

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.

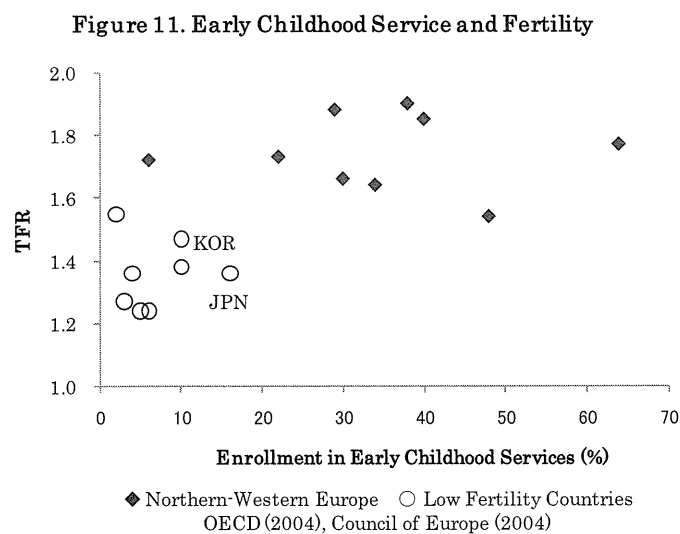
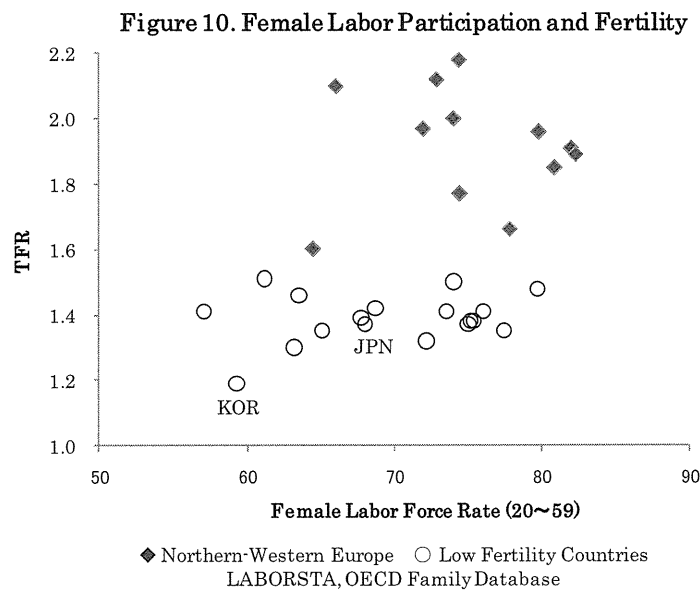


Figure 10 shows the relationship between the female labor force participation rate in 2006 and the TFR in 2008. The relationship turned from negative to positive in the mid 1980s (Engelhardt and Prskawetz, 2005, pp. 2-3; Billari and Kohler, 2002, pp. 20-21; Atoh, 2000, p. 202). However, this change in 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 Births and Fertility

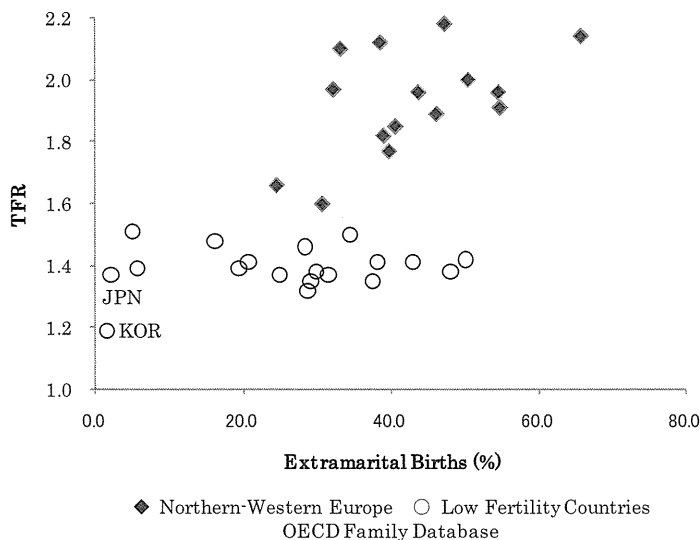


Figure 12 shows the relation between the proportion of extramarital births and fertility. The increase in cohabitation and extramarital births during the second demographic transition could be attributed to the weak familism in Northern/Western Europe. It is possible that the notion of marriage as contract 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 necessarily 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 loads (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)		

OECD Family Database

中華民國行政院主計處 (<http://www.dgbas.gov.tw/mp.asp?mp=1>)

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).

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.

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.

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

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.

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.

Table 5. Pronatal Policy Programme 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 (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 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 Measures
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		

OECD, *Society at a Glance 2009*

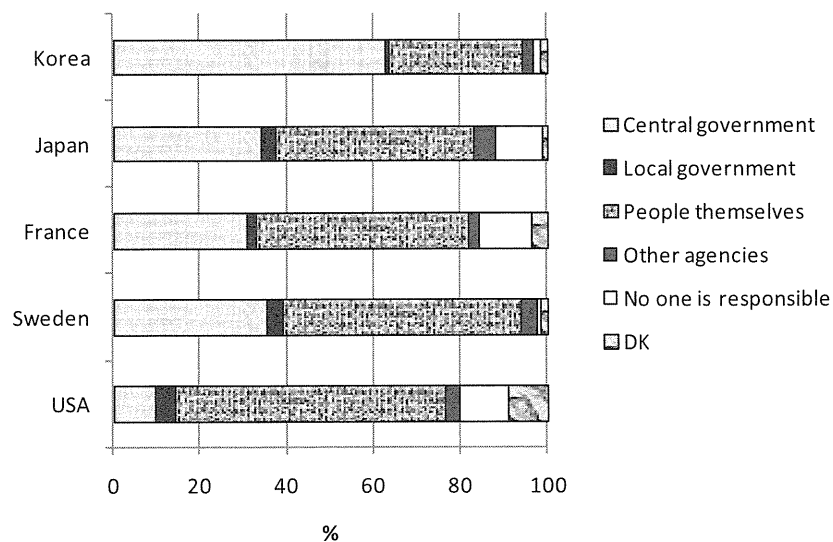
Table 7 suggests that much more governmental efforts are required for Japan and Korea to attain the replacement level. Policy developments after 2005 might have raised the level of Japan to around 1% and that of Korea to around 0.5%. However, there might be no change in the situation that Japan and Korea 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 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.

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



Cabinet Office, International Comparative Survey on Low Fertility, 2005

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.

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: Casuses, Implications, and Policy Responses," in Harris, Fred R. (ed.), *The Baby Bust: Who Will Do the Work? Who Will Pay the Taxes?* Rowman&Littlefied, 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.

(in Japanese)

- S・N・アイゼンシュタット (Eisenstadt, 1996=2004) 梅津順一・柏岡富英訳『日本 比較文明論的考察』岩波書店 (S. N. Eisenstadt, *Japanese Civilization: A Comparative View*, University of Chicago Press, 1996)
- 浅見泰司・石坂公一・大江守之・小山泰代・瀬川祥子・松本真澄 (Asami et al., 2000) 「少子化現象と住宅事情」『人口問題研究』第 56 巻第 1 号, pp. 8-37.
- 阿藤誠 (Atoh, 2000) 『現代人口学 [少子高齢社会の基礎知識]』日本評論社.
- 岩澤美帆 (Iwasawa, 2002) 「近年の TFR 変動における結婚行動および夫婦の出生行動の変化の寄与について」『人口問題研究』第 58 巻第 3 号, pp. 15-44.
- 梅棹忠夫 (Umezao, 2002) 『文明の生態史観ほか』中公クラシックス.
- 大井方子 (Oi, 2004) 「バブル崩壊前後の出産・子育ての世代間差異」樋口美雄・太田清・家計経済研究所編『女性達の平成不況：デフレで働き方・暮らしはどう変わったか』日本経済新聞社, pp. 117-151.
- 大山昌子 (Oyama, 2004) 「子どもの養育・教育費用と出生率低下」『人口学研究』第 35 号, pp. 45-57.
- 金子隆一 (Kaneko, 2004) 「出生数変動の人口学的メカニズム」大淵寛・高橋重郷編『少子化の人口学』原書房, pp. 15-36.
- 川島武宜 (Kawashima, 1957) 『イデオロギーとしての家族制度』岩波書店.
- 国立社会保障・人口問題研究所 (NIPSSR, 2005; 2008) 『人口統計資料集』2005 年版・2008 年版.
- 佐々井司 (Sasai, 1998) 「近年の夫婦出生力変動とその規定要因」『人口問題研究』第 54 巻第 4 号, pp. 3-18.
- 七條達弘・西本真弓 (Shichijo and Nishimoto, 2003) 「若い世代の夫婦の子供数に影響を及ぼす要因」『理論と方法』第 18 巻第 2 号, pp. 229-236.
- 鈴木透 (Suzuki, 2003) 「離家の動向・性差・決定因」『人口問題研究』第 59 巻第 4 号, pp. 1-18.
- 鈴木透 (Suzuki, 2009b) 「韓国の極低出生力とセロマジプラン」人口問題研究 Vol. 65, No. 4, pp. 8-28.
- 仙波由加里 (Semba, 2002) 「不妊と生殖補助技術の現状と課題」『人口学研究』第 31 号, pp. 37-46.
- 津谷典子 (Tsuya, 1999) 「出生率低下と子育て支援政策」『季刊社会保障研究』第 34 巻第 4 号, pp. 348-360.
- 内閣府(Cabinet Office, 2005) 「少子化に関する国際比較調査」
<http://www8.cao.go.jp/shoushi/cyousa/cyousa17/kokusai/index.html>
- 中根千枝 (Nakane, 1967) 『タテ社会の人間関係』講談社現代新書.
- 中根千枝 (Nakane, 1970) 『家族の構造—社会人類学的分析』東京大学出版会.
- サミュエル・ハンチントン (1996=1998) 鈴木主税訳『文明の衝突』集英社 (Huntington, Samuel P., *The Clash of Civilizations and the Remaking of World Order*, 1996)

- 廣嶋清志 (Hirosima, 1999) 「結婚と出生の社会人口学」 目黒依子・渡辺秀樹編『講座社会学 2 家族』 pp. 21-57.
- 廣嶋清志 (Hirosima, 2000) 「近年の合計出生率低下の要因分解：夫婦出生率は寄与していないか？」『人口学研究』第 26 号, pp. 1-20.
- 廣嶋清志 (Hirosima, 2001) 「出生率低下をどのようにとらえるか？—年齢別有配偶出生率の問題性—」『理論と方法』第 16 巻第 2 号, pp. 163-183.
- 福田亘孝 (Fukuda, 2004) 「出生行動の特徴と決定要因—学歴・ジェンダー・価値意識—」 渡辺秀樹・稲葉昭英・嶋崎尚子編『現代家族の構造と変容：全国家族調査[NFRJ98]による計量分析』東京大学出版会, pp. 77-97.
- フランシス・フクヤマ (Fukuyama, 1996) 加藤寛訳『「信」無くば立たず』三笠書房 (Francis Fukuyama, *TRUST: The Social Virtues and the Creation of Prosperity*, 1995)
- 藤野敦子 (Fujino, 2002) 「家計における出生行動と妻の就業行動—夫の家事育児参加と妻の価値観の影響—」『人口学研究』第 31 号, pp. 19-35.
- 八代尚宏 (Yashiro, 2000) 「少子化問題への経済学的アプローチ」『季刊家計経済研究』第 47 号, pp. 20-27.
- 山上俊彦 (Yamagami, 1999) 「出産・育児と女子就業との両立可能性について」『季刊社会保障研究』第 35 巻第 1 号, pp. 52-64.
- 山口一男 (Yamaguchi, 2005) 「少子化の決定要因について：夫の役割，職場の役割，政府の役割，社会の役割」『季刊家計経済研究』第 66 号, pp. 57-67.

(in Korean)

- 보건복지부·외 (Ministry of Health and Welfare, 2010) “제 2 차 저출산·고령사회 기본계획 2011~2015 시안,” 공청회 (2010.9.14) 자료집.

Trends in Low Fertility and Policy Responses in Taiwan

Yu-Hua Chen

Population and Gender Studies Center

National Taiwan University

1. Introduction

Half a century ago, population explosion was once a major demographic problem threatening the future of humanity. Entering the 21st century, depopulation emerges as a global trend in most advanced societies, with below replacement fertility grabbing the most public attention in East Asia. Marriage behavior and family life are changing within Taiwanese society. Trends such as late marriage, lower marital fertility and greater participation of married women in the labor force are similar to changes that took place in the industrialized societies. Yet other aspects of family life in Taiwan are still quite different from the way family institutions have developed in the West. The proportion of extramarital births is extremely rare. While cohabitation has been accepted among young people, marriage is generally viewed as a permanent arrangement, particularly in relation to childbearing and childrearing.

Taiwan completed the demographic transition during the twentieth century and experienced total fertility rates lower than the replacement level since 1984. Taiwan's TFR decreased further from 1.80 to 0.89 between 1990 and 2010. Carl Haub, the senior demographer of Population Reference Bureau, said that Taiwan has the world's lowest fertility rate.³ The least babies in the island's history were born in past year, prompting President Ma Ying-Jeou to call for *national-security* level counter-measures to address the matter. This paper will describe current trends in marriage and fertility and explore the institutional context of low fertility in Taiwan. Since values of having children serve as the fundamental ground for understanding fertility behavior, a brief examination on the intergenerational differences toward value of children is presented by using data from one 3-generation sample of grandmothers, their adult daughters, and daughter's adolescent children. Then, an overview of population policy will be provided, with the focus on newly announced pro-natal policy measures.

³ Carl Haub, "Taiwan's Birth Rate Lowest Recorded in History." Population Reference Bureau. (<http://prbblog.org/index.php/2011/01/13/taiwans-birth-rate-lowest-in-history/>)

Declining Fertility, Delaying Marriage and Cross-Border Marriage

2-1. Trends in Fertility at Post-War Era

Since the late 1950s a significant fertility decline occurred in Taiwan, but this demographic trend actually accelerated after the introduction of the family planning program initiated in 1965. With an intension to control population growth for boosting economic development, the TFR declined effectively from 7.05 to 2.76 between 1951 and 1975 as shown in Figure 1. While in 1976, year of the dragon, the rate rebounded to 3.08 and recorded the second highest number of births (423,356), next to the top one of 423,469 births in 1962. The TFR has been lower than the replacement level in 1984 and stagnated around 1.75 until the East Asian financial crisis of 1997-1998. Despite fluctuations in TFR in the late 1990s, the graph in 2000 again echoed the fact that Taiwanese couples decided to give births most often in the Year of the Dragon. Entering the 21st Century, the fertility rate touched an even lower level of 1.23 in 2003. Ever since then, Taiwan becomes a member of lowest-low fertility countries (Kohler et al., 2002) and has not seen any change in declining fertility trend.

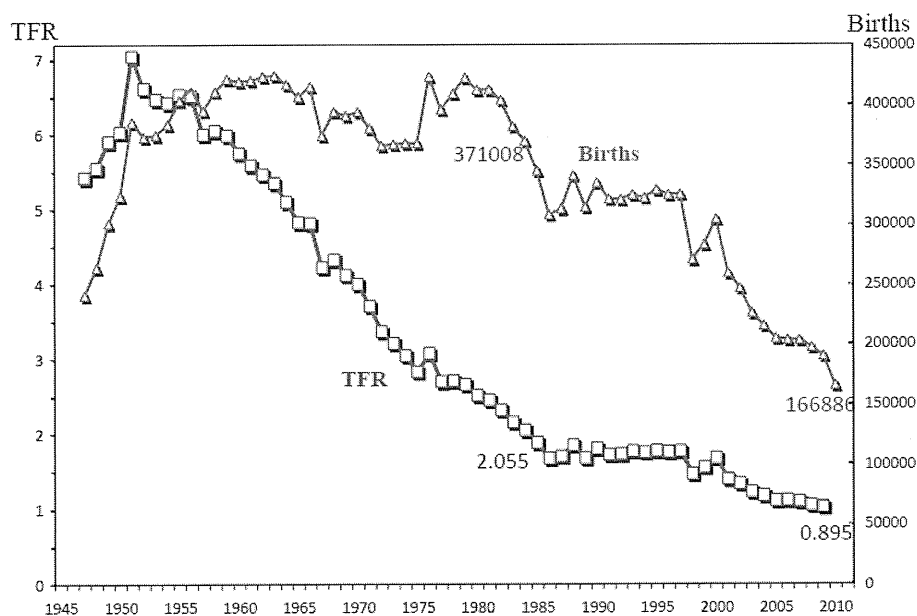


Figure 1. Trends in Total Fertility Rates and Births in Taiwan, 1947-2010

Sources: Table 7. General Fertility, Age-specific Fertility and Total Fertility Rates Per Thousand Childbearing Age Women, Department of Household Registration, Ministry of the Interior, ROC. (http://www.ris.gov.tw/web_eng/eng_sta_hs.html)

2-2. Delay in Childbearing

In Taiwan, like other East Asian countries, the delay in childbearing is significant among younger cohorts. As shown in Table 1, in 2010 the average age of mothers at first childbirth has increased by 6.1 years since 1980 when it was 23.5 years. Regardless of birth order, the mean age of mothers at childbearing was 30.6 years in the past year, 5.2 years older than in 1980. Although the average age of all mothers at childbirth is increasing, the data show that a narrowing gap between mean ages of first birth and all births through the fertility transition happened in Taiwan.

Table 1. Mean Age of Mother at Childbearing: 1980~2010

	1980	1985	1990	1995	2000	2005	2010
First birth	23.5	24.5	25.4	26.1	26.7	27.7	29.6
All births	25.4	26.0	27.0	27.7	28.2	28.8	30.6

2-2. Postponement of Marriage and Singlehood

The economic and social transformation has led to late marriage which has been evidenced as one direct factor affecting the transition to below replacement fertility in Taiwanese society (Lee, 2009; Luoh, 2007). Both men and women are marrying later than they did in the past. The mean age of first marriage reached 29.2 years for women and 31.8 years for men in 2010. The longer schooling and faster economic growth tend to delay marriage for both men and women. Education and employment tend to expand women's horizons and provide them with previously unavailable opportunities and lifestyles that compete with marriage.

How has nuptiality changed after a period of rapid economic development? The answer is highly associated with the increase in education among younger Taiwanese. In a newly finished research paper, I and my colleague analyzed the trends in timing of entry into first marriage across birth cohorts. We pooled the data of Taiwan Social Change Survey collected in different years and applied event history method for modeling the age pattern of first marriage. The empirical results demonstrate the variations in mean age at first marriage are associated with educational attainment. As shown in Table 2, the comparison between birth cohorts shows that early and universal marriage has shifted toward late and less marriage, a trend being particularly salient among younger Taiwanese. More importantly, the trends in delaying marriage of higher educated women and lowest educated men actually reflect an unchanged preference for potential partners in Taiwan's marriage market (Chen and Chen, forthcoming).

Table 2. Mean Age at First Marriage by Sex, Birth Cohort and Education

	All	Elementary	Junior H.	Senior H.	College	University+
Cohort				Men		
1908-1940	26.9	26.0	26.9	27.6	29.4	31.7
1941-1945	27.0	25.9	27.3	28.2	28.9	29.4
1946-1950	27.1	26.7	25.3	27.1	28.6	30.5
1951-1955	28.1	26.2	27.4	28.4	30.4	31.2
1956-1960	27.9	26.7	26.5	28.0	29.0	30.9
1961-1965	29.6	28.3	28.2	28.8	31.2	33.2
1966-1970	30.9	37.4	30.0	29.6	31.6	33.5
Cohort				Women		
1908-1940	22.0	21.8	22.1	24.3	22.9	26.3
1941-1945	22.6	22.1	22.8	24.6	26.2	25.6
1946-1950	23.2	22.0	22.9	25.0	25.8	27.6
1951-1955	24.0	22.0	23.2	25.6	27.3	27.6
1956-1960	24.5	21.8	23.6	25.0	27.3	28.7
1961-1965	25.5	22.2	23.7	25.9	28.1	27.7
1966-1970	26.5	21.3	22.6	25.9	28.8	29.9

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

Table 3. Trends in Proportion Single by Sex and Age Groups, 1980-2010

	1980	1985	1990	1995	2000	2005	2010
Age				Men			
25-29	40.3	47.3	56.3	63.6	69.2	76.8	85.1
30-34	13.5	16.2	22.6	30.8	35.4	41.2	54.1
35-39	7.1	7.9	10.6	15.1	18.3	21.0	29.0
40-44	5.7	5.7	6.8	8.5	10.8	12.7	17.8
Age				Women			
25-29	19.6	23.5	31.9	39.8	47.5	59.1	70.1
30-34	7.7	9.4	12.3	16.0	20.8	26.9	37.2
35-39	3.9	5.7	7.5	9.0	11.3	14.8	20.9
40-44	2.9	3.2	5.5	6.7	7.4	9.5	14.4

Source: 1980-2010 Taiwan-Fuchien Demographic Fact Book, Republic of China.

The official statistics also present a growing number of men and women who are never married (see Table 3). A closer scrutiny from the demographic data shows the proportion of women in their early 30s who had never married increased from 7.7% in 1980 to 37.2% in 2010. There was a more significant increase in the proportion of single men of 30-34 years of age from 13.5% to 54.1% during the same period. Last year, for Taiwanese in their late twenties, only 30% of women and 15% of men were married. While this may be a continuation of the shift to late marriage, it may also indicate an emerging trend toward lifelong singleness. Being unconventional choice, the singlehood has caught the public's attention and become headline news in recent years.

2-3. Cross-Border Marriage

The number of foreign nationals in Taiwan has been rather small due to the unique political environment and border control. Since the 1990s, however, the number of immigrants surged rapidly with the influx of spouses from China and Southeast Asia. While the enhancement in women's status and roles is viewed as an accomplishment of Taiwan's socioeconomic transformation, it has also been argued to have a direct effect on women's postponing marriage. Adding an unchanging norm of marriage gradient, women who have attained higher education are less likely to marry men with lower human capital. Consequently, cross-border marriage emerges as an acceptable option among less advantaged men and becomes more visible in non-metropolitan areas.

As shown in the left panel of Table 4, the number and share of cross-border marriages have increased significantly from the late 1990s. Marriage statistics for 1998 show that 14.1% of registered marriages involved non-Taiwanese wives, but this figure unexpectedly soared to 28.4% in 2003. To decelerate the growth of cross-border marriages and to inhibit the possibility of marriage fraud (i.e. trafficking in women), a variety of legal restrictions and penalties began to be implemented in 2004.⁴ There is no guarantee of legal status for marriage migrants until couples can pass a face-to-face interview held either at the checkpoints of major airports or in foreign spouses' home countries. The share of female marriage migrants were observed from 21.4% in 2004 to 11.8% in 2008. The proportion ever rebounded slightly in 2009, a year after global economic crisis. However, a significant decrease in number of wives from Southeast Asian countries was never recovered since 2005. In contrast, following

⁴ The *Act Governing Relations between Peoples of the Taiwan Area and the Mainland Area* has been revised to include harsher punishments for trafficking in immigrants. The Immigration Office of National Police Agency has also strengthened on-line and post-entry interviews of Mainland Chinese spouses and other applicants for visit, stay and residence in Taiwan area. According to the 2005 annual report, the Office has interviewed 85,726 Mainlanders, with nearly one-third of interviewees being deported back to the Mainland. For foreign spouses, particularly from Southeastern Asian countries, the conventional group interview has been replaced by one-to-one interviews as of June 2005.