

emphasizes the mother's supreme role of childrearing.

Table 3. Pronatal Policy Interventions in Japan

Year	Policy Measures
1991	Government's Guideline "Toward Satisfactory Conditions for Healthy Childbearing" Amendments to Child Allowance Law Childcare Leave Law
1994	Angel Plan (1994~1999) Amendments to Childcare Leave Law
1997	Amendments to Child Welfare Law
1999	New Angel Plan (1999~2004)
2000	Amendments to Childcare Leave Law Amendments to Child Allowance Law
2002	Ministry of Health "Measures for Decreasing Children Plus One"
2003	Law for Measures to Support the Development of the Next Generation Law for Measures to Cope with Decreasing Children Society Amendment to Child Allowance Law
2004	Support Plan for Parents and Children (2004~2009)
2006	New Policy to Cope with Low Fertility
2007	Important Strategy to Support Children and the Family

The Next Generation Law, enacted in July 2003, required local governments and large companies to submit their own programs to foster new generations. At the same time, the Law for Measures to Cope with Decreasing Children Society ordered the Cabinet Office to prepare new measures to prevent further rapid decline in fertility. An expansion of the child allowance, to cover children in the third grade of primary school, was enforced in April 2004.

In December 2004, the government declared the Support Plan for Parents and Children (New-New Angel Plan) for the period between 2004 and 2009. The document emphasized the role of local governments and companies in providing childcare supports and improving gender equity. In addition, the document pointed out the importance of economic independence of the youth. From fiscal year 2006, the child allowance was expanded again to cover children in the sixth grade of elementary school. In addition, the Support Plan for Mothers' Reentry to Labor Market was implemented. The plan includes such measures as starting a course at vocational schools for mothers reentering the work force, helping mothers who attempt to start businesses, and running "Mothers' Hello Works" for job-seeking mothers.

In June, 2006, the government announced the New Policy to Cope with Low Fertility. The monthly cash benefit of the child allowance was raised from 5,000 yen to 10,000 until the third birthday of a child. However, Japan's child allowance is still means-tested, and approximately 15% of children were eliminated in 2003 because of their parents' high income (Suzuki 2006, p. 10). The cash benefit during childcare leave was raised from 40% to 50% of wages. According to the Basic Survey of Employment Management of Women in 2005, 72.3% of eligible female workers actually took the leave. The ratio of the number of leave-takers to annual births in 2005 was 11.1% (Suzuki 2007, p. 21).

The Important Strategy to Support Children and the Family in 2007 focused on the issue of compatibility between work and the family and aimed at the materialization of the "work-life balance." The agreed Work-Life Balance Charter proposed to raise the

employment rate and productivity while reducing the number of temporary workers, to shorten working hours while seeking better family life, and to improve flexibility and gender equity in workplaces.

5-2. Evaluation and Orientation of Pronatal Policy

Most of the developed countries except for the United States are suffering from below-replacement fertility. It seems that a consensus is emerging that a well-developed country cannot reproduce itself (Caldwell 2006, p. 373). Even so, very low or lowest-low fertility is not acceptable. The governmental task for countries experiencing such fertility is to reduce the difference from Northern/Western Europe and English speaking countries and to secure moderately low fertility, if not the replacement level.

Japan has been adopting and extending policy measures to cope with low fertility. However, those efforts have not been successful in preventing fertility decline. Although the TFR started rising after 2005, it seems to be a result of the good economy rather than pronatal interventions. The experience of Eastern European socialist countries in the 1960s and 1970s shows that massive transfers of the national budget, amounting to around 10%, could induce a significant fertility recovery (Caldwell 2006, p. 340). However, such a magnificent budget allocation is impossible in today's capitalist country under the new market economy, especially as Japan has recently chosen a very neo-liberalistic course aiming at a small government under the leadership of Prime Minister Junichiro Koizumi (2001-06). Thus, it is very unlikely that Japan can allocate budget for a pronatal policy as large as France's today, not to mention that of Eastern Europe in the 1960s.

Even though an immediate effect cannot be expected, governments of extremely low fertility countries such as Japan should sustain pronatal policy to delay fertility decline and to narrow the difference between themselves and moderately low fertility countries. For a governmental effort to be successful in the very long run, it should match the direction of long-term changes that have been taking place in the developed world. Even though the difference in gender equity between different cultures has long historical roots, efforts should be paid to improve the equity, especially within family. Gender education in schools, if not too radical, may gradually change the attitudes of young men and women. There should be clear opposition against the so-called three-year-old myth that says a mother's working is harmful to the development of her very young child. Efforts must be sustained to improve the compatibility and family-friendliness of workplaces. The Work-Life Balance Charter declared in 2007 was an attempt in this area. The clear and simple message that society will support childrearing is required. A reduction in financial supports such as child allowances and baby bonuses could have a serious negative impact on such a message.

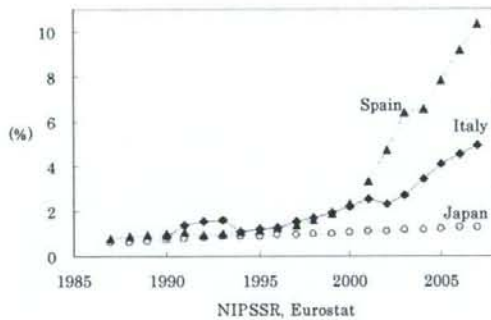
Assuming that the long term trend of value changes is toward secularization and individualization, it is doubtful that an approach emphasizing traditional family values can be successful in the long run. Therefore, emphasizing or restoring traditional family values is unlikely to induce fertility recovery to the moderately low level. There is a widespread

feeling that it is not the government's role to define the desirable type of family or individual lifestyles (Caldwell 2006, p. 333). In Japan, a 1999 governmental campaign stating, "A man who does not participate in childcare cannot be called a father," caused more opposition than support, under the conditions of long working hours and work environments unfriendly to the family. The Japanese government has been very careful recently not to be seen as forceful and interfering with individuals' autonomy. Although "Plans to Support Children and Childrearing (New-New Angel Plan)" announced in 2004 has a chapter entitled "Understanding Value of Life and Role of the Family," the chapter is very brief and avoids offending those who stay single or childless.

The natural response to social forces in postmodern society seems to be a decline in marriage and a shift to extramarital births. As shown in Figure 18, the direction of change is apparent even though the tempo is extremely slow in Japan. Thus, an effort to raise nuptiality may not help Japan to converge with the Northern European family pattern and moderately low fertility. Though a government should not attempt to increase extramarital births by encouraging welfare mothers, a government also should not devote itself to an effort that has questionable effects in the long run.

5-3. Transition to Immigration Policy

Figure 20. Proportion of Foreign Population



For a country with very low or lowest-low fertility, the problems of population aging and population decline will have very severe impacts. Because the number of elderly people keeps growing while that of workers keeps decreasing, a continuous increase in the tax rate will be required. Wage inflation caused by a labor shortage would cause economic confusion. A shortage of young workers would reduce the dynamism of the economy

and rob it of its competitiveness (McDonald 2008, pp. 19–20). Since Japan has little hope to achieve moderately low fertility soon, it is likely to face such problems. Thus, the eventual transition to an immigration country seems to be inevitable. As in shown Figure 20, the change in Japan in terms of international migration has been as slow as that of extramarital births. The population with foreign citizenship was only 1.3% in 2007, compared with 5.0% in Italy and 10.4% in Spain.

Japan has been reluctant to accept unskilled foreign workers. While Taiwan launched a guest worker program in 1992 and Korea in 2004, Japanese companies can employ unskilled foreign workers only through the Industrial Trainee Program. The official purpose of the program is to transmit industrial technology, even though many companies utilize it to cope

with the labor shortage. A foreign worker on this program can stay in Japan up to three years: one year as a trainee and two years as a technical intern. The registered number of trainees grew from 39,067 in 2002 to 70,519 in 2006, as shown in Table 4. This illustrates the scale of the growing demand for unskilled workers and the need for a new immigration policy.

The number of registered foreign employees was 178,781 in 2006, which did not change significantly from 179,639 in 2002. The figure includes experts such as professors, instructors, engineers, entertainers, etc. However, the majority of foreign workers are permanent or long-term residents without restrictions on labor participation. As in Table 4, such residents account for more than 50% of registered foreigners in Japan. A large proportion of these residents are Koreans and Chinese that came to Japan before World War II. Another proportion is the descendants of the Japanese who immigrated to Brazil, Peru and The Philippines. These descendants came to Japan after 1990 when the reformation of the immigration law enabled long-term residence for them. It is estimated that more than 300,000 Japanese descendants entered Japan after 1990 and worked as unskilled laborers. In 2006, however, the law was reformed again to limit the entrance of these Japanese descendants by requiring certification of no criminal record. In addition, fewer Japanese Brazilians appear interested in migrating to Japan recently, because of the good economy in their home country.

Table 4. Registered Foreigners by Status in Japan

	2002	2003	2004	2005	2006
Employee	179,639	185,556	192,124	180,465	178,781
Trainee	39,067	44,464	54,317	54,107	70,519
Student	157,613	176,070	173,081	157,715	168,510
Long-term & Permanent Residents	957,226	988,110	1,029,317	1,067,352	1,106,357
Family of Japanese or Parmanent Residents	362,370	352,832	348,628	356,777	365,196
Other	155,843	148,622	157,116	174,403	174,395
Total	1,851,758	1,895,654	1,954,583	1,990,819	2,063,758
	2002	2003	2004	2005	2006
Employee	9.7	9.8	9.8	9.1	8.7
Trainee	2.1	2.3	2.8	2.7	3.4
Student	8.5	9.3	8.9	7.9	8.2
Long-term & Permanent Residents	51.7	52.1	52.7	53.6	53.6
Family of Japanese or Parmanent Residents	19.6	18.6	17.8	17.9	17.7
Other	8.4	7.8	8.0	8.8	8.5
Total	100.0	100.0	100.0	100.0	100.0

Ministry of Justice

This year witnessed some changes in Japan toward an immigration country. Indonesian care workers and nurses arrived at Japan under the economic partnership agreement between the two governments. Japan plans to accept such experts also from the Philippines. A governmental party group proposed accepting 10 million foreign workers,

10% of the total population, in the coming 50 years. This shows a sharp contrast with the earlier proposal made by a governmental project team in 2006, that the proportion of immigrants should be up to 3% and unskilled workers are not acceptable. The debate may continue and it may take time to reach a consensus. However, considering the extremely low fertility rate in Eastern Asia, it is likely that Japan will need to compete with Korea, Taiwan and Singapore in recruiting immigrant workers in the near future. In this respect, Japan is least prepared among advanced Eastern Asian countries.

Conclusion

Unlike Southern European countries, Japan has still not witnessed any demographic surprises, such as a delayed second demographic transition or replacement migrations. Considering how these aspects occur so gradually, such emergent changes may not take place in Japan for decades. Even if the Japanese government decides to accept unskilled foreign workers, it is questionable whether the potential immigrants would choose Japan as their destination. Considering that almost all developed countries cannot reproduce their populations and that low fertility may spread in Eastern and South-Eastern Asia, the competitiveness of Japan as a host country might not be as high as expected. Therefore, it is likely that Japan will experience long-term population decline. In such a case, Japan will face challenges in terms of how to sustain wealth and happiness under the shrinking population.

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Fertility Decline and Governmental Interventions in Eastern Asian Advanced Countries

Toru Suzuki

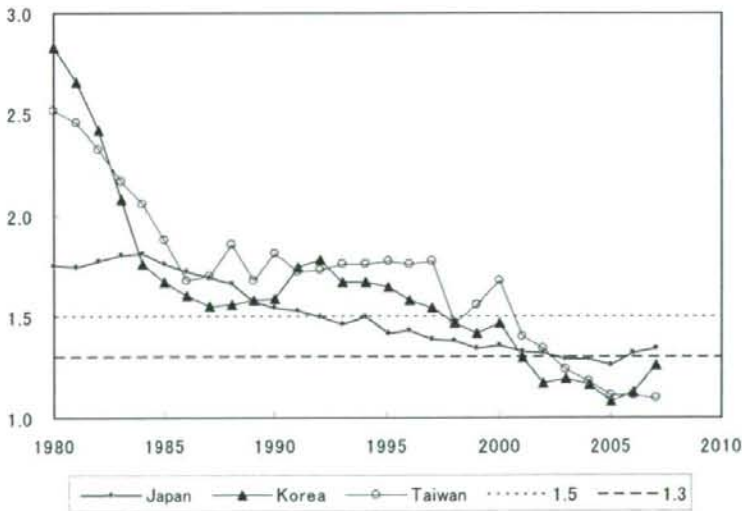
National Institute of Population and Social Security Research, Tokyo, Japan

Introduction

This paper is prepared as a long introduction to papers presented by Dr. Lee Sam-Sik on the Republic of Korea (simply "Korea" henceforth) and Professor Lee Meilin on the Republic of China (simply "Taiwan" henceforth). Both papers include detailed description of fertility decline and its determinants and governmental responses. This paper firstly compares fertility decline in three countries. Secondary, a methodological problem is pointed out concerning the role of nuptiality decline. Thirdly, socioeconomic and cultural determinants of low fertility will be discussed. Lastly, governmental response to extremely low fertility in three countries will be compared. This work was supported by the Scientific Grant of Ministry of Health, Labour and Welfare of Japan.

1. Fertility Decline in Eastern Asia after 2000

Figure 1. Total Fertility Rate



After the first fertility transition in the 1950s, the TFR of Japan fluctuated around the replacement level until the mid 1970s. The TFR started declining again in the late 1970s and, as shown in Figure 1, arrived at the line of 1.5 in 1992. The line

was chosen by McDonald (2005; 2008) to refer to “very low fertility.” Japan’s TFR declined further and crossed the line of 1.3 in 2003. Kohler et al. (2002) chose the line of 1.3 to define “lowest-low fertility,” which appeared in Europe in the 1990s. As in papers by Lee Sam-Sik and Lee Meilin, the TFR of Korea and Taiwan arrived at the replacement level in 1983 and 1984, respectively. Both countries crossed the line of 1.5 in 1998, though Taiwan temporarily escaped from very low fertility in 1999 and 2000. Three countries showed slight baby boom in 2000 and figures were 1.36 in Japan, 1.47 in Korea and 1.68 in Taiwan. While Japan sustained the slow pace of fertility decline after 2000, the acceleration in other two countries was outrageous. Korea arrived at the line of 1.3 as early as in 2001, followed by Japan and Taiwan in 2003. The figures in 2007 are 1.34 in Japan, 1.26 in Korea and 1.10 in Taiwan. Although Japan escaped from the threshold of 1.3, it is questionable if it is possible to retrieve moderately low fertility of 1.5 or more in the near future.

2. The Role of Nuptiality

Unlike in Europe and Northern America where extramarital births account for considerable part of fertility, such condition does not hold in Eastern Asia. The proportion of extramarital births in 2006 was 2.1% in Japan, 1.5% in Korea and 4.2% in Taiwan. Thus, fertility decline can be decomposed to nuptiality decline and the decline in marital fertility.

Although both Lee Sam-Sik and Lee Meilin rely on AMFRs (Age-specific Marital Fertility Rates), the method is erroneous (Hirosima, 2001; Kaneko, 2004). Let x be the current age, a be the age at first marriage, and $y = x - a$ be the marital duration. It is assumed that there is no divorce, remarriage or death during the childbearing age. Thus, the term “marriage” always means first marriage and there is no marital status other than “single” and “(currently) married”. The ordinary age-specific fertility rate $f(x)$ can be expressed as follows.

$$f(x) = \int_0^x n(a)m(a, x-a) da, \quad (2-1)$$

The denominator of AMFRs is the proportion married and is written $N(x)$.

$$N(x) = \int_0^x n(a) da. \quad (2-2)$$

The AMFR at age x is defined as the ratio of fertility to the proportion married.

$$AMFR(x) = \frac{f(x)}{N(x)} = \frac{\int_0^x n(a)m(a, x-a) da}{\int_0^x n(a) da} \quad (2-3)$$

As far as the marital fertility is a function of marriage duration, dividing with $N(x)$ does not help. The ratio is theoretically valid only in the pre-industrial setting where no intentional birth control is made and the marital fertility is a function of age. If $m(a, x-a)$ in (3) is replaced with $m(x)$,

$$AMFR(x) = \frac{\int_0^x n(a)m(x) da}{\int_0^x n(a) da} = \frac{m(x) \int_0^x n(a) da}{\int_0^x n(a) da} = m(x). \quad (2-4)$$

In this case, the age-specific fertility rate is the product of the proportion married and marital fertility rate. However, when the marital fertility is a function of marriage duration as well as of the age at marriage, the ratio is not meaningful.

Decomposition analysis does not always fail, even though AMFRs are not theoretically valid. In the following, ΔTFR is the total change, ΔTFR_n is the change due to the marriage behavior, and ΔTFR_m is that due to the childbearing behavior of a married couple. It can be shown that age-shift in marriage causes a serious problem that other types of changes do not suffer.

$$\Delta TFR = TFR_2 - TFR_1 = \int_0^\infty \{f_2(x) - f_1(x)\} dx, \quad (2-5a)$$

$$\Delta TFR_n = \int_0^\infty \{N_2(x) - N_1(x)\} \cdot \frac{1}{2} \left\{ \frac{f_2(x)}{N_2(x)} + \frac{f_1(x)}{N_1(x)} \right\} dx, \quad (2-5b)$$

$$\Delta TFR_m = \int_0^\infty \left\{ \frac{f_2(x)}{N_2(x)} - \frac{f_1(x)}{N_1(x)} \right\} \cdot \frac{1}{2} \{N_2(x) + N_1(x)\} dx. \quad (2-5c)$$

Case 1. Age-neutral nuptiality change: Assume that all the age-specific marriage rates are multiplied with a constant c . Thus, $n(a)$ turns to be $c n(a)$. By (2-1) and (2-2), new age-specific fertility rate and the proportion married will be $c f(a)$ and $c N(a)$, respectively. Then, there is no change in age-specific marital fertility rates. The decomposition shows correctly that the nuptiality change caused the fertility change in its entity.

$$\Delta TFR_n = \int_0^\infty \{c N(x) - N(x)\} \cdot \frac{1}{2} \left\{ \frac{f(x)}{N(x)} + \frac{f(x)}{N(x)} \right\} dx$$

$$= (c-1) \int_a^b f(x) dx = TFR_1 - TFR_2,$$

$$\Delta TFR_m = \int_0^{\infty} \left\{ \frac{f(x)}{N(x)} - \frac{f(x)}{N(x)} \right\} \cdot \frac{1}{2} \{cN(x) + N(x)\} dx = 0.$$

Case 2. Duration-neutral marital fertility change: Assume that all the marital fertility rates are multiplied with a constant c . Thus, $m(a,y)$ is replaced with $c m(a,y)$. By (2-1), new age-specific fertility rate will be $c f(x)$. There is no change in the proportion married. Then, age-specific marital fertility rates will be multiplied with c . The decomposition shows correctly that the marital fertility change caused the fertility change in its entirety.

$$\Delta TFR_n = \int_0^{\infty} \{N(x) - N(x)\} \cdot \frac{1}{2} \left\{ c \frac{f(x)}{N(x)} + \frac{f(x)}{N(x)} \right\} dx = 0,$$

$$\begin{aligned} \Delta TFR_m &= \int_0^{\infty} \left\{ c \frac{f(x)}{N(x)} - \frac{f(x)}{N(x)} \right\} \cdot \frac{1}{2} \{N(x) + N(x)\} dx \\ &= (c-1) \int_0^{\infty} f(x) dx = TFR_1 - TFR_2. \end{aligned}$$

Case 3. Tempo change in marital fertility: Assume that marital fertility rates are uniformly shifted by h . Thus, $m(a,y)$ becomes $m(a,y-h)$ and there is no birth for h years after marriage. By (2-1), new age-specific fertility rate will also be shifted by h . There is no change in the TFR, because the whole fertility schedule is shifted while the quantum is kept constant. The decomposition shows correctly that both effects are null.

$$\Delta TFR_n = \int_0^{\infty} \{N(x) - N(x)\} \cdot \frac{1}{2} \left\{ \frac{f(x-h)}{N(x)} + \frac{f(x)}{N(x)} \right\} dx = 0,$$

$$\begin{aligned} \Delta TFR_m &= \int_0^{\infty} \left\{ \frac{f(x-h)}{N(x)} - \frac{f(x)}{N(x)} \right\} \cdot \frac{1}{2} \{N(x) + N(x)\} dx \\ &= \int_0^{\infty} f(x-h) dx - \int_0^{\infty} f(x) dx = 0. \end{aligned}$$

Case 4. Tempo change in marriage: Unfortunately, age-shift in marriage does not produce such a nice result even when the change is an ideal shift without a change in quantum. Assume that age-specific marriage rates are uniformly shifted by h . Thus, $n(a)$ is replaced by $n(a-h)$. New age-specific fertility rate and the proportion married are,

$$f_2(x) = \int_0^x n(a-h) m(a, x-a) da,$$

$$N_2(x) = \int_0^x n(a-h) da = \int_0^{x-h} n(a) da = N(x-h).$$

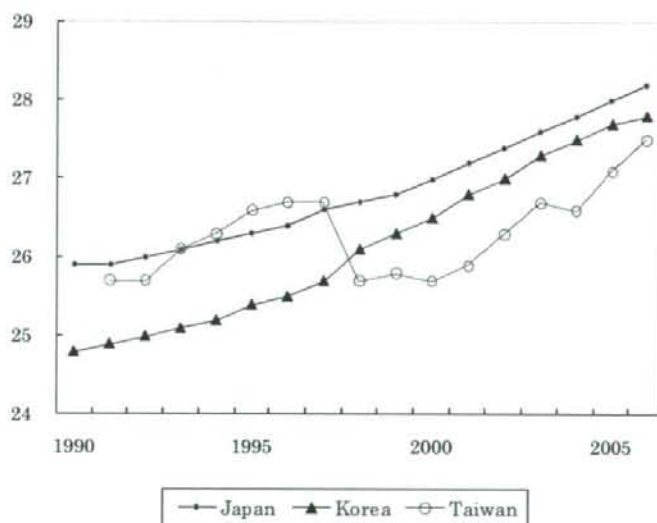
Since there is no change in marital fertility, ΔTFR_m should be zero. However, such a correct result can rarely be obtained. Thus, the use of AMFRs should be avoided whenever there is a change in the timing of marriage.

$$\Delta TFR_m = \frac{1}{2} \Delta TFR + \frac{1}{2} \left\{ \int_0^\infty n(a-h) M^+(a) da - \int_a^{\beta+h} n(a) M^-(a) da \right\},$$

where, $M^+(a) = \int_0^\infty \frac{N(x)}{N(x-h)} m(a, x-a) dx,$

$$M^-(a) = \int_0^\infty \frac{N(x-h)}{N(x)} m(a, x-a) dx.$$

Figure 2. Mean Age of Women at First Marriage



As shown in Figure 2, there has been a secular trend of delay in marriage in three countries. In such a case, the proportion of newly-wed wives rises in older ages. Then, AMFRs in these ages can rise even when genuine marital fertility declines. This implies that the decomposition using AMFRs can underestimate the role of marital fertility. According to a study cited by Lee SamSik, 195% of fertility decline between 1990 and 1999 in Korea was explained by nuptiality decline. Lee Meilin also

referred to literatures asserting that marital fertility rose and did not contribute to fertility decline in Taiwan since the late 1980s. Such assertion was made also in Japan until the mid 1990s (Atoh, 1992, p. 51; Kono, 1995, pp. 67-71; Tsuya and Mason, 1995, pp. 147-148; NIPSSR, 1997, p.10). However, more sophisticated methods than that depends on AMFRs have been showing that nuptiality decline does not explain fertility decline in its entity. Table 1 summarizes results of these studies. As a whole, nuptiality decline explains between 35% and 75% of the TFR decline, depending on the period in question. Thus, it is safe to say that both nuptiality and marital fertility have contributed to the recent fertility decline in Japan, and their relative importance varies over time.

Table 1. Contribution of Nuptiality in Fertility Decline

Literature	Period	Contribution of Nuptiality
Hirosima (1999)	1974~1997	40%
Hirosima (2000)	1970~2000	70%
Iwasawa (2002)	1970~2000	70%
Kaneko (2004)	1980~2000	74%
Suzuki (2005)	1990~2002	37%
Ogawa (2006)	1972~2000	52%

Figure 3. Proportion of Currently Married Women in 2005

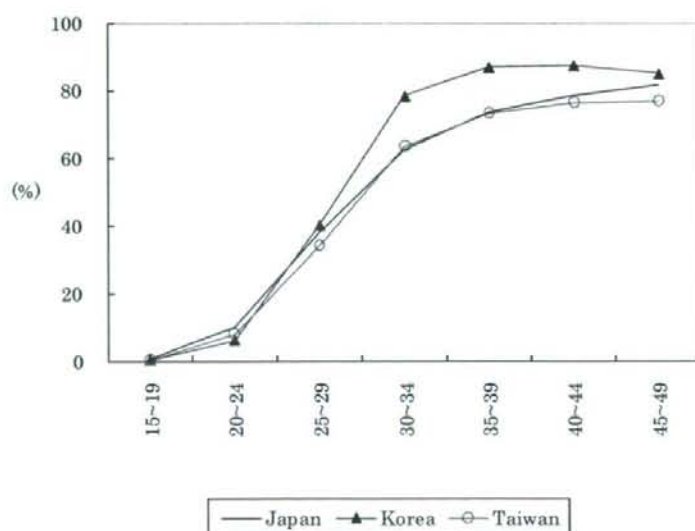
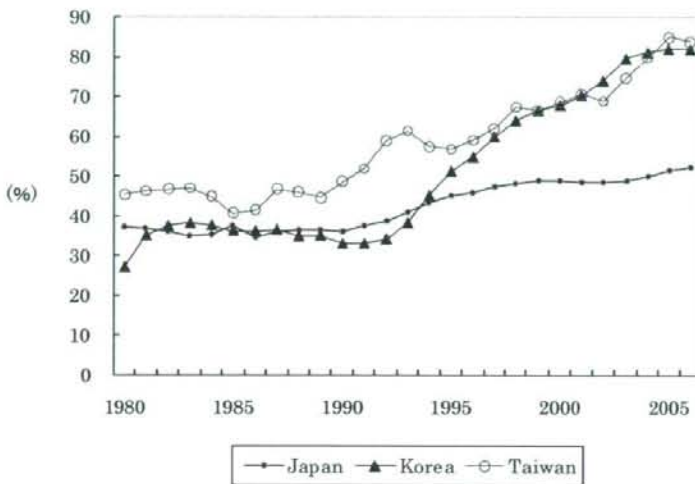


Figure 3 shows the proportion of currently married women in 2005. Although Korea showed lowest proportion up to age 25 reflecting the recent rapid nuptiality decline, the proportion was highest at age 25 and older. Thus, Korea had the most advantageous marriage pattern for fertility at that time. However, the TFR of Korea

was 1.08 in 2005, the lowest among three countries. This implies that marital fertility in Korea was extremely low in 2005. Although Lee Sam-Sik asserts that approximately a half of fertility decline between 2000 and 2004 can be attributed to marital fertility, this conclusion could be underestimation due to the deficiency of AMFRs. Suzuki (2008) used parity progression measures and concluded that two thirds of fertility decline between 2000 and 2005 in Korea can be attributed to the decline in marital fertility.

3. Determinants

Figure 4. College Enrollment Rate



Both Lee Sam-Sik and Lee Meilin refer to higher educational attainment in younger cohorts. Figure 4 shows the trend of college enrollment in three countries. Although the rate has been increasing in all countries, the rise in the 1990s in Korea is especially impressive. This caused social concern on educational cost in Korea and the governmental intervention reflected such concern. Arita (2006) pointed out three characteristics of extraordinary educational fever in Korea; its strength is apparent in higher private educational cost than other countries that Korean parents pay; it is continuous in the sense that no cooling down can be observed; it is universal in the sense that all social strata are caught in the fever.

Lee Sam-Sik mentions the economic instability and uncertainty of Korean young workers. Figure 5 shows the trend in unemployment rates of young men and women. Only Japan shows the recent improvement since 2002 or 2003 reflecting the recovery from economic recession. Such good economy in Japan could be the main reason of the recent fertility recovery and escape from the lowest-low level. However, the effect of good economy will disappear soon due to the global recession started in the United

States.

Figure 5a. Male Unemployment Rate at Age 20-29

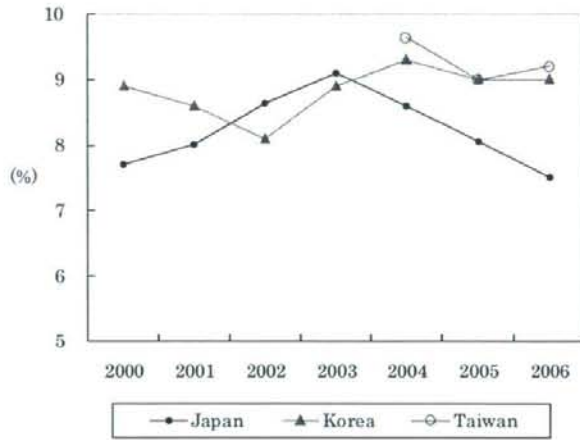
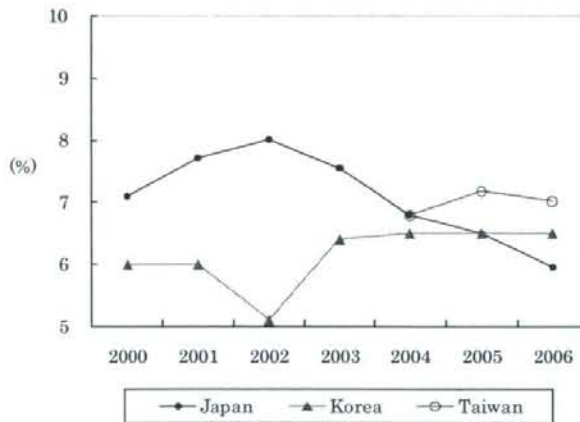


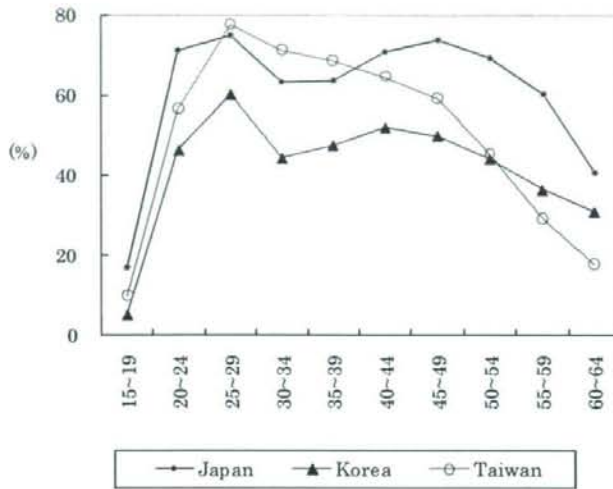
Figure 5b. Female Unemployment Rate age Age 20-29



Lee Meilin emphasizes the role of improvement in women's status. The high status of women in formal sector and remaining traditional gender role within family matches the proposition by McDonald (2002) that fertility falls to very low levels when gender equity rises in individual-oriented institutions while remaining low in family-oriented institutions. Such conflict between occupational and familial sectors becomes apparent as more married women participate in labor market. Figure 6 shows the age profile of female labor force participation in 2005. While Japan and Korea show the famous M-shaped pattern, Taiwan shows a monotonously declining pattern after the peak in late 20s. Such declining pattern can be also found in Southern European low fertility countries. On the other hand, very little decline can

be observed between ages 25 and 50 in moderately low fertility countries.

Figure 6. Female Labor Force Participation in 2005



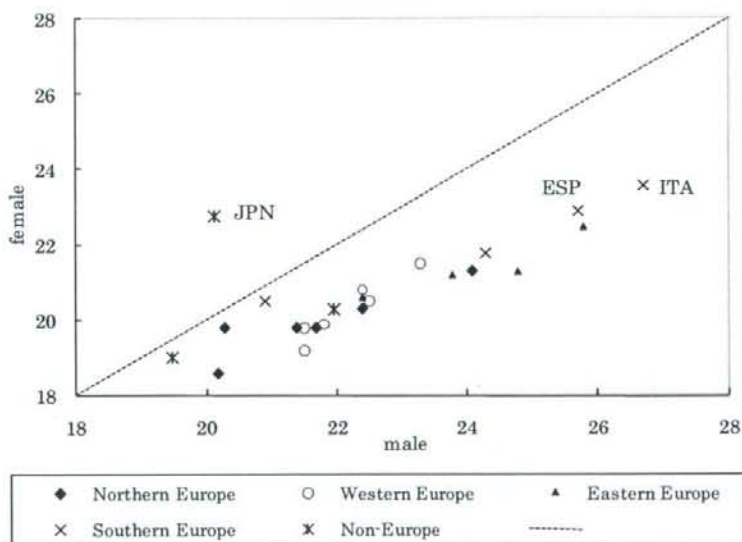
When lowest-low fertility was a phenomenon occurring only in Europe, it was natural to look for features common in lowest-low fertility countries. However, once lowest-low fertility spread out from Europe, the appropriateness of this attempt became questionable. Because lowest-low fertility has appeared in very different cultural settings in Southern Europe, Eastern Europe and Eastern Asia, the phenomenon seems to be a natural response to socioeconomic changes in the postmaterial era. In this respect, those countries that have avoided lowest-low fertility should be seen as exceptional and as requiring explanation.

Reher (1998) asserted that the contrast between weak family ties in Western and Northern Europe and strong family ties in Southern Europe has deep historical roots. In contrast to the Oriental family system that affected Southern Europe, the "Occidental" structure was based on the conjugal pair, and women had a higher position in the northern part of the continent. The Reformation changed the meaning of marriage from a sacrament to a civil contract, enhanced women's position further, reduced parental authority, and promoted individualism (Reher, 1998, pp. 213-214). Clearly, gender equity and compatibility between wife's work and childcare in today's countries with moderately low fertility have a long historical background. This is why these countries developed non-parental childcare activities involving baby sitters, tutors, childcare workers and other professionals. In contrast, countries with strong family ties are still clinging to maternal care.

Another prominent feature of Northern/Western Europe and their descendents is early home-leaving. In these countries in the pre-industrial era, young men and

women left the parental home before marriage to work as servants (Reher, 1998; Wall, 1999). The tradition of the majority of men and women leaving home before marriage still remains today (Billari et al., 2001, pp. 18–19). Premarital home-leaving is thought to promote union formation through both consensual union and formal marriage, while Southern European adolescents are suffering from postponement syndrome, which discourages autonomy and weakens their ability to make decisions in their own lives (Dalla Zuanna, 2001; Livi-Bacci, 2001). As shown in Figure 7, Japan occupies a singular position in that men leave as early as Northern Europeans while women leave as late as Southern Europeans. However, since late leaving of either sex discourages union formation, Japan may suffer from the same problem as Southern Europeans. It does not seem that comparable life table measures are calculated by Korean or Taiwanese demographers.

Figure 7. Median Age at Home-Leaving of Cohorts Born around 1960



Source: Billari, et al. (2001), Goldscheider&Goldscheider (1994), Ravanera et al. (1995), Suzuki (2003)

Last but not least, a clear cultural divide in cohabitation and extramarital births was observed. These forms of postmodern behavior were once related to a decline in fertility to below the replacement level. Today, however, the low frequency of such behavior is a good predictor of lowest-low fertility. Japan is characterized by a very robust marriage institution. As mentioned above, the proportion of extramarital births in three Eastern countries are still very low, ranging between 1% and 5%. On the other hand, Southern European countries are now experiencing the rapid increase in extramarital births. The recent escape from lowest-low fertility in these countries

could be attributed to such “delayed second demographic transition” (Billari 2008).

The explanation based on the family pattern suggests that very low or lowest-low fertility will keep spreading around the world. When a society arrives at a certain level of economic development, social forces such as increasing human investments, occupational insecurity and female labor force participation will severely depress fertility. Because no other societies have family patterns as unique as Northern/Western Europe's, their fertility rates will go down to the extremely low level. This may happen soon in Southeastern Asia, Latin America, or the coastal region of China.

4. Governmental Interventions

The Japanese government was surprised by the historically low TFR of 1.57 in 1989 and started an inter-ministry committee to create measures to cope with the declining fertility in 1990. An expansion of child allowance, establishment of childcare leave, announcement of governmental program called Angel Plan took place between 1991 and 1994. However, the transition to pronatal policy in Korea and Taiwan was slower than in Japan. The high population density and the long lasting fear for population explosion in both countries may explain the slowness in consensus building that is necessary in such transition. The TFR of Korea was 1.54 in 1997, which was the level that forced the Japanese government to start pronatal interventions. However, it was only after the TFR hit 1.17 in 2002 that the Korean government started worrying about low fertility. After a series of round table meeting participated by various interest groups, the government finally announced the program called “Saeromaji Plan” in 2006 to cope with low fertility and population aging. As Lee Meilin writes, the concern of feminists and environmentalists caused the delay in transition to pronatal policy. Although the Taiwanese government originally planed to publish the White Book of Population Policy in 2005 to announce new pronatal measures, the book was not published until 2008. Assertions by feminists widely included in the book as a result of long discussion and coordination.

Reflecting the extraordinarily high private educational cost in Korea, the Saeromaji Plan includes such measures as expansion of after-school programs and development of cyber learning programs in addition to supporting child care and educational cost for low income group. On the other hand, educational cost is not a big issue in Japan and Taiwan. Financial supports other than educational area include tax reform, exemption of pension premium and housing support for childrearing families in Korea. Taiwanese government is planning tax reform and housing loan, as Lee Meilin explains.

The child allowance is still “on consideration” stage in Korea and Taiwan. It is a difficult decision making for both governments to launch a universal child allowance