

Low Fertility and Governmental Intervention in Japan and Korea¹

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Introduction

When below replacement fertility appeared in Northern/Western Europe in the 1980s, the second demographic transition theory (van de Kaa, 1987) interpreted the trend as an expression of value changes from familism to individualism, together with such changes as increase in cohabitation, extramarital births, divorce, female labor force participation and living alone. In the 1990s, however, the TFR (Total Fertility Rate) dropped to “lowest-low” level of 1.3 or less in Southern/Eastern European countries (Kohler et al., 2002). The emergence of lowest-low fertility drastically changed the correlation between fertility level and family variables. Today, countries with robust marriage institution, traditional gender role and strong familism tend to show lower fertility.

Even when Southern/Eastern European countries experienced historically low fertility level of less than 1.3 in the 1990s, demographers could not imagine that Eastern Asian advanced countries would be the top runners of fertility decline with extremely low fertility of less than 1.2 after the year 2000. While it is regrettable that no demographic theory could predict it, we still need to seek interpretation and explanation of such emergent change.

This paper examines fertility decline and governmental reaction in Japan and the Republic of Korea (simply “Korea” henceforth). Demographic analysis will examine the effects of delayed child-birth, nuptiality decline and other proximate determinants. Effects of desired family size, direct cost of children, economic recession and female labor force participation are also considered. The cultural divide of fertility suggests the effectiveness of cultural deterministic view of fertility. A comparative approach on the family pattern in Northern/Western Europe, Southern/Eastern Europe, Japan and Confucian countries will be attempted.

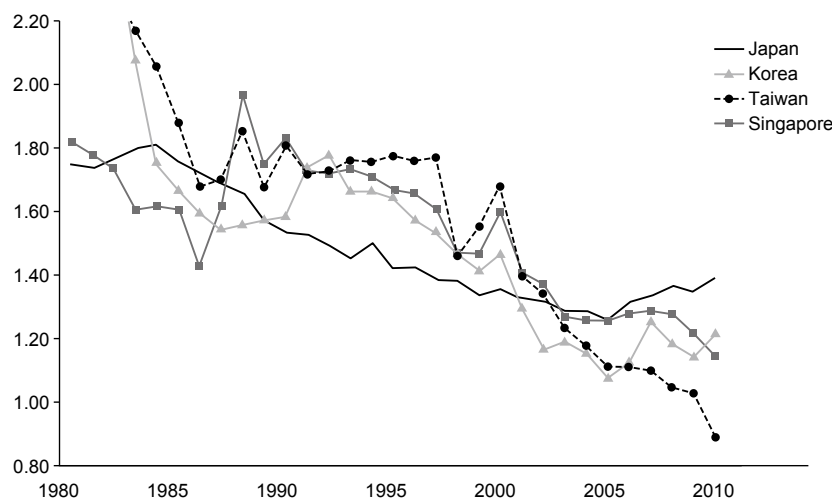
Low fertility is a very serious problem both

in Japan and Korea because it causes unbearably rapid population aging. The governmental reaction to fertility decline and the development of pronatal policy measures in both countries will be described. Because of the cultural difference and smaller governmental budget than European welfare countries, it will take a long time for Japan and Korea catch up European forerunners in fertility recovery. The problem is more serious in Korea with more distant cultural pattern from Northern/Western Europe and with difficulty to cope with compressed socioeconomic changes as a late comer.

1. Unexpected Fertility Decline in Eastern Asia

Demographers have been failing to anticipate emergent changes in fertility. The prediction of classic demographic transition theory that fertility will fluctuate around the replacement level was rejected by the postwar baby boom and subsequent spread of below replacement fertility. Cyclical change that asserted by Easterlin (1978) was denied when it became apparent that most developed countries cannot regain the replacement level for decades. When Scandinavian countries and German speaking countries led fertility decline into the below replacement level, the second demographic transition theory (van de Kaa, 1987) asserted that the trend is the result of value change toward individualism and secularization. The theory predicted that fertility decline will proceed together with post-modern family changes such as increase in cohabitations, extramarital births and divorces. The prediction failed due to the emergence of lowest-low fertility defined as the TFR of 1.3 or less (Kohler et al., 2002). A paradoxical situation has appeared that fertility is lower in countries with more robust marriage institution, more effective gender segregation and stronger familism.

Figure 1. TFR in Eastern Asia



In the 2000s, lowest-low fertility started spreading in Eastern Asian advanced countries. Figure 1 shows the development of fertility decline in Japan, Korea, Taiwan and Singapore since 1980. Although Korea, Taiwan and Singapore showed lower TFRs than Japan in the late 1980s, these three countries sustained higher level than Japan throughout the 1990s. However, sudden acceleration of fertility decline in three countries after the small millennium baby boom resulted in the lower TFRs than Japan. Korea arrived at the line of 1.3 in 2001, followed by other countries including Japan in 2003. While Japan, as many European countries, escaped from lowest-low fertility after 2005, the TFR of other country stayed at the lowest-low level. The TFR of Singapore, 1.22 in 2009, was considerably higher than Tokyo (1.12) or Seoul (0.96). Low fertility problem in Korea and Taiwan is much more serious because they are at the lowest level in the world if metropolitan area and very small countries are excluded.

When McDonald (2005) chose the line of 1.5, the cultural divide of TFR was evident. All Scandinavian countries, French speaking countries and English speaking countries have rarely experienced the TFR lower than 1.5. On the other hand, all German speaking countries, Southern Europe, Eastern Europe, the former Soviet Union and Eastern Asian advanced countries failed to sustain the line of 1.5. Most Southern/Eastern

European countries that suffered from lowest-low fertility of 1.3 or less in the 1990s have escaped from that level. In 2008, Moldova was the only European country still showing the lowest-low level (Goldstein et al., 2009). As shown in Table 1, such countries as Estonia, Slovenia and Greece have already retained the level higher than 1.5 to make the cultural divide ambiguous. To the contrary, Eastern Asian advanced countries other than Japan still remains at the lowest-low level. In the regional level, the former East Germany and Northern Italy have experienced the TFR less than 1.0. However, according to Goldstein et al. (2009), no European country other than Ukraine has experienced the TFR as low as 1.08 in Korea in 2005. The latest TFR of Taiwan (0.895 in 2010) is as low as that was recorded in the former East Germany (0.83 in 1992).

Lesthaeghe (2010) asserted that heterogeneity and historical path dependency do not imply the failure of the second demographic transition theory. However, no demographer including the founder of the theory could expect a drastic fertility decline in advance to other transitions such as cohabitation, extramarital births, divorce and living alone. The connection between low fertility and strong familism caused a big problem for demographers (Dalla Zuanna, 2001; Micheli, 2000). The relationship between fertility and the family pattern will be revisited later.

Table 1. TFR of Advanced Industrial Countries

Coutry	TFR	Coutry	TFR
Israel	2.96	Czech Republic	1.49
Iceland	2.14	Bulgaria	1.48
New Zealand	2.14	Croatia	1.47
Turkey	2.12	Lithuania	1.47
Mexico	2.08	Cyprus(3,4)	1.46
Ireland	2.07	Latvia	1.44
United States	2.04	Malta	1.43
Norway	1.98	Slovak Republic	1.41
France	1.98	Italy	1.41
Chile	1.97	Spain	1.40
Australia	1.97	Poland	1.40
Sweden	1.94	Austria	1.39
United Kingdom	1.94	Germany	1.38
Finland	1.86	Japan	1.37
Denmark	1.84	Romania	1.35
Belgium	1.83	Hungary	1.33
Netherlands	1.79	Portugal	1.32
Canada	1.66	Singapore	1.22
Estonia	1.63	Korea	1.15
Luxembourg	1.59	Taiwan	1.03
Slovenia	1.53		
Greece	1.51		
Switzerland	1.50		

Source: Chen and Chen. (forthcoming). "Changes in Entry into First Marriage among Taiwanese: Differences by Cohort, Education, and Ethnicity."

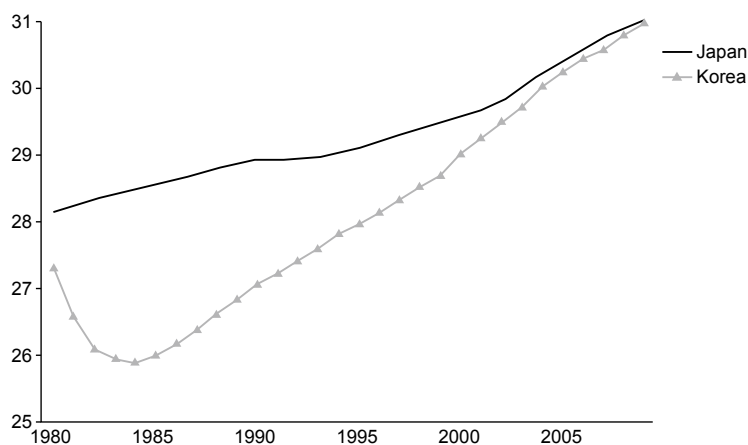
2. Demography of Fertility Decline

2-1. Delay in Childbearing

Most of the advanced industrial countries show the delay in childbearing. As shown in Figure 2, Japan and Korea are not an exception.

Korea finished the first fertility transition in the early 1980s and the mean age at childbirth started rising. In Japan, the delay was accelerated after 2000. The delay in Korea was even faster and Korean women have almost caught up Japanese women.

Figure 2. Mean Age of Mother Childbearing



It is known that the delay in childbirth exaggerates fertility decline shown in the TFR. Bongaarts and Feeney (1998) formalized how to adjust this “tempo distortion.” Their ATFR (Adjusted Total Fertility Rate) is defined by birth order.

$$AFTER_i = \frac{TFR_i}{1 - r_i}$$

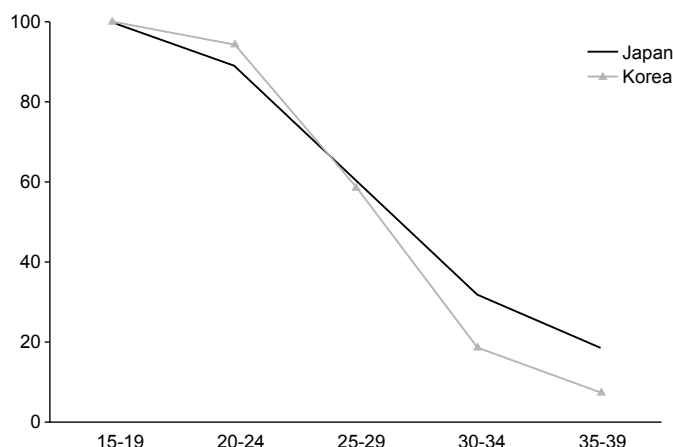
Here, r_i is the rate of change in the mean age at childbirth by birth order. In Japan, the mean age at all births increased by annual average of 0.16 years in the period of 2000-09. This implies that the TFR of Japan would be higher by $1 / (1 - 0.16) = 19\%$ if there were no delay in childbirths. In Korea, the annual increase was 0.22 years, which implies that the TFR would be 28% higher if the delay stopped immediately. More accurate magnitude of tempo

distortion can be obtained from birth order specific calculation. However, it is enough here to point out that there is considerable exaggeration of fertility decline, especially in Korea.

2-2. Marriage

Figure 3 shows the proportion of single women in the 2005 census. While Korean women show lower proportion of single than Japanese women at age 30 and over, they show higher proportion in younger ages especially early 20s. As in the case of fertility before the turn of century, nuptiality in Korea used to be higher than in Japan. However, nuptiality decline in Korea has been so rapid recently that the proportion of single started exceeding Japan in young ages. It is expected that the higher proportion than Japan will extend to older ages as time goes by.

Figure 3. Proportion of Single Women (2005)



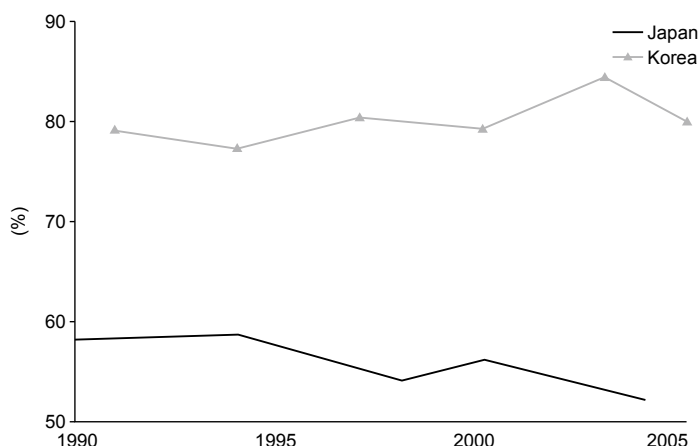
The proportion of extramarital births in 2008 was 2.1% in Japan and 1.8% in Korea. In such countries with practically no extramarital births, a large part of fertility decline can be attributed to nuptiality decline. Although some Japanese and Korean demographers asserted that nuptiality decline explains whole part of fertility decline using AMFRs (Age-specific Marital Fertility Rates), the method is erroneous (Hirosima, 2001; Kaneko, 2004; Suzuki, 2009a). More sophisticated demographic analyses have shown that between 35% and 75% of fertility decline in Japan can be explained by nuptiality decline (Hirosima, 1999; 2000; Iwasawa, 2002; Ogawa, 2003; Kaneko, 2004; Suzuki, 2005). For Korea, Suzuki (2008) showed that while 31.5% of fertility decline between 2000 and 2005 was explained by nuptiality decline, 68.5% was attributed to the decline in

marital fertility.

2-3. Proximate Determinants

Since marriage does not explain fertility decline in its entirety, there should be proximate determinants (Bongaarts, 1978) that caused a significant fall in marital fertility. However, neither contraception nor induced abortion is responsible for it in Japan. As shown in Figure 4, the proportion of currently married women practicing contraception was 52% in 2004 and was lower than in the early 1990s. In Korea, the contraception rate was as high as 79.3% in 2000 and there was a further increase to 84.5% in 2003. While this explains a part of the TFR decline from 1.47 to 1.19 in this period, the decline from 1.19 (2003) to 1.08 (2005) does not match with the trend in contraception.

Figure 4. Proportion of Married Women Practicing Contraception



While the trend of induced abortion in Korea is unknown, the ratio of abortions to births in Japan dropped in the early 1990s and sustained a low level under 30%. As expected, the frequency of miscarriages has also been declining. There were 27,005 still births in 2006 in Japan and the ratio to live births was 2.5%. It was significantly lower than the 4.4% of 1990. It is said that many mothers in Japan stop breastfeeding by 1.5 years after giving birth. Thus, neither intrauterine mortality nor postpartum amenorrhea seems to have contributed to the recent fertility decline.

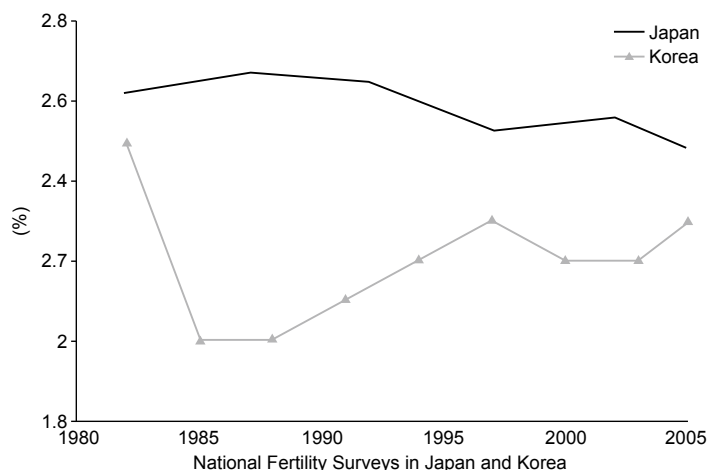
The remaining proximate determinants are frequency of intercourse and sterility. There is no time series data on coital frequency or infecundity of married couples in Japan. It might be possible to assert that sexless couples are increasing due to the long working hours or strengthened mother-child ties. It might also be possible to hypothesize an increase in infecundity due to the rising age at marriage, environmental hormones, and sexually transmitted diseases (Semba, 2002). However, it

is difficult to quantitatively evaluate such hypotheses, due to the lack of necessary data.

2-4. Demands for Children

An important question on the recent fertility decline is whether it is a result of voluntary choice. The Low Fertility Trap Hypothesis (Lutz et al., 2006) suggested a possibility of positive feedback between attitude and behavior. The mechanism has already started working in German speaking countries where the ideal number of children is extremely low. However, very low fertility in Japan and Korea is not the result of very low demand for children. Figure 5 shows the change in the ideal number of children in two countries. The demand for children in Japan has been declining slowly but still as high as 2.48 in 2005. In Korea, the ideal family size was small in the early 1980s but gradually recovered to 2.3 in 2005. Thus, the recent fertility decline in both countries should be explained not by demand itself but by obstacles to fulfilling the demand.

Figure 5. Ideal Number of Children



2-5. Direct Cost of Children

In the world of post-industrialization, globalization and rapid technological development, there is a growing demand for human capital investment. Thus, parents are more interested in quality for their children and educational costs

have become higher (Becker, 1991; Willis, 1994). The rising cost of children, including public and private educational costs, is thought to be the main reason of the recent low fertility rate in Eastern Asia.

Table 2. Expenditure on Education as Percentage of GDP

Coutry	TFR	Coutry	TFR
Iceland	7.0	0.8	7.8
United States	5.0	2.6	7.6
Denmark	6.6	0.5	7.1
Korea	4.2	2.8	7.0
Chile	3.7	2.7	6.4
Sweden	6.1	0.2	6.3
Belgium	5.9	0.2	6.1
Canada	4.6	1.5	6.1
France	5.5	0.4	6.0
New Zealand	4.8	1.2	5.9
United Kingdom	5.2	0.6	5.8
Mexico	4.7	1.1	5.7
Finland	5.5	0.1	5.6
Portugal	5.1	0.5	5.6
Netherlands	4.7	0.8	5.6
Austria	5.1	0.2	5.4
Poland	4.8	0.5	5.3
Australia	3.8	1.4	5.2
Japan	3.3	1.6	4.9
Spain	4.2	0.6	4.8
Germany	4.0	0.7	4.7
Ireland	4.4	0.2	4.7
Czech Republic	4.1	0.5	4.6
Italy	4.1	0.4	4.5
Slovak Republic	3.4	0.5	4.0

Source: OECD, Education at a Glance 2010.

Table 2 shows the educational expenditure as the percent of GDP by country. While Korea spends the fourth highest amount as the total, it spends highest educational cost from private sources. This implies that Korean parents are forced to spend money so that their child can survive in severe competition in Korean society. While the educational fever in Japan is not as harsh as in Korea, Japanese parents also spend considerable amount of educational cost, only after Korea, Chile and the United States.

2-6. Economic Recession and Labor Market Condition

Young people who grow up in periods of rapid economic growth tend to have high aspirations for their future lives. When the economy slows down, however, labor market conditions for young workers become tight. Those who conceive difficulty in achieving their expected standard of living will hesitate when it comes to marriage and childbearing (Easterlin, 1978). It is known that the relative income of Japanese young men is especially low due to the seniority based employment system (Lutz et al., 2006).

Figure 6. Unemployment Rate of Men aged 30-34

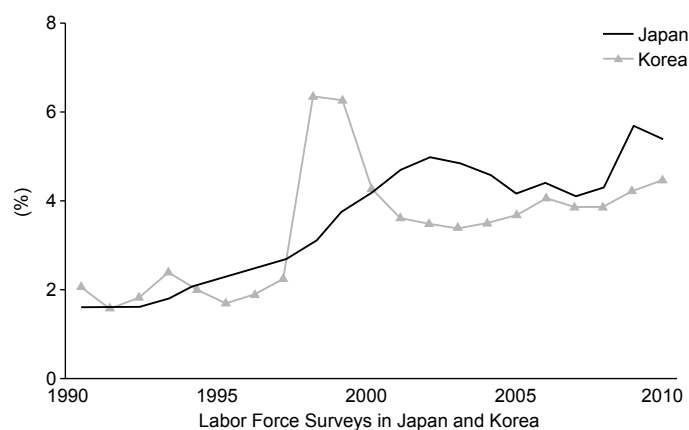


Figure 6 shows the increase in unemployment for Japanese and Korean men aged 30-34. The unemployment rate in Japan rose from 1.6% in 1990 to 5.0% in 2002 due to the bad economic condition. The impact of the financial crisis in Korea in 1998 was disastrous. In both countries, the labor market condition became tighter than the period of rapid economic growth or bubble economy. Such a change induces young people's pessimistic attitude toward the future and lowers nuptiality and fertility.

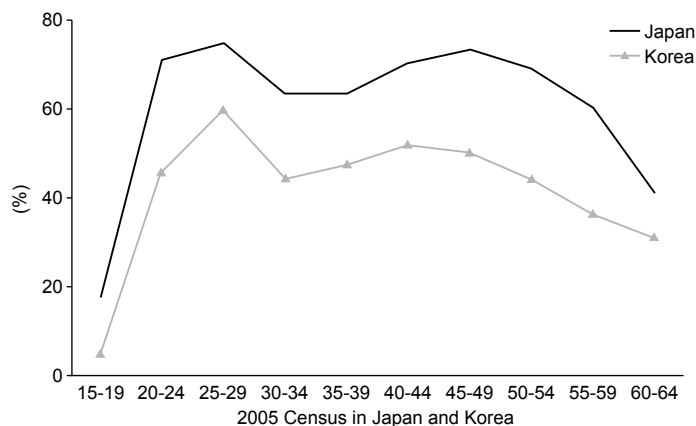
2-7. Female Labor Force Participation and Gender Roles

According to Becker (1991, pp. 350–354), the main cause of family changes since the latter half of the 20th century has been the rising economic power of women. The expanding occupational

opportunities for women increased the time spent on market activities and raised the opportunity cost of children. The declining return from the gender-based division of labor reduced the merit of marriage and promoted the rise in the divorce rate. These changes resulted in the increase in female-headed households, cohabitation, and extramarital births.

Both Japan and Korea have the so-called M-shaped curve of female labor force participation rates as shown in Figure 7. The pattern suggests that women in 30s are difficult to stay at workplace due to the low compatibility between work and the family life. In a society with low compatibility, the increase in female labor force participation depresses fertility through the opportunity cost of childbearing and childrearing.

Figure 7. Female Labor Force Rate (2005)



3. Cultural Deterministic View of Fertility

3-1. Moderately Low Fertility and Western European Family Pattern

When lowest-low fertility was a phenomenon occurring only in Europe in the 1990s, 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. Rather, 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. Such countries include Nordic countries, Western European countries except for German speaking countries, and English speaking countries. Since English speaking countries are assumed to have the Anglo-Saxon family pattern as modal model, these countries are called “Northern/Western European countries.” Such Northern/Western European family pattern is contrasted to that in “low fertility countries.” As McDonald (2005) pointed out, the latter includes German speaking Western European countries, Southern European countries, Eastern European countries, the former Soviet Union members, and Eastern Asian advanced countries.

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).

Figure 8 shows the correlation between the Gender Empowerment Measures (GEM) in the UNDP Human Development Report 2007/2008 and the TFR in 2008. The correlation is high (0.726) and the discrimination is very impressive. McDonald (2000, p. 437) stated that fertility falls to very low levels when gender equity rises in individual-oriented institutions but remains low in family-oriented institutions. However, it seems that gender equity in formal sector (GEM) itself is a powerful predictor of fertility. The strong correlation suggests that Northern/Western gender pattern with the deep historical root plays an important role to sustain moderately low fertility in these countries.

Figure 8. Gender Empowerment and Fertility

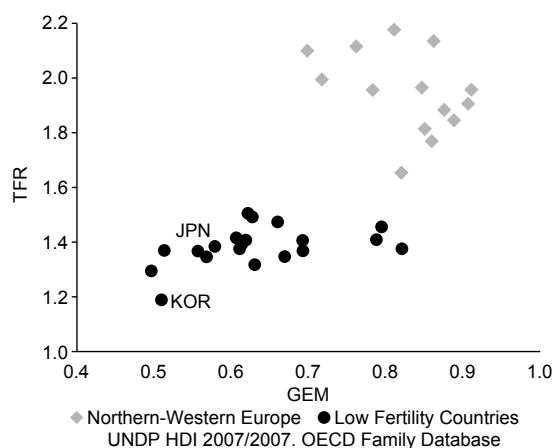
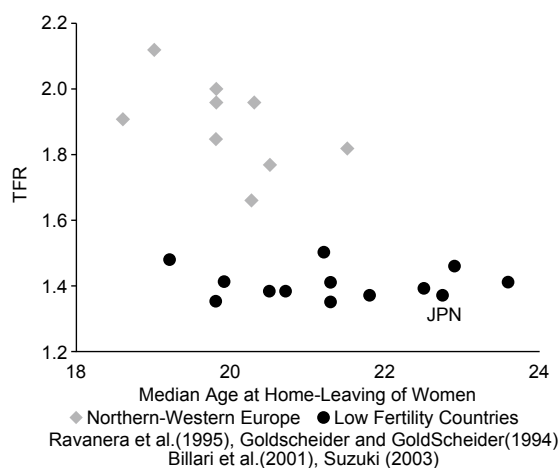


Figure 9. Home-Leaving and Fertility



Another prominent feature of Northern/Western Europe and their descendants 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, p. 204; Wall, 1989, p. 370). 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 (Livi-Bacci, 2001, p. 148; Dalla Zuanna, 2001, pp. 148-149). Figure 9 shows the correlation between the median age at home leaving of women born around 1960 and the TFR in 2008. It is apparent that women in Northern/Western European countries tend to leave earlier

than low fertility countries. The median age at home-leaving of Japanese women (22.8) is only after Italy (23.6) and Spain (22.9). Considering the recent drastic nuptiality decline in Korea, Korean women are supposed to leave home as late as Japanese women.

Figure 10. Female Labor Participation and Fertility

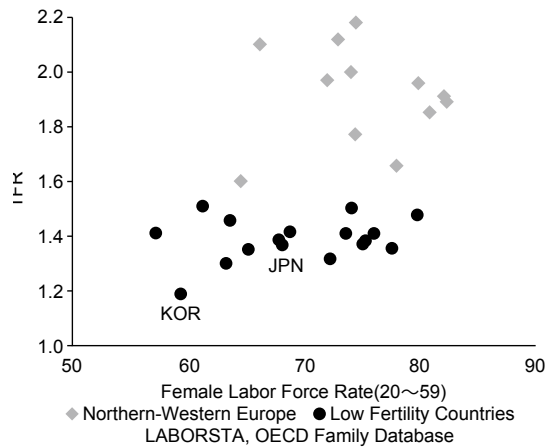


Figure 11. Early Childhood Service and Fertility

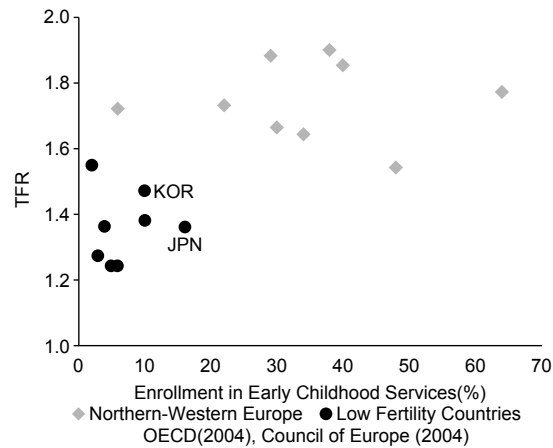


Figure 10 shows the relationship between the female labor force participation rate in 2006 and the TFR in 2008. The relationship turned from negative to positive in the mid 1980s (Engelhardt and Prskawetz, 2005, pp. 2-3; Billari and Kohler, 2002, pp. 20-21; Atoh, 2000, p. 202). However, this change in aggregate data does not imply an emergent change in the relationship but an increase in unobserved heterogeneity in the compatibility between work and the family (Suzuki, 2008, pp. 34-35). Northern/Western European countries have succeeded in improving the compatibility and the negative impact of female work on fertility is thought to have disappeared or even turned positive. In low fertility countries, however, it is thought that the compatibility is still low and female work sustains the negative impact on fertility. In Japan, many micro analysis shows that mother's work still has the negative effect on fertility (Asami et al., 2000; Oi, 2004; Oyama, 2004; Sasai, 1998; Shichijo and Nishimoto, 2003; Tsuya, 1999; Fukuda, 2004; Fujino, 2002; Yashiro, 2000; Yamagami, 1999; Yamaguchi, 2005). This could be true for Korea and Taiwan (Suzuki, 2009a, p. 17; Tung and Yang, 2005, pp. 51-52).

Figure 11 shows the correlation between early

childhood services for under age two around 2000 and the TFR in 2000. Unlike in low fertility countries where childcare is mother's supreme role, Northern/Western European countries developed non-parental childcare activities involving baby sitters, tutors, childcare workers and other professionals. It is thought that the weak parent-child tie in this region had an important role in promoting the use of early childhood services and thus improved the compatibility between work and the family. In contrast, countries with strong family ties are still clinging to maternal care. According to the Third National Family Survey in 2003 by NIPSSR, 82.9% of Japanese wives agreed that, "A mother should not work, but should take care of her child for three years after birth." Such an emphasis on the mother's supreme role could be the factor that curbs the effect of childcare service on fertility. According to Retherford and Ogawa (2006, p. 36), Japan's low enrollment rate of young children in day-care centers is not because of the short supply of service but because of mothers' wanting to raise their children on their own. The low enrollment in Korea in Figure 11 together with the M-shaped pattern suggests the mother and child tie in Korea is as strong as in Japan.

Figure 12. Extramarital Birth and Fertility

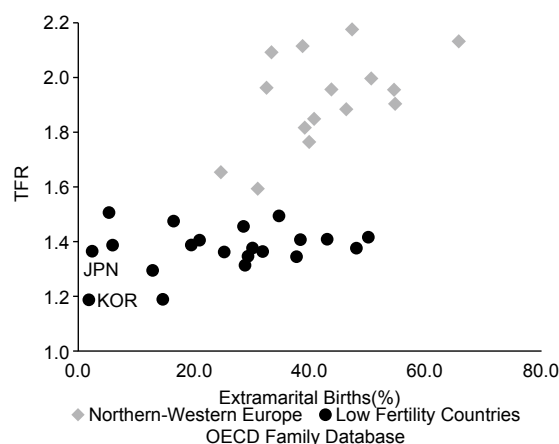


Figure 12 shows the relation between the proportion of extramarital births and fertility. The increase in cohabitation and extramarital births during the second demographic transition could be attributed to the weak familism in Northern/Western Europe. It is possible that the notion of marriage as contract rather than sacrament and the emphasis on individual autonomy helped to disconnect reproduction from marriage. While the figure suggests that the rise in extramarital births does not necessary lead to fertility recovery, the proportion of 20% or more seems to be the necessary condition for moderately low fertility. In fact, the recent fertility recovery in Southern European countries is accompanied by the delayed second demographic transition, namely the spread of cohabitation, extramarital births and marital instability (Billari 2008, pp. 9–11). While other elements of second demographic transition have already taken place in Eastern Asian advanced countries, only the increase in extramarital births cannot be observed in this region (Lesthaeghe, 2010, p. 244).

As have seen so far, countries with Northern/Western European cultural background are characterized by weak family ties, high position of women, early independence of a child, high compatibility between work and the family, participation of non-family members in childbearing, and weakened marriage institution. Because of these extraordinary family patterns, those countries could avoid lowest-low fertility even under the postmodern economic and social changes. Union formation did not delayed so much in prolonged human investment because of the norm of early home-leaving and economic independence. The compatibility between work and the family quickly improved because non-maternal childcare

activities involving baby sitters, tutors, childcare workers and other professionals were common. Gender equity was achieved swiftly both in formal and informal spheres because women's position was already high in ancient ages. The decline in marriage institution was immediately compensated by increase in cohabitation and extramarital birth.

3-2. Traditions of Feudal Family and Confucian Family

Low fertility countries without such extraordinary family pattern as Northern/Western Europe can be divided into two family patterns. One is the offspring of feudal family in Southern/Eastern Europe and Japan, and the other is the offspring of Confucian family in Korea and Taiwan. Table 3 summarizes the lowest level of TFR experienced by advanced countries. Some countries such as Czech Republic, Slovak Republic, Italy and Spain experienced the TFR less than 1.2. However, it seems that no European country, as well as Japan, has experienced the TFR less than 1.1. On the other hand, Korea recorded 1.08 in 2005 and Taiwan 0.895 in 2010. This could be the result of the Confucian family pattern that is more distant from Northern/Western pattern than other parts of Europe or Japan. Then, it is expected that the more distant the family pattern is from Northern/Western Europe, the lower the TFR goes down.

Feudalism is a loose integration of feudal loads that had own military powers and laws. This type of political structure existed in ancient China but shifted to the centralized agricultural bureaucracy (Cumings, 2005, p. 72) after the Qin dynasty. The elaborated imperial examination system after the Tang dynasty marked the establishment of familistic Confucian social system in China. The

Yi dynasty of Korea enforced Confucianism on Korean people and Korean society became more Confucianistic than China itself by the 19th century.

These countries were sharply contrasted with Japan in the early 19th century that was similar to Medieval Europe. The decentralized and loosely integrated political system of Japan allowed the competition between feudal lords (daimyos). Since the master-servant relationship was the

principle of the society, loyalty was more valued than filial piety which was the most fundamental value in a Confucian society. Since the imperial examination system was not introduced, the society was more closed in terms of social mobility. On the other hand, Japanese family household or "ie" could include a member who was not related with blood. This feudal and less familistic value system prevented nepotism and promoted the rule of law.

Table 3. Recorded Lowest TFR in Advanced Industrial Countries

Country	TFR	(Year)	Country	TFR	(Year)	Country	TFR	(Year)
New Zealand	1.89	(2002)	Canada	1.49	(2000)	Italy	1.19	(1995)
Ireland	1.85	(1995)	Netherlands	1.47	(1983)	Slovak Republic	1.19	(2002)
United States	1.74	(1976)	Denmark	1.38	(1983)	Spain	1.16	(1998)
Australia	1.73	(2001)	Luxembourg	1.38	(1985)	Czech Republic	1.13	(1999)
France	1.66	(1994)	Switzerland	1.38	(2001)	Korea	1.08	(2005)
Norway	1.66	(1984)	Austria	1.33	(2001)	Taiwan	0.90	(2010)
United Kingdom	1.63	(2001)	Portugal	1.32	(2007)			
Belgium	1.51	(1985)	Hungary	1.28	(2004)			
Finland	1.50	(1973)	Japan	1.26	(2005)			
Sweden	1.50	(1999)	Greece	1.25	(2001)			
			Germany	1.24	(1994)			
			Poland	1.22	(2003)			
			Slovenia	1.20	(2003)			

Source: OECD Family Database

The sharp contrast between Japan and other Eastern Asian societies developed a view that Japan stands as an isolated civilization while Korea and Vietnam are included into Chinese (Confucian) civilization (Huntington, 1996=1998, p. 59). According to Eisenstadt (1996=2004, p. 21), Japan is the only non-axial civilization without being alienated or absorbed into one of axial civilizations. Nakane (1967) also stated that the Japanese society is very different from China, India and Europe in emphasizing social groups based on location. On the other hand, many scholars including E. H. Norman, T. Persons, and E. Durkheim pointed out the similarity in social structure and historical development between Japan and Europe (Eisenstadt, 1996=2004, pp. 2-4). In Japan, Umezao (1957=2002) asserted that Japan and Europe are special places where autogenic succession proceeded to prepare the bourgeoisie and capitalism.

In the feudal family system, the parent-child relation and conjugal relation were seen from rights and obligations between autonomous

persons. Although the family relation was by no means egalitarian, inferiors like child or wife were thought to have rights in addition to obligation. Women's position was relatively high and the idea of contract was common in family relations. If Northern/Western Europe is the most typical case of feudal family system, Southern Europe and Japan can be seen as the case of feudal family influenced by patriarchic and authoritarian pattern of Roman family, Islamic family or Confucian family.

The Confucian family pattern can be contrasted with these feudal family patterns. Filial piety is absolute obligation because it is the law of nature. A child was totally powerless and rightless against the father and the idea of contract was out of question. This was very different from the Samurai family in Japan in which filial piety was conditioned by returning debt to parents (Kawashima, 1957). While the family was the basic model for all social organization in Confucian society, the Samurai family had its model in master-servant relation (Goode, 1963, p. 323).

Table 4. Family Pattern Immediately before Modernization

	China	Korea	Japan
Ideology	Filial piety	Filial piety	Loyalty
Trust on Non-Family	Low	Low	High
Woman's Position	Rigid segregation	Rigid segregation	Relatively equal
Kinship Group	Patrilineal	Patrilineal	Bilateral or weakly patrilineal
Marriage	Exogamy	Exogamy	Endogamy
Adoption	Within clan, Generation is considered	Within clan, Generation is considered	Free
Inheritance	Equal among sons	Weak primogeniture	Primogeniture
Household Structure	Joint family or circulation of parent	Stem family	Stem family

Fukuyama (1995=1996, p. 110) attributed the difference between high trust Japanese society and low trust Chinese society to the strength of familism. The Chinese people do not believe non-family members and a huge enterprise is difficult to grow in Chinese societies. Traditional communities in China lacked solidity and experiences to cooperate for a gigantic project. In Japan, familism was much weaker and nepotism was more carefully avoided. The loyalty to non-family group such as community and feudal government was emphasized, which foster patriotism and nationalism in Japan.

The contrast between Japanese family and Confucian family can be seen in the position of woman immediately before the modernization. Westerners visited Japan in the 18th and 19th centuries found that the position of Japanese women was higher than other Asian societies, especially than China (C. P. Thunberg, 1775, cited in Screech, 2005, p. 110; P. F. Siebold, 1852, cited in Murphy, 2009; M. C. Perry, 1856, p. 462; W. E. Griffis, 1876, p. 551).

Table 4 summarizes the family patterns in China, Korea and Japan in the 19th century. As already mentioned, filial piety was the fundamental ideology of a Confucian society. While the trust on others tends to be low in Confucian society, Korea is an exceptional case to successfully developed huge enterprises. Women in Confucian society were rigidly segregated from the formal productive sector. In China, both men and women succeed father's surname and does not change even after marriage. This patrilineal pattern was imported to Korea. Nakane (1970) emphasized the

difference between "dozoku" in Japan from Chinese patrilineal clan. In Japan, an adopted son or a married daughter loses his/her membership of the family of orientation. Although both paternal and maternal lines are considered as kinship, paternal line is more emphasized.

While marriages within the paternal clan were strictly prohibited, adoptions were always executed within the clan in Confucian societies. The Japanese family was more interested in sustaining the family name and property rather than the blood line. Thus, even an unrelated man could be adopted as the designated heir. Although there is some similarity in inheritance and household structure between Japan and Korea, the contrast between Japan and Confucian societies are more impressive.

4. Governmental Policy Interventions

4-1. Pronatal Policy in Japan

Table 5 summarizes the development of pronatal policy measures in Japan. 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. The amount of the child allowance was raised in 1991, while the period of payment was shortened to keep to the budget. The Childcare Leave Law (formally "Law Concerning the Welfare of Workers Who Take Care of Children or Other Family Members Including Child Care and Family Care Leave") was established in May 1991 and enforced in April 1992.

Table 5. Pronatal Policy Programme in Japan

Year	Policy Measure
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 (2000~2004)
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 (2005~2009)
2006	New Policy to Cope with Low Fertility
2007	Important Strategy to Support Children and the Family
2010	Visions for Children and Childrearing

In December 1994, the government publicized the Angel Plan for the period between 1994 and 1999. The program emphasized the compatibility between work and childcare and public support for childrearing. As a part of this program, amendments to the Childcare Leave Law were made to support income and exempt social security premium payment in 1994. In 1997, a major reformation was made to the Child Welfare Law to provide working mothers with satisfactory daycare services.

In December 1999, the government released the New Angel Plan for the period between 1999 and 2004. This document asserted the need to improve gender equity and working conditions. In May 2000, an amendment to the Childcare Leave Law determined that 40% of wages should be paid during the leave. The child allowance, which was previously available only for children less than three years old, was expanded to also cover preschoolers. The cabinet adopted the "Zero Waiting List for Daycare Program" as a political goal in July 2001. As a result, the daycare center enrollment rate of children under age two increased from 15.6% in 2001 to 20.3% in 2007. At least a part of the difference from Northern European countries, where the rate is higher than 40%, should be attributed to the cultural pattern that emphasizes the mother's supreme role of childrearing.

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 was means-tested until 2009, 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.

In January 2010, the government publicized a new action program called Visions for Children and Childrearing. The main goals are that “the growth of children is supported socially and young people can grow securely,” “desired pregnancy, childbearing and childrearing can be materialized,” “communities can support childrearing through various networks,” and “both men and women can achieve the work-life balance.”

4-2. Pronatal Policy in Korea

In the 1960s and 1970s, Korea suffered from a Malthusian nightmare of overpopulation under rapid population growth and high population density. This explains why Korea was so slow to turn to pronatal policy. While the Japanese government was shocked by the TFR of 1.57 in 1989 and started pronatal programs, the Kim Dae-Jung government showed no action for the TFR of 1.42 in 1999. After the TFR fell as low as 1.17 in 2002, the Noh Mu-Hyeon government finally took a step toward pronatal intervention. While Japan took 17 years from arrival at below replacement fertility to launching pronatal policy, Korea took 20 years and Taiwan took 22 years (Jones et al., 2009, pp. 6-7).

Table 6. Pronatal Policy Programme in Korea

Year	Policy Measure
2006	Saeromaji Plan 2010
2008	Saeromaji Plan 2010, Complemental Version
2010	Saeromaji Plan 2015

In 2006, the governmental action program “Saeromaji Plan 2010” was announced after a long discussion with representatives of managers, laborers, activists and feminists. This is an integrated policy package to cope with low fertility and aging society. The fertility part includes various measures such as supporting daycare cost, rewarding a big family through tax and housing, improving childcare services, expanding maternity and childcare leaves, assisting mothers’ employment, and reinforcing family values.

Since the private educational cost is notorious as the main factor of low fertility in Korea, the Saeromaji Plan included such measures as extending after-school classes and cyber-education programs. Considering furious educational fever and heated competition, however, it is unlikely that such public after-school programs can beat existing private educational services.

The incumbent president Lee Myung-Bak took presidency in 2008. In December of the year, his government announced an enlarged version of the Saeromaji Plan. Such measures as promoting marriage, afterschool program, tax relief, support for unmarried parents were introduced or reinforced. While the discussion on child allowance disappeared, those on men’s military service and

induced abortion newly appeared. The conservative value orientation stating that children should be taught the value of marriage and happiness of childrearing in formal education in the original plan was deleted.

The second round of the Saeromaji Plan series was publicized in October 2010 to cover the period 2011-15. According to the document (Ministry of Health and Welfare, 2010), various legal developments were achieved on family friendliness, gender equity and elderly care during the first five year period (2006-10). However, the document concluded that the first Saeromaji Plan failed to consider various aspects of fertility and to induce active participation of the private sector. While maternity leave and childcare leave are more flexible than Japan, the document does not mention to child allowance program.

4-3. Policy Effectiveness in Eastern Asian Setting

Policy measures emphasizing monetary support become less effective in the course of economic development. While the family planning program in Singapore was quite effective in the 1970s, fiscal policies lost some of their attraction in the 1980s (Straughan, et al., 2009, p. 197). While

Eastern European socialist countries succeeded in fertility recovery by transferring a large proportion of the national income, such policy is not possible in democratic countries (Caldwell, 2006, p. 329).

However, relatively high fertility in Scandinavian countries and France in Table 1 suggests that exclusive family policy can bring about fertility recovery in a long run, if not immediately.

Table 7. Public Expenditure on Family as % of GDP (2005)

Country	%	Country	%
Luxembourg	3.60	Slovak Republic	2.13
Denmark	3.38	Czech Republic	1.73
Sweden	3.21	Netherlands	1.65
United Kingdom	3.20	Switzerland	1.34
Hungary	3.11	Italy	1.31
France	3.02	Spain	1.14
Finland	2.97	Poland	1.13
Iceland	2.97	Greece	1.08
Austria	2.84	Canada	1.05
Norway	2.84	Mexico	1.00
Australia	2.83	Japan	0.81
New Zealand	2.63	United States	0.62
Belgium	2.60	Korea	0.27
Ireland	2.49	Turkey	0.03
Germany	2.17		

Table 7 suggests that much more governmental efforts are required for Japan and Korea to attain the replacement level. Policy developments after 2005 might have raised the level of Japan to around 1% and that of Korea to around 0.5%. However, there might be no change in the situation that Japan and Korea forms a group of lowest governmental effort together with Northern America. While it is important that young adults receive a clear and simple message that “society will support you if you have children” (McDonald, 2002, p. 442), parents and expected parents in Japan and Korea cannot feel sufficient support.

The cultural deterministic view of fertility suggests that the more distant the family pattern is from Northern/Western European pattern, the lower fertility declines. This is an ad-hoc interpretation of the relationship between fertility and the family pattern. However, there could be cultural difference also in effectiveness of pronatal policy. If the Japanese and Korean people respond to the pronatal policy in the same way as Europeans, the government will need to spend much more money than in Northern/Western European countries because fertility is much lower. But do Asian people actually respond in the same way?

Figure 10. Who is primarily responsible to cope with low fertility?

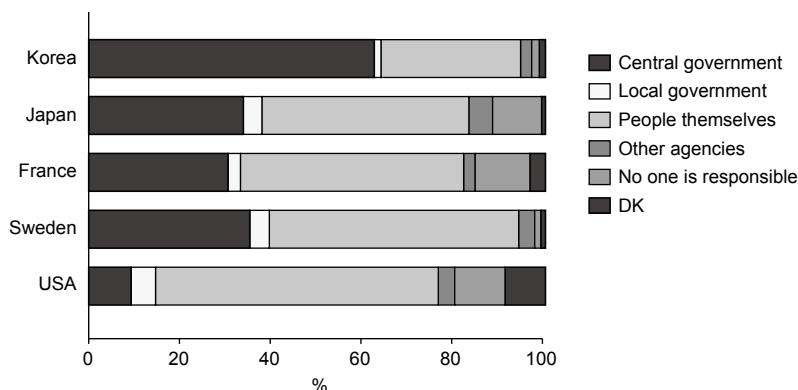


Figure 10 shows the response to “Who is primarily responsible to cope with low fertility?” in the International Comparative Survey conducted by Japan Cabinet Office in 2005. While the response of the Japanese resembles to that of Northern/Western Europeans, Korea marks one pole that is opposite from the United States. As many as 62.1% of Korean respondents answered that “the central government is primarily responsible to cope with low fertility issue” compared to the Japanese (34.3%), French (30.8%), Swedish (35.2%) and American (9.6%) respondents. This suggests that the response of Japanese people to pronatal policy would be basically same as Europeans. However, such policy might be less effective in Korea because people are not easily satisfied with the governmental support. In such a case, the Korean government would need to spend more money than Japan to regain the replacement level.

Conclusion

If the cultural pattern does matter as suggested in this paper, such deeply rooted difference is difficult to overcome. Thus, the same political effort as Northern/European countries may not be sufficient to achieve the replacement level in

Eastern Asia. Even if it is difficult to achieve the replacement level, however, pronatal policy effort is still worth paying. The higher the TFR is, the slower the future population decline and population aging will be. Thus, the TFR of 1.3 is better than 1.2, and 1.4 is better than 1.3.

Neither Japanese nor Korean government has been successful in sending message that “society will support you if you have children.” In Japan, the ambitious expansion of child allowance program by the Democratic Party has failed to secure the confidence toward governmental policy. Although the Democratic Party promised to provide 26,000 yen monthly from the fiscal year of 2011, the monetary benefit stayed at 13,000 yen. Opposition parties have proposed to restore means test that was abolished by the Democratic Party in 2010. Further retreat may take place to cope with the impact of disastrous earthquake and tsunami in March, 2011. In this situation, young Japanese adults may think that public support for childrearing will decrease in the future. While the first Saeromaji Plan document recommended the government to consider child allowance program, such discussion disappeared in the second round. Thus, the governmental message in Korea is even weaker than in Japan.

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References

- Becker, Gary S. (1991) *A Treatise on the Family, Enlarged Edition*, Harvard University Press, Cambridge, Massachusetts.
- Billari, Francesco (2008) "Lowest-Low Fertility in Europe: Exploring the Causes and Finding Some Surprises," *The Journal of Japanese Population*, Vol. 6, No. 1, pp. 2-18.
- Billari, Francesco, Dimiter Philipov and Pau Baizán (2001) "Leaving Home in Europe: the Experience of Cohorts Born around 1960," Max Planck Institute for Demographic Research, WP2001-014.
- Billari, Francesco C. and Hans-Peter Kohler (2002) "Patterns of Lowest-Low Fertility in Europe," Max Planck Institute for Demographic Research Working Paper WP-2002-040.
- Bongaarts, John (1978) "A Framework for Analyzing the Proximate Determinants of Fertility," *Population and Development Review*, Vol. 4, No. 1, pp. 105-132.
- Bongaarts, John and Griffith Feeney (1998) "On the Quantum and Tempo of Fertility," *Population and Development Review*, Vol. 24, No. 2, pp. 271-291.
- Caldwell, John C. (2006) *Demographic Transition Theory*, Springer, Dordrecht.
- Cumings, Bruce (2005) *Korea's Place in the Sun - A Modern History, Updated Edition*, W. W. Norton & Co., 2005.
- Dalla Zuanna, Gianpiero (2001) "The Banquet of Aeolus: A Familistic Interpretation of Italy's Lowest Low Fertility," *Demographic Research*, Vol. 4, No. 5, pp. 134-162.
- Easterlin, Richard A. (1978) "What will 1984 be like? Socioeconomic Implications of Recent Twists in Age Structure," *Demography*, Vol. 15, No. 4, pp. 397-421.
- Engelhardt, Henriette and Alexia Prskawetz (2005) "A Pooled Time-Series Analysis on the Relation between Fertility and Female Employment," IUSSP XXV International Population Conference, Tours.
- Goldscheider, Francis K. and Calvin Goldscheider (1994) "Leaving and Returning Home in 20th Century America," *Population Bulletin*, Vol. 48, No. 4, pp. 1-35
- Goldstein, Joshua R., Tomas Sobotka and Aiva Jasilioniene (2009) "The End of 'Lowest-Low' Fertility?" *Population and Development Review*, Vol. 35, No. 4, pp. 663-699.
- Goode, William J. (1963) *World Revolution and Family Patterns*, The Free Press of Glencoe.
- Griffis, William Elliot (1876) *The Mikado's Empire*.
- Jones, Gavin, P. T. Straughan and Angelique Chan (2009) "Very Low Fertility in Pacific Asian Countries - Causes and Policy Responses," in Jones, Gavin, P. T. Straughan and Angelique Chan (eds.), *Ultra-Low Fertility in Pacific Asia*, Routledge, London, 2009, pp. 1-22.
- Kohler, Hans-Peter, Francesco C. Billari and José Antonio Ortega (2002) "The Emergence of Lowest-Low Fertility in Europe during the 1990s," *Population and Development Review*, Vol. 28, pp. 641-681.
- Lesthaeghe, Ron (2010) "The Unfolding Story of the Second Demographic Transition," *Population and Development Review*, Vol. 36, No. 2, pp. 211-251.
- Livi-Bacci, M. (2001) "Too Few Children and Too Much Family," *Daedalus*, Vol. 130, No. 3, pp. 139-156.
- Lutz, W., V. Skirbekk, and M. R. Testa (2006) "The Low Fertility Trap Hypothesis: Forces that May Lead to Further Postponement and Fewer Births in Europe," *Vienna Yearbook of Population Research 2006*, pp. 115-151.
- McDonald, Peter (2000) "Gender Equity in Theories of Fertility Transition," *Population and Development Review*, Vol. 26, No. 3, pp. 427-440.
- McDonald, Peter (2002) "Sustaining Fertility through Public Policy: the Range of Options," *Population (English Edition)*, Vol. 57, No. 3, pp. 417-446.
- McDonald, Peter (2005) "Fertility and the State: the efficacy of policy," XXV International Population Conference.
- Micheli, Giuseppe A. (2000) "Kinship, Family and Social Network: The Anthropological Embedment of Fertility Change in Southern Europe," *Demographic Research*, Vol. 3, No. 13, pp. 1-27.
- Murphey, Rhoads (2009) *East Asia: A New History*, Fifth Edition, Longman.
- Ogawa, Naohiro (2003) "Japan's Changing Fertility Mechanisms and its Policy Response," *Journal of Population Research*, Vol. 20, No. 1, pp. 89-106.
- Perry, Matthew Calbraith (1856) *Narrative of the Expedition of an American Squadron to the China Seas and Japan*.
- Ravanera, Z.R., Rajulton, F., and Burch, T.K. (1995) "A Cohort Analysis of Home-Leaving in Canada, 1910-1975," *Journal of Comparative Family Studies*, Vol. 26, No. 2, pp. 179-193.
- Reher, David Sven (1998) "Family Ties in Western Europe: Persistent Contrasts," *Population and*

Development Review, Vol. 24, No. 2, pp. 203-234.

Retherford, Robert D. and Naohiro Ogawa (2006) "Japan's Baby Bust: Causes, Implications, and Policy Responses," in Harris, Fred R. (ed.), *The Baby Bust: Who Will Do the Work? Who Will Pay the Taxes?* Rowman&Littlefield, pp. 5-47.

Screech, Timon (2005) *Japan Entolled and Deciried - Carl Peter Thunberg and the Shogun's Realm, 1775-1796*, Routledge.

Straughan, Paulin Tay, A. Chan and G. Jones (2009) "From Population Control to Fertility Promotion," in Jones, Gavin, P. T. Straughan and Angelique Chan (eds.), *Ultra-low Fertility in Pacific Asia*, Routledge, London, 2009, pp. 181-203.

Suzuki, Toru (2005) "Why is Fertility in Korea Lower than in Japan?" *Journal of Population Problems*, Vol. 61, No. 2, pp. 23-39.

Suzuki, Toru (2006) "Lowest-low Fertility and Governmental Actions in Japan," The PIE International Conference on Declining Fertility in East and Southeast Asian Countries, Hitotsubashi Collaboration Center, Tokyo.

Suzuki, Toru (2007) "Nuptiality and Fertility Declines in Japan," International Seminar on Low Fertility and Policy Responses in Selected Asian Countries, Korea Institute for Health and Social Affairs.

Suzuki, Toru (2008) "Korea's Strong Familism and Lowest-Low Fertility," *International Journal of Japanese Sociology*, No. 17, pp. 30-41,.

Suzuki, Toru (2009a) "Fertility Decline and Governmental Interventions in Eastern Asian Advanced Countries," *The Japanese Journal of Population*, Vol. 7, No. 1, pp. 47-56.

Tung, An-Chi and Wen Shan Yang (2006) "Fertility Decisions and Women's Labor Market Status: A Case Study of Taiwan," *Journal of Population Studies*, No. 39, pp. 39-55.

van de Kaa, Dirk (1987) "Europe's Second Demographic Transition," *Population Bulletin* Vol. 42, No. 1.

Wall, R. (1989) "Leaving Home and Living Alone: An Historical Perspective," *Population Studies*, Vol. 43, pp. 369-389.

Willis, Robert J. (1994) "Economic Analysis of Fertility: Micro Foundations and Aggregate Implications," in Kiessling, K. L. and H. Landberg (eds.), *Population, Economic Development, and the Environment*, chp.6.