1989		2008		2020		2020	
	Income	Percentage	Income	Percentage	Income	Percentage	Disposable Income	Percentage
Average	9,659,256	15	46,510,548	17.9	64,393,269	12.7	51,854,835	15.7
1 level	3,033,396	47.8	12,682,242	65.6	13,572,309	60.1	11,053,296	73.7
2 level	4,839,156	30	21,291,978	39.1	27,047,772	30.1	22,827,486	35.7
3 level	5,831,148	24.9	26,992,206	30.8	36,651,297	22.2	30,693,399	26.6
4 level	6,734,484	21.5	32,443,830	25.6	44,521,104	18.3	37,124,037	22.0
5 level	7,656,672	19	37,633,206	22.1	52,767,345	15.4	43,088,310	18.9
6 level	8,677,164	16.7	43,153,608	19.3	61,304,226	13.3	50,233,194	16.2
7 level	9,946,764	14.6	49,389,252	16.8	70,758,720	11.5	57,344,490	14.2
8 level	11,648,316	12.5	57,602,832	14.4	82,852,920	9.8	66,609,000	12.2
9 level	14,459,136	10	71,131,896	11.7	101,106,525	8.1	80,605,737	10.1
10 level	23,748,576	6.1	112,726,602	7.4	152,965,518	5.3	118,673,634	6.9

* Annual income of households by 10 income levels = Average monthly income of households by 10 income levels × 12 (months)

*: Tuition fees = Average amounts of engineering courses tuition of four-year private universities

(In 1989: 1,451,000 Won, In 2008: 8,316,000 Won, In 2020: 8,150,583 Won)

Source1 (in 1989, 2008): Korea Higher Education Research Institute,

「『대학등록금 경감 방안』에 대한 정책 연구」 『2008 국정감사 정책 자료집④』 (안민석 의원실), 2008.10.

Source2 (in 2020): Written by Taisuke TAGO (Taewoo YOON) based on following

국가통계포털 (www.kosis.kr)

Household survey (over two people in city) average monthly income and expenditure of households by income levels (1/4-4/4 in 2020).

대학알리미 (<https://www.academyinfo.go.kr>)

Source: Tago (Yoon), 2022c

Tuition fees in Japan and Korea are expensive. **Table 2** shows the percentages of engineering courses' tuition fees for an annual income of households by 10 income levels in Korea. During the past 10 years, the rates have declined overall in all income levels. That is because it has been difficult for universities to increase tuition fees for the past 10 years by the government's regulations. Regardless of that, it is still high. Tuition fees are over 60% of the annual income of the lowest household. Even more, tuition fees account for 73.7% of the annual disposable income of the lowest household. Even more, students must pass conditions to get national scholarships such as specific GPA scores, and over approximately 20% students of overall applicants have been rejected to get the scholarship for the condition (Tago (Yoon), 2022c).

Furthermore, in Korea, it is common to study in universities after graduating from high school. In 2004, over 80% of students graduating from high schools pass the university enrollment tests. In 2011, 72.5% of them enrolled in upper education institutes, which is the oldest statistics about the subject, and in 2021, 73.7%

of them enrolled upper education institutes. In Korea, it used to be considered unusual not to enroll in upper education institutes after graduating high school, which led 'Asunaro', a rights advocacy group for teenagers, to implement movements to boycott enrollment in universities. They have argued that not to enrolling in a university should not be unusual, and that it should be considered just as a choice. However, the prevailing negative attitudes towards choosing not to enroll in an university have caused many people in Korea to enroll in universities and pay tuition fees in any way, even though tuition fees may be too burdensome. As the result, it seems that many people may give up having babies because they know it is hard for them to pay for high educational expenses.

3.4 COVID-19 Pandemic and the Exposed Problem

During the COVID-19 pandemic, university students have complained about high tuition fees in Japan and Korea. In the two countries, there were student movements demanding refunds of tuition fees (Jung, 2020; Mitsumoto, 2021). As a result, these problems have been discussed in the mass media and National Assembly in Japan (Watanabe, 2021) as well as in Korea.

In Korea, constitutional complaints and lawsuits against the Ministry of Education as well as universities have demanded them to refund and reduce tuition fees (Jung, 2020; Tago (Yoon) 2022b). This is not only because the quality of education services were poor compared to the amount paid during the COVID-19 pandemic, but also because of the economic burden of excessively expensive tuition fees, declining household income, and lack of part-time jobs during the COVID-19 pandemic.

On “Everytime”, the most popular online community for university students in Korea, there were some posts by university students leaving school due to economic reasons during the COVID-19 pandemic in 2020, although it is not clear how many students have actually left their universities for that reason during the pandemic.

This problem regarding high tuition fees not only occurred in Korea but also in Japan, both of which are classified as countries

with insufficient support systems, such as scholarships as well as high tuition fees in the world (Watanabe, 2021). According to a survey by the Japanese student group 'FREE', a number of students were considering dropping out or taking a leave of absence due to the decreasing number of part-time jobs or economic difficulties during COVID-19 (The Japan Times, 2020). In 2020, one in every 13 university students in Japan was considering leaving school for economic reasons in the COVID-19 pandemic (The Japan Times, 2020).

This means, due to the COVID-19 pandemic, the existing tuition fees problem has been worsened in Korea and Japan. This is because dissatisfaction with the existing tuition fees exploded as economic difficulties become deepened during the COVID-19 pandemic. However, even after the COVID-19 situation, the problem of high tuition fees will remain. In these environments, fertility rates likely continue to decline (Watanabe, 2022).

4. Conclusion

Many people in Korea and Japan do not want to have and cannot have children, and there are gaps between desired and actual fertility. Current policies try to encourage even people who do not want to have children at all to have children. Instead of this approach, current policies should create an environment where people who want to have children can have as many children as they want (A group of reporters in The Mainichi Shimbun, 2022). It is necessary to create an environment in which the costs of higher education are not a burden or does not discourage people from giving birth. Especially in Korea, paying for children's higher education is considered a fundamental part of raising children, and also in Japan, the rate of enrolling in university is getting high.

Tuition fees in South Korea and Japan are a burden for families, mainly parents, but it also results in those who take out loans to pay tuition fees, giving up or postponing marriage and having babies (Yonhap news, 2017). As written above, in Korea, starting

in 2022, tuition fees for children after the third child is free. But it needs to be expanded for the first and second children. Another challenge is that the government and society need to gain people's trust that the government will keep the policies for at least 20 years when their children enroll in universities.

However, the current financial situation for higher education in Korea, as well as in Japan, is unstable because the budget is decided every year, although the Korean government has expanded remarkably the budgets of national scholarships to support students, in contrast with the Japanese government, during the past 10 years. When the budgets are secured stably, people can trust that the policies will continue until when their children study in universities, and even more, that the society and government will be a safety net for them to protect their life and guarantee their human rights.

In Korea, there have been discussions to enact a bill, called the 'Higher Education Financial Grant Act', for over 18 years, which allocates a certain rate of domestic tax to higher education finance, so the scale of scholarships can be expanded more, and even more, tuition fees can be free (Tago (Yoon), 2022a). But the budget is 7-10% of the national tax which is 1.0-1.33% of the GDP in a year. The budget is approximately 8.8558 trillion won (approximately 6.719 billion dollars) annually, which is similar to the average budget for higher education in OECD countries (National Assembly Budget Office, 2021; Tago (Yoon), 2022a). For that reason, the bill has met opposition and has never been passed (Tago (Yoon), 2022a). It is necessary to research more on how to reduce the burden of tuition fees and to stably secure the finances for higher education. Most of all, people in Japan and Korea need to discuss the problem from the perspective of raising fertility rates in order to make their societies sustainable.

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