Fertility Trend and Family Policies in Germany, Austria, Switzerland and the Netherlands

Toshihiko Hara

1. Introduction

Germany (former West and East Germany), Austria, Switzerland and the Netherlands are situated in Western Europe with tight relations in history, culture and language. As for fertility trend, they show certain similar patterns (except for former East Germany). Their total fertility rates (henceforth referred to as simply TFRs) declined rapidly from the mid-1960s to the mid-1970s and since then recorded long-term low levels ranging from 1.3 to 1.6.

The purpose of this paper is to clarify common denominators and differences in reciprocal comparison in fertility trends, their demographic determinants, socio-economic factors, the policy responses to low fertility and their effects in four countries and to explore the policy implications for Japan.

2. Declining trend of Fertility

(1) Historical view

At the end of the 19 century, the long term fertility decline began and the TFRs of four countries shifted from a traditional high level of around 4.5 to the sub-replacement level of 1.55-1.8 in the 1930's, except for the Netherlands which recorded 2.5 in 1935. In any case, until before World War II, the historical process of fertility transition had been accomplished and the number of births and children had been decided by birth control and family planning in couples, not by marriage control in society (Schwarz 1999:239-242; IFD 1999:14-15; Calot 1998:8-94; Garssen and de Beer 1999:54).

In the early 1940's, pronatalistic policies were implemented in Germany and Austria under the Nazi regime, and the temporal rise of the birth rate was observed. In Switzerland and the Netherlands, some decrease in fertility were also recorded at that time.

Following World War II, there were a short but strong turn up of TFRs (except for Germany). After the shake out of this reaction, the baby boom continued for one decade from the mid-1950s to the mid-1960s and TFRs exceeded the replacement level in all four countries. However they entered into a decline phase again between 1963 and 1965, recording long-term low levels until recently.

(2) Trend in TFR : 1960-2000

Figure 1 shows the trends in TFR : 1960-2000. In the mid-1960s, TFR increased and peaked, in the Netherlands at 3.22 in 1961, in Austria at 2.82 in 1963, in former West Germany at 2.55 in 1964, in Switzerland at 2.68 in 1964 and at 2.49 in former East Germany in 1965.
After that, TFR continued to fall dramatically below replacement level until around 1975 and to stagnate at the low level ranging from 1.3 to 1.6 for 25 years with some fluctuation. The only exception is former Eastern Germany. TFR began to rise since 1976 with certain effects of pronatalistic family policies, recorded the new peak level of 1.94 in 1980 and sustained a higher level than the other areas. After the fall of the Berlin Wall, due to so called "Demographic Shocks", TFR dropped drastically to 0.77 in 1993.

TFR level in 2000 is 1.38 in former West Germany, 1.22 in former East Germany, 1.34 in Austria, 1.50 in Switzerland and 1.72 in the Netherlands. The recent trend shows former East Germany's gradual catch-up to former West Germany and the recuperation in the Netherlands since 1997.

(3) Completed fertility of female birth cohort

Figure 2 shows the trends in completed fertility of female birth cohorts born in 1930 and after (henceforth referred to as simply CTFR).

CTFR increased and peaked, in the Netherlands at 2.67 for cohort in 1930, in both part of Germany at 2.22 for cohort in 1932, in Switzerland at 2.20 for cohort in 1933 and in Austria at 2.45 for cohort in 1934. After that, CTFR began to fall. The cohort fertility fell below 2.0 for cohort in 1940 in both part of Germany, in Switzerland for cohort in 1942, in Austria for cohort in 1943 and in the Netherlands for cohort in 1946.

In recent trends, the lowest level of CTFR is 1.48 for cohort in 1965 in former West Germany, then at 1.47 for cohort in 1967 in former Eastern Germany, at 1.54 for cohort in 1967 in Austria, at 1.65 for cohort in 1965 in Switzerland and at 1.76 for cohort in 1965 in the Netherlands. Every country still shows very low level cohort fertility but their declines seem to be continued.

3. Demographic determinants on fertility trend

(1) marriage and divorce

a. Total marriage rate and proportion of ever married women

Figure 3 shows the trends in total female first marriage rates (henceforth referred to as simply TFFMR):1960-2000. In the 1960's, TFFMRs were above the level of 1 (except for Switzerland) due to continuing marriage boom from the 1950's. But following the 1970's, they have begun to decline swiftly to very low levels and stagnated since the 1980's at around 0.6.

In the case of the former Eastern Germany, TFFMR rose slightly from 1975, went down since 1978 to 1983, went up again to 1987, dropped after the fall of the Berlin Wall and recovered. It shows the complicated movement as reflections of changes in family policies and social systems.

In trend in TFFMR of Austria, also abrupt ups and downs in 1972, 1983 and 1987 can be observed in concern with changes of preferential tax system for marriage.

Figure 4 shows the trends in female first marriages from the cohort perspective. The proportions of ever married women by age 50 for cohorts born before 1945 were around 95% in the Netherlands and former West Germany, 90% in Austria,
85% in Switzerland, one can say it was a period when virtually everybody married. However, in the following generations, these proportions decreased step by step and are expected to decline to 72-75% for the cohorts 1966-1967.

In the case of former Eastern Germany, this proportion marked exceptional trend like TFFMR. From cohort 1935 to cohort 1944, this rose up to 96% and was stable until cohort 1951. It is said that the high levels of ever married proportion in these generations were due to the family policy of the government, which gave priority to married couples to obtain their living quarters. On the other hand, this proportion of Austria shows almost the same trend with other countries and it means the changes in marriage support policy caused no substantial impact on cohort marriage behavior in long term.

b. Mean age of women at first marriage (below age 50)

Figure 5 shows the trends in mean age of women at first marriage. In 1960, it recorded 23.7 years in former West Germany, 22.6 years in former East Germany, 24.0 years in Austria, 24.9 years in Switzerland and 24.2 years in the Netherlands. It continued to be lower and bottomed out at 24.1 years in 1971 in Switzerland, at 22.6 years in 1973 in the Netherlands, at 22.7 years in 1974 in Austria, at 22.5 years in 1975 in former West Germany and at 21.7 in 1978 in former East Germany. Then, it began to rise again and continued to climb higher to the present. The mean age of women at first marriage in 1997 (where the comparative data are available) is 26.8 years in former West Germany, 26.0 years in former East Germany, 26.5 years in Austria, 27.5 years in Switzerland and 27.4 years in the Netherlands.

Figure 6 shows the trends in mean age of women at first marriage from the cohort perspective. The curves indicate the same movements of timing shift of marriage and the turning points to postponement are observed nearby cohort 1947. The mean age of women at first marriage in cohort 1966 (where the comparative data are available) is 26.1 years in former West Germany, 23.0 years in former East Germany, 25.2 years in Austria, 27.0 years in Switzerland and 26.2 in the Netherlands.

The mean age of marriage both in period and cohort is relatively high in Switzerland and low in former East Germany and in Austria.

c. Mean age at childbirth

The trends in mean age at childbirth in 1960-2000 (Fig. 7) shows the almost same pattern with marriage behavior. It fell down until 1974-1975, then turned to rise and continued to be higher to the present. As for mean age at first childbirth, this trend change began a little earlier, i.e., from 1970-1971 (Fig. 8).

In any case, it is interesting that the postponement of childbirth began in every country a few years later after when TFR has commenced to decrease. Inversely, the mean age at childbirth continued to decline during the swift fertility declines from 1964 to 1974. This paradoxical movement of the mean age at childbirth should be better explained by the falling mean age at first marriage until the mid-1970s.

Mean age at childbirth (in parentheses mean age at first childbirth) in 1999
recorded 28.9 years (28.0 years) in former West Germany, 27.5 years (27.6 years)
in former East Germany, 28.1 years (26.3 years) in Austria, 29.7 years (28.5 years)
in Switzerland and 30.3 years (28.7 years) in the Netherlands. It is very high in the
Netherlands and Switzerland, relatively low in former East Germany and Austria.

From the cohort perspective (Fig. 9), the lowest level of mean age at
childbirth is observed in birth cohort 1942-1946. The mean age at childbirth in
cohort 1965 (where the comparative data are available) is 28.7 years in former
West Germany, 24.9 years in former East Germany, 27.2 years in Austria, 29.3
years in Switzerland and 29.9 in the Netherlands. Only in former East Germany, a
temporal reversal in the postponement of childbirth is observed from cohort 1956
to cohort 1961, which is assumed to be due to pronatalistic family policy of SED
(Sozialistische Einheitspartei Deutschlands).

(2) Cohabitation and Extra-marital births

a. Cohabitation

According to the Fertility and Family Survey (FFS) taken in
1992-1995(Klijzing&Macura 1997:889), the proportions of consensual union in
female samples aged 20-24 (in parentheses 25-30) at interview were 12%(14%)in
former West Germany, 16%(12%)in former East Germany, 21%(24%)in the
Netherlands, 25%(20%)in Switzerland and 25%(21%)in Austria. They were still
far lower than 44%(31%)in Sweden. These proportions in the 30s were almost
half of the ones in the 20s. It is justified to say with this data that cohabitation is
not spreading as an alternative living arrangement for marriage (Table 1).

According to the Clearinghouse on International Developments in Child,
Youth and Family Policies at Columbia University, the percentage of couples
living in a consensual union aged at 16-29 in 1996 were 40% in Germany, 39% in
Austria, 40% in Switzerland and 46% in the Netherlands. They shows that the
cohabitation became a popular life style at least among young peoples, even
though it was not so much as in Sweden recording 73%. On the other hand, the
same data indicate that the cohabitation rates in all ages in the countries were still
around 11% (no data on Germany) and stayed at about a half of 27% in Sweden
(Table 2).

As the backgrounds of this limited spreading of cohabitation, the instability
of partnership and lower fertility in consensual union in comparison with those in
married couples are pointed out and once children are expected or born, the
consensual unions are transformed into marriage, thus, unmarried cohabitation
with own children remains rather rare(Niemeyer 1994; Klein 1999; Müller 1999;
Hara 2001a). Inversely, the consensual unions among young couples in the four
countries have only premarital character.

b. Extra-marital births

Figure 11 shows the extra-marital births ratios per 100 live births 1960-2000. They stayed at a still low level in the early 1960's, when the baby boom was lasting, but began to rise from about 1968 and continued to increase to the present. This ratio in 1999 (where the comparative data are available) is 17.7 in former West Germany, 49.9 in former East Germany, 30.5 in Austria, 10.0 in Switzerland and 22.7 in the Netherlands. It tends to be high in former East Germany and Austria, very low in Switzerland.

It is to be noticed that around 35% of children born in out-of-wedlock in former West Germany and about 50% in former East Germany are commonly legitimated after marriage of parents and around 30% of them are brought up by their mother and their father-in-low (Dorbitz and Gärtner 1998:387-391).

The relatively high level of extra-marital births ratio in Austria is known to have a large deviation among the local areas due to the different historical background for several centuries. It depends basically on the tradition of agricultural production, land ownership and the influence of Counter-Reformation in the 17th century in each area (BMUJF 1999:141-146).

In Switzerland, this ratio started to rise in the 1980's with the increase of cohabitation, continues since 1992 to go accelerate up again, even though the level of the ratio itself is still relatively low in Europe. In the Netherlands, also, it rises up swiftly since the 1980's with the growing number of consensual unions but about three in ten unmarried mothers get married sooner or later (Garssen and de Beer 1999:56).

(3) Contraceptive methods and legal abortions ratio

After introducing the oral pill into market in the mid-1960s, the modern contraceptive methods including rings and sterilization, spread swiftly and it is reported that nowadays one practices nearly perfect birth control from youth. The major contraceptive method for women is the oral pill but the young people tend to combine it with condom and elders prefer to use IUD (Intra Uterine Devices) or nothing.

Abortion was legalized in 1976 in former West Germany, in 1972 in former East Germany, in 1975 in Austria and in the Netherlands. In Switzerland, the regulations are different in each canton.

In any case, there were heated controversies about it in the 1970's due to the religious background in the countries, except for former East Germany, which was under a socialist regime. The legal abortion ratios climbed up to high level after legalization, but after then continued to decline to record low levels at present in the countries except for former East Germany, where this ratio keeps a comparatively high level (Fig. 12).

(4) Tempo and quantum
a. Ryder Index

For the better observation of fertility trend, it is necessary to analyze TFRs in
tempo and quantum aspect. The former indicates the changes in childbearing timing and the latter shows the ones in the number of children of a woman in her life (Fukuda 1999:3).

In this study, the tempo index (henceforth referred to as simply TI) and the quantum index (QI) of TFRs in four countries since 1974 are calculated by Ryder’s method (Ryder 1980; Otani 1993).

In former West Germany, QI declined consistently from 1.75 in 1974 to 1.50 in 1996, while TI shows some similarity with TFR (Fig.13). This indicates the periodical movement of TFR was strongly influenced by effect of timing change in childbearing. In addition, the TI ranging in 0.80-0.93 shows the fertility levels in TFR since 1974 appeared to be lower than cohort fertility trend due to postponement of childbirth. Furthermore, the little rise and fall of TI around 1981 suggest some timing effect of family policy changes in CDU (Christlich-Demokratische Union) government.

In former East Germany (Fig.13), TI trend showed a resemblance to TFR, but exceeded 1.0 since 1977, while QI tended to decline continuously from 1.83 in 1975 to 1.51 in 1996. It means that the rise of TFR from 1974 to 1980 in contrast to former West Germany was caused in fact only by the positive timing effect of the pronatalistic family policies of SED, which had no substantial impact on declining cohort fertility. The same is true in the case of drastic decrease caused by the negative timing effect after the fall of the Berlin Wall, when TI reached 0.51 in 1993-1994.

In Austria (Fig.13), even though the total trends resemble those of former West Germany, QI declined from 1.93 in 1974 to 1.56 in 1998, i.e., the quantum changes in cohort fertility affect the periodical movement of TFR more deeply.

Switzerland and the Netherlands (Fig.13) shows the similarity to former West Germany and Austria, however the up and down in TI is smaller. There were no obvious effects of family policies and only constant timing effect of the postponement of marriage and childbirth to a later age. Especially, in the case of the Netherlands, QI in 1999 indicates still the relatively high level of 1.77 among four countries and this means TFR in the Netherlands could be recovered to around 1.8, if the timing effect disappear (Table 3).

b. Difference between TFR and CTFR

One needs all the CTFRs in reference to the age-specific fertility rates from 15 years to 44 years to calculate the Ryder Index in one period year. Thus, due to the limitation of available data, TI and QI could only be obtained since 1974.

To solve this problem, it is possible to use the difference between TFR in a period year and CTFR for cohort born 29 years ago. In this brief method, the quantum factor in a period year is represented by the CTFR for cohort aged 29 years old in the same period year, which corresponds to QI in Ryder’s method. The subtraction of this CTFR from TFR in the year indicates the tempo factor. If the value of it is positive, the timing of birth is advancing and if negative, it is postponing. The former case corresponds with TI >1, the latter, with TI<0 in the Ryder Index.

The results in this brief method (Fig. 14) show that the rise and fall of TFR
from the 1960s to the mid of 1970s were attributed in large extent to the timing effect. In that period, the birth timing shifted to lower age because of the continued marriage boom among the young people until around 1974, while the fertility decline had already begun among the elder age brackets. Thus, the timing factor was positive until around 1966, when the influences of two moments were balanced; then it became negative with increasing weight of the latter. Since 1974, the same trend with the Ryder Index are observed.

c. Thermo-graphic representations

As we have already seen, fertility trend is a complex phenomenon caused by the reproductive behavior of population both in period and cohort. It’s not easy to comprehend intuitively two different perspectives as a whole.

One possible solution of this problem is to make a three-dimensional graphic representation with X-axis for periods (calendar year), with Y-axis for fertility level, with Z axis for ages. It looks like a topographic map. One can observe the fertility trend both in period and cohort as a whole by turning this map in monitor. But we encounter some difficulty to read details. As the next alternative, one can draw contour lines in each fertility level and project them on a plane. In addition, one colors this contour map from red to violet in gradation according to the intensity of fertility. In this way, we obtain a thermo-graphic representations of age- and parity-specific fertility.

Thermo-graphic representations on age-specific fertility (Fig.15) demonstrate fertility trends in countries after World War II comprehensively.

The German-speaking countries and Netherlands show the almost same process (except former East Germany); there was an intensive baby boom among the 20s age bracket around 1964, after then fertility decline began from the 40s age bracket and spread to younger age bracket. Around 1974, the boom went out and the postponement of childbearing started.

In the case of former East Germany, the intensity of reproductive behavior among people in their early 20s was relatively stable at least before the fall of the Berlin Wall, even though the fertility declined in older age brackets.

On the other hand, Japanese age-specific fertility shows clearly a different pattern of development. Two baby booms were analyzed; the first in the wide range from the 20s to the middle of 30s directly after the War and their echo in the narrow range of the 20s, interrupted in 1966, the year of the hinoe uma or fiery horse (Chinese zodiac). Fertility declines after the first baby booms occurred both in younger and older age groups and the intensity of the reproductive behavior among the middle-late 20s is still strong at least until 1985. However, here in Japan also, a gradual postponement of childbearing has started around 1974.

In the cases of Netherlands(Fig. 16), this figure of the age-specific fertility could be broken down in each birth order by using the data on age- and parity-specific fertility. In both countries, the births of more than the three children in a family are disappearing very rapidly from the end of 1960's to the beginning of 1970's and the postponement of childbearing in the first and the second births are observed, which are forming the main trend in all births after 1970's.
As for Switzerland (Fig. 17), we could make a graphic representation on fertility trend extended retrospectively before World War II. This figure shows there was another baby boom from 1940 to 1950 in Switzerland (supposedly, because of neutral position of this country during the War) and the trend pattern from 1932 to 1940 resembles the recent development since the 1980's.

In Fig. 18, one can compare the trend of the age-specific fertility with the one of the age-specific first marriage rate of women in Austria. They indicate only a weak similarity.

As a whole impression of these figures, it is interesting that one cannot find out any definitive trend in any birth cohort, which must occur in the diagonal direction in Lexis diagram. We can see only the periodical changes and their influences.

4. Socio-economic factors

(1) Rise of higher educated women

According to the OECD data in 1998, the proportion of women aged 25-34 who obtained tertiary education is higher than for women aged in 45-54. This suggests the rise of higher educated women in the four countries (Fig. 19). Among them, the Netherlands shows the largest difference from 18.5% for women aged 45-54 to 27.2% for women aged 25-34, then respectively Germany from 16.7% to 19.0%, Switzerland from 11.0% to 15.2% and Austria from 8.4% to 12.9%.

This tendency appears more visible in labor force than in non-labor force and it is comprehensive that the rise of higher educated women has a tight relation to the increasing labor participation of women. Especially, the high education level of women aged 25-34 in labor force in the Netherlands is notable.

(2) Changes in labor participation of women and wage gap by gender

In comparison of female labor participation rates in different age groups using the ILO data from 1960 to 2000, it is clear that the participation pattern shifted from the so called 'M form' to 'reversed U form' in these countries (Fig. 20). Due to rising tertiary educational attainment, the relatively high participation rate of 60%-70% in women aged 15-19 in 1960 decreased gradually and stabilized since 1990 at the low level of 30%-40%. On the other hand, the participation rate which peaked in 20-24 then dropped in 30-34 became sustained on the high level of 70%-80% in 2000. However, the one for women aged 60 and elder has tended to drop in recent years supposedly due to the development of pension system.

In Germany, the trough in ages 30-34 has been invisible and nearly 80% of women aged 40-44 is in labor since 1990 partly because of some effect of unification with former East Germany. Austria shows a resemblance to the development in Germany, even though the level of participation for women aged 40-44 is staying at 70%. In Switzerland, the peak of labor participation in ages 20-24 is relatively high with nearly 80% but the trough in ages 30-34 remains to be the most visible in the four countries. The Netherlands shows a slightly different trend. The labor participation rate peaks at ages 25-29, then decrease to
70% in ages 30-34 and begins to drop sharply from the ages 40-45.

The employment rates were in 1997 64.3% of single women and 61.7% of married women in former West Germany, respectively 62.1% and 79.5% in former East Germany, 61.6% of all women in Austria, 61.9% of all women in the Netherlands and in 1990 48.2% of all women and 44.5% of married women in Switzerland.

The part-time job ratio was 43% in 1997 in former West Germany, respectively 24.0% in 1997 in former East Germany, 30% in 1997 in Austria, 55.3% in 1994 in Switzerland and 33.8% in 1995 in the Netherlands. It is interesting that the part-time ratio in the Netherlands is relatively low in spite of their famous work sharing system.

It is reported that the employment rate and part-time job ratio correspond with child rearing and the former is lower and the latter tends to be higher with number of children to be cared. In Switzerland, decision making to have a family (i.e. raise a child) depends directly on the job and career of women (Bundesamt für Statistik 1996:30-36,106-110). And also the influence of unemployment rates is suggested in Germany and in Austria (Schwarz 1999:273-275; IFD 1999:56-58).

In comparison of wage gap by gender in manufacturing industry using the ILO data from 1996 to 2000, the largest differences are in Austria from 69.1% to 68.3% and the smallest ones are in the Netherlands from 76.5% to 77.5%. In three of the countries, the tendency to catch up is observed but weak (Table 4).

(3) Unemployment rates

In comparison of unemployment rates using the ILO data from 1969 to 2000 (Fig.21), the swift rise of unemployment was experienced in the Netherlands from the early 1970s and in Austria from the mid of 1970s, while in Switzerland this rate stayed at a relatively low level until 1990. After the Wassenaar Agreement in 1982, the unemployment rate in the Netherlands began to drop dramatically and keep the same level with Switzerland in 2000. In contrast, Germany shows the high unemployment level above 10%, supposedly due to the influence of unification. According to this data, no marked difference by gender is observed. According to the OECD data in 1998, the unemployment rate in the young population under 24 years tend to be higher than in other age-groups. However, the one in 25-30 years doesn't show any significant difference with the rate in 15-64 (Table 5).

(4) Socio-economic factors and fertility

As we have seen before, there were the socio-economic changes, which could have influenced the fertility development in four countries, though it is not easy to measure their extent.

In concern with Germany, the impact of rising educational level of woman on late marriage and increase of life long singles was reported to be affirmed but not on the number of children (Bossfeld, Huininik&Rohwer, 1991:337-351; Schwarz, 1999b:231-256).

In Austria, it is known that the female labor participation rates are a variable of the age of mother and number of her children (Table 6). The labor participation
rates among women aged 30-34 in 1997 was 74.4%, this rate was 88.2% in the case of childless and 68.7% in the case with children. In addition, according to the number of children under 15, this rate tended in all age groups to decrease from around 80% for mothers with one child, to 60% for mothers with two children and to nearby 50% for mothers with 3 and more children, though the rate was 90% in case of single mothers (IFD, 1999:56-58). According to FFS in Germany (1992), a similar relation between the proportion of fulltime mothers and the number of children was observed (Table 7). These reports indicate the influence of the marriage or the number of children on the female labor participation but do not demonstrate the inversed influence of the female labor participation on the fertility rate.

The effects of socio-economic factors on childlessness are more evident in former West Germany. According to Dorbritz & Schwarz (1996:246), childlessness in former West Germany was correlated with income, the level of occupational training, living situation of women. High childless rates were observed among the women in low income brackets, in higher education and in more individualized living arrangements. In combination of factors, two separate groups were characterized by high childlessness. The one was so called "das Karrierenmilieue (career oriented group)," comprised unmarried, highly educated and fulltime employed women, which indicated the childlessness rate of 89%. They tended to abstain from marriage and childbearing because of foreseen difficulties to make a career and have a family. The other was named "das Milieu der konkurrierenden Optionen (group of competitive options) and this group consisted of unmarried, fulltime employed women with low income (under 2500 DM per month). The childlessness rate of this group was about 65%. They had the feeling that their income was not enough for either having child or enjoying desired consumer life.

These findings are interesting, but they indicated only the correlations between socio-economic status and childlessness in micro data at a certain time. Inversely, their correlations in time series in macro data were not assured. Thus, the extent of impacts of the two women groups mentioned above on the spreading childlessness (and on the total fertility trend) in former West Germany as whole was not cleared.

5. Family policies and fertility

(1) Backgrounds and the basic concept

In contrast to similarities in fertility trends, the historical backgrounds and the basic concept of family policies show many differences, which are reflected by historical, cultural and political situations in the countries (Table 8).

In Germany, any arguments and policies to promote births are tabooed still today due to nightmare memories about pro-natalistic policies which accompanied racial discrimination under the Nazi regime. For this reason, the basic standpoint for family policy is that the government should be responsible for family according to constitutional prescription but act only in a subsidiary function to marriage and family and avoid any intervention in individual affairs. Thus, the family policies in former West Germany, historically have been designed to
encourage and sustain the traditional, two parent family with an "at-home" mother caring for children, through financial measures to realize an equitable distribution of the burden of maintaining a family. However, with the social changes in the 1970s, i.e. legalization of abortion, the reform of divorce law, improvement of juristic status of extra-marital child, the family policy has become increasingly concerned with various family models. Then, since the 1980s, the weight of the family policy is shifting to the support for labor participation of mothers and for improving the child rearing environment, through the extended three-year parental leave with the child-rearing allowance, an acknowledgement of the rearing period in pension law and so on.

In contrast to former West Germany, the government in former East Germany performed a series of pro-natalistic policy measures from 1976 under the slogan of "build up the Socialist Nation" and they realized even a short term rise of fertility. The major purpose of this policy was to promote labor participation of women (and fertility) for expanding of labor supply source (in future). In fact, they were supportive of labor policy rather than family policy. They have realized the high level of job participation in married women and the developed child care facilities. On the other side, they have increased the extra-marital births through the preferential dwelling support for single mothers and decreased the mean age of first marriage and birth, by giving the priority to married mother for using the child care center. These legacies remains still today in former East Germany long after unification (Höhn 1997; Dorbritz 1995).

Austria experienced also pro-natalistic policies under the Nazi regime and there still exists the feeling against the family policy to promote fertility, however the concerns with the negative future influences of low fertility on the national economy and welfare are officially acknowledged. Therefore, the Austrian government have provided various family policy measures to alleviate the financial burden of child rearing families and to promote the conformity between family life and career. It is spending relatively large amount of money for them. On the other side, the Austrian constitution has no explicit definition for the role of the government on family policy in spite of many historical trials. This situation would have brought the frequent changes and the complications in systems and their subsidiary influences on the marriage trend (Hara 2001b).

While Switzerland held the neutral position during World War II and had no trauma of population policy under Nazi regime, it has kept the tradition of liberalism and direct democracy based on Canton federalisms. This canton's dominance with different ethnic compositions and weakness of federal state delays implementation of federal laws and the developments of institutions for family policy in this country. The official documents and public discussions in Switzerland tend to show more interest in immigration policy and the integration of foreigners than the issues on low fertility.

In the Netherlands, because of their narrow geographical space and high population density, the concern to the population problems was traditionally acute and there isn't any taboos on population policy, even which have historically aimed to limit the population growth. In this context, there has been serious discussions about the appropriate population level of this country until the late
1960s (Beets & van Nimbergen 1999). Thus, the present family policies in this country do not target any fertility level but promote the conformity between family life and career, for solving the discrepancy between the ideal and realized number of children in family. The work sharing system, an important part of so called 'Polder Model', was introduced from the end of 1970s and brings many fruitful products, i.e. the swiftly decline of unemployment rates, the amelioration of governmental expenditure for social securities and other economic improvements. This work sharing system started originally as labor or economic policy and resulted in having the important impact on family policy to promote the Society with equal gender participation. However, "the dominant value orientation (as well as policy) that children should be at least partly be looked after by one of the parent (women still provides the majority of care) did not change" (Van Nimwegen 2001:14).

(2) Maternity and parental leaves

Maternity leaves (Table 9) are 14 weeks in Germany, 16 weeks in Austria, Switzerland and the Netherlands, including full replacement of one's salary. The take up rates are almost 100% (no data for Switzerland).

Parental leaves in Germany are granted for 36 months after childbirth, with income-tested two years Child-Rearing Allowance (Erziehungs geld) and with related 3 years Job Protection. In Austria, they continue for 30 months without sharing, or for 36 months with sharing by both parents, who received 100% of one's salary (higher rate for single- and low income parents). In the Netherlands, there is a right to parental leave for 6 months per parent, however principally unpaid and part-time (20 hours ) work at minimum is required to obtain it. In Switzerland, there is no common parental leave system and replacement of one's salary varies in cantons but the right to part-time work is guaranteed on the federal level until the child's eighth birthday. The take up rates of women are 96% in Germany and also high in Austria. In contrast, the one in the Netherlands shows a comparatively low level of about 40%, supposedly due to the work sharing system. However, the take up rates of males seem commonly low. The take up rates of males in the Netherlands is 9%. The female proportion of all takers is 97.5% in Germany and 99% in Austria (The Clearinghouse 2002).

(3) Early childhood education and care

Despite some subtle differences, child care policy in these countries (Table 10) have not yet to be fully developed, except for former East Germany, where the rest of legacy in socialist regime remains still today. Public and publicly subsidized preschools for the three to five years olds are well developed and show the good coverage rates of 80% in Austria, 85% in Germany and 95% in the Netherlands (no data for Switzerland). Especially, since 1997, the government in Germany has introduced a guarantee for preschool education in the three to five years olds and this policy has promoted the construction of Kindergartens in former West Germany. In contrast, very poor coverage rates for infants under 3 years are observable, i.e. 4.2% in former West Germany (50% in former East Germany), 3% in Austria and 4% in the Netherlands (no data for Switzerland).
For the background of this delayed development, the still existing traditional concept is indicated, that the children under 3 years old should be cared at home by mother (Lohkamp-Himmighofen 1999).

The primary schools in Germany and Austria are operated for a half day, mostly without meal provision. Their teaching hours are thus 525 hours in Germany and 630 hours per year in Austria at about age 7. On the other side, the ones in the Netherlands are 880 hours with canteen, supposedly due to the work sharing system (The Clearinghouse 2002).

In any case, it is hardly said that the early childhood education and care in these countries are adequately organized for children with working mothers.

(4) Family and child allowances

There are various financial measures to alleviate the burden of child rearing family in Germany and Austria, i.e. Maternity Allowance, Child-Rearing Allowance, Child Allowance, child tax deductions, educational tax deductions etc. and they are considerably generous in the European context, even though not leading (Hara 2001b). In the Netherlands, a complex child allowance system which varies the amounts by number of children and a child's age are available; however the tax system has no special consideration of families excepting for lone parent. In Switzerland, neither Child Allowance or child tax deductions on federal level are granted (Table 11).

(5) Impacts of family policy measures on fertility trend

As we have seen before, they show large differences in family policies but large similarities in fertility trends. It is difficult to imagine that the former could have any deciding influences on the latter in long term. Nevertheless, it is possible to indicate some historical cases of the impact in the short term.

The most incredible was the diverged fertility development in former East Germany since 1974. TRFs rose there swiftly from 1975 to 1980 in contrast to the ones in former West Germany. This depended clearly on the pro-natalistic policy measures, which have been introduced around 1976. The socialist government founded at that time the marriage loan system with the repayment moratorium in the case of the third childbirth (limited until the 28 mother's birthday) and implemented a variety of policies to promote the fertility such as birth premium, maternity leave with salary replacement, child allowance, cutting down of mother's working hours, building up of child care centers, preferential dwelling support for lone mother and so forth. Above all, the public child care systems for all the children over 1 year old, e.g. nursery, kindergarten, school full day operation, weekend and holiday camping, were perfectly established and contributed to improving the child rearing environment and the labor participation of mothers (Höhn 1997:10-11).

However, even with these powerful family policies, TFRs have never reached the replacement level and as already mentioned, most of their rises in that period could be explained to have been due to the timing effect of advanced childbearing and to have brought no substantive change in decreasing cohort fertilities. They remains still today at relatively low mean ages at marriage and first child birth,
relatively high extra marital birth and abortion ratio, as the legacies of the socialist regime.

In addition, the serious reactions on the fertility trends after the fall of the Berlin Wall indicate these policy measures were very constrained to be sustained financially and politically. In this meaning, the case of former East Germany should be understood as not the proof but rather the limits of the effectiveness by governmental intervention to fertility trends (Hara 2000).

In former West Germany, we could see in around 1981 the timing effects of family policy changes on fertility trends on a smaller scale. Prior to this period, the generous child allowance was guaranteed under the second coalition government between SPD (Social Democratic Party) and FDP (Liberal Democratic Party) from 1975 to 1982. After the election at the end of 1982, when the new coalition government with the leading of CDU was organized, the expenditures for family policies had been tightly constricted until 1985. The little rise and fall of TFR around 1981 were corresponding with these policy changes, even though they have no influence on the decreasing cohort fertilities (Hara 2001a).

In concern to the impact of family policy change on the marriage behavior, the case in Austria was very interesting. The abrupt ups and downs in trend of the marriage rates were caused in 1972 by the introduction of preferential tax system for marriage, in 1983-84 by the spreading rumors of its repeal and in 1987-1988 by its final abolition (BMUJF 1999:152). Such sort of institutional changes have made merely periodical fluctuation and the total marriage rates continued to decline from 0.8-0.9 in 1970s to 0.54 in 2000. They affected neither TFRs, age-specific fertility rates nor cohort fertility, as we have already seen.

As for Switzerland, the family policy itself is weak on the federal level and varies in each canton, thus it is difficult to observe any impact of family policy measures on fertility. It seems rather the migration policy than family policy could have more impact on fertility level, as thinking about high immigration rate, large proportion of foreign inhabitants in total population, and the higher level of fertility among foreign nationals than Swiss nationals.

In the Netherlands, the unique work sharing system was introduced originally not as family policy but as labor and social welfare policy for the establishment of so called 'Polder Model' since the Wassenaar agreement in 1982. This system evidently contributed to promote the female labor participation and to improve the child rearing environment, but no explicit impacts on periodical or cohort fertility have been observed until today (Van Nimwegen 2001).

6. Conclusions and the implications for Japan

According to the previous analysis, it is clear that four countries have common denominators in historical view of fertility development, i.e. a decline in the 1930's (partly because of economic recession), a short rise in the early 1940's, a little delayed baby boom in the mid-1950's and -1960's, an abrupt decline and long-term stagnation at below replacement level in 1970's(partly except for former East Germany under socialist regime) to present.
The thermo-graphic representation of Switzerland extended retrospectively to 1932 suggests that the fertility in these countries would have already tended to below replacement level in the long term but have been temporarily interrupted and erratic before and after World War II.

In this context, people in this area should have only revived the childbearing pattern before World War II in economic recovering in the 1950's. However, this movement spread into the younger age bracket due to the liberalization and individualization after the War and as a consequence of prolonged marriage life, parity progression to higher birth order was strongly promoted. This resulted in the explosive baby boom until around 1964. Simultaneously, the demand for adequate measures for birth control increased. In this situation, the oral pill was introduced into the market and spread rapidly from the high parity group to stop additional childbearing, to the low parity group for postponement of childbirth. Until around 1974, this process reached all age-groups, the third or 4+ births became only rare cases, as we have seen in thermo-graphic representation of the Netherlands. At the same time, a timing shift of the first birth to an older age began and continues to 2000's, for targeting a maximum of two children in the right moment. And this childbearing pattern caused the below replacement level of fertility over time because of the timing effect of postponement of marriage and birth to the arbitrary moment, and in cohort because of the increase of involuntary life-long singles and childlessness.

In addition to these common factors with other western countries, the important characteristics among the German speaking countries and the Netherlands are the relatively low proportion of consensual unions and extra-marital births. The cohabitations and the out of wedlock births in these countries have still only premarital character, and the traditional bonding between marriage and childbirth remains stable. The dominant value orientation that little children under 3 years old should be cared at home by (married) mother didn't change. These social norms on marriage, childbirth and childrearing restrain the recuperation of fertility, in contrast to Nordic and Anglo-Saxon countries. In this aspect, one can see some similarities with Japan.

Regarding socio-economic factors, there are several common denominators with Japan. While the rise of higher educated women and the increase of female labor participation continue, the relatively large part time job proportion in working mothers and the stable income gap by gender are still predominant. However, the direct impacts of these factors on the fertility trend could not be attested in time series macro data, even though some correlations in periodical micro data were observed. According to my impression, it seems more natural to interpret, that the strong bonding between marriage, births and childrearing would affect the female working style and labor circumstances in these societies.

As we have seen before, even though the family policies in these countries vary in many aspects, their basic concepts show the certain similarity in concern with strong bonding of marriage, childbirth and childrearing. Nevertheless, the early childhood education and care in these countries are organized not adequately for working mothers and the parental leaves system are designed in principal to promote the child rearing by mothers at home. In fact, the take up rate of parental
leaves in males remains at extremely low level in spite of promotion campaigns.

In context to the policy implications for Japan, it is a difficult question, if one can change these social norms on marriage, childbirth and childrearing. According to the previous analysis, the family police in each country itself reflects strongly the cultural and social norm in each society and it shows a high consistency with them. Thus, it is not expected that the former would change the latter (Hara 2000d).

It seems also unthinkable that family policy measure could give a long term influence on fertility trend. Only short term timing effects could be caused by political implementation but it is hardly sustainable. And nevertheless, one must foresee the large risk of the possible reaction on the fertility in its suspension like the case in former East Germany.

Finally, let’s see about the future trends of fertility in the German speaking countries and the Netherlands. As already mentioned, the tempo effects of the postponement of marriage and birth on the TFRs are becoming weak in these countries. It means the age shift of childbirth timing would be reaching the maximum level or the level, by which the cohort fertility would no longer be influenced. Therefore, the future level of TFR in each country depends on the final stabilized level of the cohort fertility in future. In this context, the Lesthaeghe's study shows differential recuperation trends in selected Western European countries (Lesthaeghe 2001). According to his analysis, Switzerland and the Netherlands indicate the higher catching up rate after 30 in cumulative cohort fertility than Germany and Austria. These tendencies are varied not by the differences in family policy but by the traditional pattern in family formation (i.e. fertility concentration in late or early ages).

Nevertheless, the quantum index calculated in this report shows 1.8 in the Netherlands, 1.7 in Switzerland, 1.5 in Germany and 1.6 in Austria in 1996. Therefore, it is very possible that the TFRs of these countries will recover these levels, if not the replacement level, with diminishing tempo effects.
Fig. 1 Total fertility rate 1960-2000

Fig. 2 Completed fertility of female birth cohorts born 1930 or after

Fig. 3 Total female first marriage rate 1960-2000

Fig. 4 Proportion of ever married women by age 50 (%)

Fig. 5 Mean age of women at first marriage* 1960-2000

Fig. 6 Mean age of women at first marriage (below age 50)

Source: Fig. 1-Fig. 6 Council of Europe 2001
Note: FRG=former West Germany, GDR=former East Germany, A=Austria, CH=Switzerland and NL=the Netherlands  *<50 compl. years
Fig. 7  Mean age at childbirth 1960-2000

Fig. 8  Mean age at birth of first child* 1960-2000

Fig. 9  Mean age at childbirth cohorts born 1930 or after

Fig. 10  Total divorce rate 1960-2000

Fig. 11  Extra-marital births Ratio per 100 Live births 1960-2000

Fig. 12  Legal abortions Ratio per 100 Live births 1960-1999

Source: Fig. 7 - Fig. 12 Council of Europe 2001
Note: FRG=former West Germany, GDR=former East Germany, A=Austria, CH=Switzerland and NL=the Netherlands  *<50compl.years
Table 1. Proportions of consensual union(%)  

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Age/Year*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20-24</td>
<td>12</td>
<td>16</td>
<td>25</td>
<td>25</td>
<td>21</td>
<td>44</td>
</tr>
<tr>
<td>25-29</td>
<td>14</td>
<td>12</td>
<td>21</td>
<td>20</td>
<td>24</td>
<td>31</td>
</tr>
<tr>
<td>30-34</td>
<td>9</td>
<td>7</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>26</td>
</tr>
<tr>
<td>35-39</td>
<td>7</td>
<td>6</td>
<td>8</td>
<td>7</td>
<td>7</td>
<td>15</td>
</tr>
</tbody>
</table>

Note: FRG=former West Germany, GDR=former East Germany, A=Austria, CH=Switzerland, NL=the Netherlands, S=Sweden  *by age at interview, FFS female samples  
Source: Klijzing & Macura, 1997 : 889

Table 2. Percentage of couples living in a consensual union, 1996

<table>
<thead>
<tr>
<th></th>
<th>Percentage of couples living in a consensual union, 1996</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Age group 16-29 years old</td>
</tr>
<tr>
<td>Sweden</td>
<td>73</td>
</tr>
<tr>
<td>Denmark</td>
<td>72</td>
</tr>
<tr>
<td>Norway</td>
<td>69</td>
</tr>
<tr>
<td>Iceland</td>
<td>65</td>
</tr>
<tr>
<td>Finland</td>
<td>63</td>
</tr>
<tr>
<td>France</td>
<td>47</td>
</tr>
<tr>
<td>Netherlands</td>
<td>46</td>
</tr>
<tr>
<td>Germany</td>
<td>40</td>
</tr>
<tr>
<td>Switzerland</td>
<td>40</td>
</tr>
<tr>
<td>Austria</td>
<td>39</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>34</td>
</tr>
<tr>
<td>Belgium</td>
<td>31</td>
</tr>
<tr>
<td>EU-15</td>
<td>31</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>27</td>
</tr>
<tr>
<td>Ireland</td>
<td>17</td>
</tr>
<tr>
<td>Greece</td>
<td>15</td>
</tr>
<tr>
<td>Portugal</td>
<td>11</td>
</tr>
<tr>
<td>Spain</td>
<td>10</td>
</tr>
<tr>
<td>Italy</td>
<td>9</td>
</tr>
</tbody>
</table>

Source: The Clearinghouse on International Developments in Child, Youth and Family Policies at COLUMBIA UNIVERSITY
Table 3. Reyder Index

<table>
<thead>
<tr>
<th>Year</th>
<th>TFR</th>
<th>QI</th>
<th>TI</th>
<th>TFR</th>
<th>QI</th>
<th>TI</th>
<th>TFR</th>
<th>QI</th>
<th>TI</th>
<th>TFR</th>
<th>QI</th>
<th>TI</th>
</tr>
</thead>
<tbody>
<tr>
<td>1974</td>
<td>1.51</td>
<td>1.75</td>
<td>0.86</td>
<td>1.90</td>
<td>1.97</td>
<td>0.94</td>
<td>1.72</td>
<td>1.85</td>
<td>0.93</td>
<td>1.77</td>
<td>1.84</td>
<td>0.92</td>
</tr>
<tr>
<td>1975</td>
<td>1.43</td>
<td>1.73</td>
<td>0.84</td>
<td>1.84</td>
<td>1.83</td>
<td>0.89</td>
<td>1.74</td>
<td>1.86</td>
<td>0.90</td>
<td>1.66</td>
<td>1.96</td>
<td>0.93</td>
</tr>
<tr>
<td>1976</td>
<td>1.46</td>
<td>1.71</td>
<td>0.85</td>
<td>1.84</td>
<td>1.83</td>
<td>0.89</td>
<td>1.74</td>
<td>1.86</td>
<td>0.90</td>
<td>1.66</td>
<td>1.96</td>
<td>0.93</td>
</tr>
<tr>
<td>1977</td>
<td>1.40</td>
<td>1.70</td>
<td>0.85</td>
<td>1.85</td>
<td>1.83</td>
<td>0.89</td>
<td>1.75</td>
<td>1.84</td>
<td>0.90</td>
<td>1.58</td>
<td>1.97</td>
<td>0.82</td>
</tr>
<tr>
<td>1978</td>
<td>1.38</td>
<td>1.68</td>
<td>0.82</td>
<td>1.90</td>
<td>1.84</td>
<td>0.87</td>
<td>1.69</td>
<td>1.82</td>
<td>0.89</td>
<td>1.58</td>
<td>1.97</td>
<td>0.82</td>
</tr>
<tr>
<td>1979</td>
<td>1.38</td>
<td>1.67</td>
<td>0.83</td>
<td>1.89</td>
<td>1.82</td>
<td>0.87</td>
<td>1.69</td>
<td>1.82</td>
<td>0.89</td>
<td>1.58</td>
<td>1.97</td>
<td>0.82</td>
</tr>
<tr>
<td>1980</td>
<td>1.33</td>
<td>1.66</td>
<td>0.80</td>
<td>1.91</td>
<td>1.83</td>
<td>0.88</td>
<td>1.68</td>
<td>1.81</td>
<td>0.89</td>
<td>1.58</td>
<td>1.97</td>
<td>0.82</td>
</tr>
<tr>
<td>1981</td>
<td>1.47</td>
<td>1.64</td>
<td>0.87</td>
<td>1.85</td>
<td>1.84</td>
<td>0.88</td>
<td>1.67</td>
<td>1.77</td>
<td>0.87</td>
<td>1.56</td>
<td>1.99</td>
<td>0.82</td>
</tr>
<tr>
<td>1982</td>
<td>1.44</td>
<td>1.63</td>
<td>0.88</td>
<td>1.86</td>
<td>1.84</td>
<td>0.88</td>
<td>1.66</td>
<td>1.76</td>
<td>0.87</td>
<td>1.54</td>
<td>1.98</td>
<td>0.82</td>
</tr>
<tr>
<td>1983</td>
<td>1.37</td>
<td>1.62</td>
<td>0.82</td>
<td>1.92</td>
<td>1.87</td>
<td>0.86</td>
<td>1.65</td>
<td>1.76</td>
<td>0.87</td>
<td>1.54</td>
<td>1.98</td>
<td>0.82</td>
</tr>
<tr>
<td>1984</td>
<td>1.29</td>
<td>1.61</td>
<td>0.80</td>
<td>1.94</td>
<td>1.86</td>
<td>0.86</td>
<td>1.63</td>
<td>1.74</td>
<td>0.86</td>
<td>1.53</td>
<td>1.97</td>
<td>0.82</td>
</tr>
<tr>
<td>1985</td>
<td>1.26</td>
<td>1.60</td>
<td>0.80</td>
<td>1.95</td>
<td>1.87</td>
<td>0.86</td>
<td>1.62</td>
<td>1.73</td>
<td>0.86</td>
<td>1.53</td>
<td>1.97</td>
<td>0.82</td>
</tr>
<tr>
<td>1986</td>
<td>1.34</td>
<td>1.59</td>
<td>0.84</td>
<td>1.90</td>
<td>1.89</td>
<td>0.86</td>
<td>1.61</td>
<td>1.70</td>
<td>0.86</td>
<td>1.53</td>
<td>1.97</td>
<td>0.82</td>
</tr>
<tr>
<td>1987</td>
<td>1.36</td>
<td>1.58</td>
<td>0.84</td>
<td>1.91</td>
<td>1.90</td>
<td>0.86</td>
<td>1.60</td>
<td>1.69</td>
<td>0.86</td>
<td>1.53</td>
<td>1.97</td>
<td>0.82</td>
</tr>
<tr>
<td>1988</td>
<td>1.34</td>
<td>1.58</td>
<td>0.85</td>
<td>1.92</td>
<td>1.90</td>
<td>0.86</td>
<td>1.60</td>
<td>1.69</td>
<td>0.86</td>
<td>1.53</td>
<td>1.97</td>
<td>0.82</td>
</tr>
<tr>
<td>1989</td>
<td>1.39</td>
<td>1.56</td>
<td>0.89</td>
<td>1.94</td>
<td>1.90</td>
<td>0.86</td>
<td>1.60</td>
<td>1.69</td>
<td>0.86</td>
<td>1.53</td>
<td>1.97</td>
<td>0.82</td>
</tr>
<tr>
<td>1990</td>
<td>1.43</td>
<td>1.56</td>
<td>0.89</td>
<td>1.95</td>
<td>1.90</td>
<td>0.86</td>
<td>1.60</td>
<td>1.69</td>
<td>0.86</td>
<td>1.53</td>
<td>1.97</td>
<td>0.82</td>
</tr>
<tr>
<td>1991</td>
<td>1.36</td>
<td>1.55</td>
<td>0.91</td>
<td>1.95</td>
<td>1.90</td>
<td>0.86</td>
<td>1.60</td>
<td>1.69</td>
<td>0.86</td>
<td>1.53</td>
<td>1.97</td>
<td>0.82</td>
</tr>
<tr>
<td>1992</td>
<td>1.30</td>
<td>1.54</td>
<td>0.92</td>
<td>1.95</td>
<td>1.90</td>
<td>0.86</td>
<td>1.60</td>
<td>1.69</td>
<td>0.86</td>
<td>1.53</td>
<td>1.97</td>
<td>0.82</td>
</tr>
<tr>
<td>1993</td>
<td>1.24</td>
<td>1.53</td>
<td>0.92</td>
<td>1.95</td>
<td>1.90</td>
<td>0.86</td>
<td>1.60</td>
<td>1.69</td>
<td>0.86</td>
<td>1.53</td>
<td>1.97</td>
<td>0.82</td>
</tr>
<tr>
<td>1994</td>
<td>1.28</td>
<td>1.52</td>
<td>0.91</td>
<td>1.95</td>
<td>1.90</td>
<td>0.86</td>
<td>1.60</td>
<td>1.69</td>
<td>0.86</td>
<td>1.53</td>
<td>1.97</td>
<td>0.82</td>
</tr>
<tr>
<td>1995</td>
<td>1.34</td>
<td>1.51</td>
<td>0.90</td>
<td>1.95</td>
<td>1.90</td>
<td>0.86</td>
<td>1.60</td>
<td>1.69</td>
<td>0.86</td>
<td>1.53</td>
<td>1.97</td>
<td>0.82</td>
</tr>
<tr>
<td>1996</td>
<td>1.30</td>
<td>1.50</td>
<td>0.90</td>
<td>1.95</td>
<td>1.90</td>
<td>0.86</td>
<td>1.60</td>
<td>1.69</td>
<td>0.86</td>
<td>1.53</td>
<td>1.97</td>
<td>0.82</td>
</tr>
<tr>
<td>1997</td>
<td>1.34</td>
<td>1.50</td>
<td>0.90</td>
<td>1.95</td>
<td>1.90</td>
<td>0.86</td>
<td>1.60</td>
<td>1.69</td>
<td>0.86</td>
<td>1.53</td>
<td>1.97</td>
<td>0.82</td>
</tr>
</tbody>
</table>

Source: Age-specific birth rates (WG/EG=BiB,A=Statistik Austria/ODE/IFD.CH=Swiss Federal Statistical Office/ODE/ODE,NL=Statistics Netherlands,NIDI), Completed fertility of female birth cohorts born 1930 or after (Council of Europe, 2001). Own calculation.
Fig. 14 Difference between TFR and CTFR

- For West Germany
- For East Germany
- Austria
- Switzerland
- the Netherlands

*with time lag 29 years
Source: Council of Europa, 2001, Own Calculations
Fig. 15  Thermo-graphic representations on age-specific fertility: All births
Fig. 16
Thermo-graphic representations of age- and order specific fertility in the Netherlands 1950-1999:

Source: Statistics Netherlands
Fig.17  Thermo-graphic representations  
Age-specific fertility of Switzerland: All births in 1932 -1996 

Age-specific fertility rates of Switzerland in 1932-1996 All Births

![Thermo-graphic representation of age-specific fertility rates of Switzerland](image1)

Source: SWISS FEDERAL STATISTICAL OFFICE/OBSERVATOIRE DEMOGRAPHIQUE EUROPEEN

Fig.18  Thermo-graphic representations  
Age-specific fertility and first marriage rate of women in Austria.

![Thermo-graphic representation of age-specific fertility rates of Switzerland](image2)

Source: SWISS FEDERAL STATISTICAL OFFICE/OBSERVATOIRE DEMOGRAPHIQUE EUROPEEN
Fig. 19  Economically active population / Age / Rates  1960-2000: Switzerland


* Tertiary Education = ISCED 5A/6, ISCED 5B
Source: OECD Database 2000, Education at a Glance, own calculations

Fig. 20  Economically active population / Age / Rates  1960-2000: Switzerland

Table 4. Wage gap by gender in manufacturing industry 1996-2000

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>Woman</td>
<td>73.9%</td>
<td>74.0%</td>
<td>74.1%</td>
<td>74.5%</td>
<td>73.5%</td>
</tr>
<tr>
<td></td>
<td>Man</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Austria</td>
<td>Woman</td>
<td>69.1%</td>
<td>68.7%</td>
<td>68.6%</td>
<td>68.3%</td>
<td>68.4%</td>
</tr>
<tr>
<td></td>
<td>Man</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Switzerland</td>
<td>Woman</td>
<td>71.7%</td>
<td></td>
<td>72.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Man</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Netherlands</td>
<td>Woman</td>
<td>76.5%</td>
<td>76.9%</td>
<td>76.9%</td>
<td>77.5%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Man</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: LABORSTA - ILO database on labour statistics operated by the ILO Bureau of Statistics.

Fig. 21 Unemployed Rates by sex 1969-2000

Table 5. Unemployment Rates by age and sex, 1998

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th></th>
<th>Female</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Age Group</td>
<td>20-24</td>
<td>25-29</td>
<td>30-34</td>
<td>35-39</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Austria</td>
<td>4.3%</td>
<td>3.8%</td>
<td>4.0%</td>
<td>4.4%</td>
</tr>
<tr>
<td></td>
<td>4.9%</td>
<td>4.4%</td>
<td>4.6%</td>
<td>4.1%</td>
</tr>
<tr>
<td>Germany</td>
<td>10.8%</td>
<td>9.1%</td>
<td>9.2%</td>
<td>7.7%</td>
</tr>
<tr>
<td></td>
<td>7.3%</td>
<td>10.3%</td>
<td>4.1%</td>
<td>2.3%</td>
</tr>
<tr>
<td>Netherlands</td>
<td>2.7%</td>
<td>1.7%</td>
<td>1.2%</td>
<td>1.4%</td>
</tr>
<tr>
<td></td>
<td>1.2%</td>
<td>2.3%</td>
<td>3.7%</td>
<td>4.1%</td>
</tr>
<tr>
<td>Switzerland</td>
<td>5.4%</td>
<td>4.4%</td>
<td>3.2%</td>
<td>8.4%</td>
</tr>
<tr>
<td></td>
<td>4.1%</td>
<td>3.7%</td>
<td>4.1%</td>
<td>1.2%</td>
</tr>
</tbody>
</table>


Table 6. Labor Participation rates % of Women, Number of Children in Austria 1997

<table>
<thead>
<tr>
<th>Age Group</th>
<th>No Child</th>
<th>1 Child</th>
<th>2 Children</th>
<th>3+ Children</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>69.7</td>
<td>83.1</td>
<td>88.2</td>
<td>89.0</td>
</tr>
<tr>
<td>Women with no Child</td>
<td>78.4</td>
<td>72.4</td>
<td>68.7</td>
<td>70.1</td>
</tr>
<tr>
<td>Women with Child</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>one child</td>
<td>80.9</td>
<td>80.3</td>
<td>80.2</td>
<td>74.6</td>
</tr>
<tr>
<td>two children</td>
<td>50.0</td>
<td>65.9</td>
<td>57.3</td>
<td>51.4</td>
</tr>
<tr>
<td>Lone Parent</td>
<td>89.7</td>
<td>85.6</td>
<td>90.3</td>
<td>91.5</td>
</tr>
</tbody>
</table>

Source: IFD 1999, p.58.

Table 7. Proportion of Housewife in West and East Germany - FFS 1992

<table>
<thead>
<tr>
<th>Region</th>
<th>No Child</th>
<th>1 Child</th>
<th>2 Children</th>
<th>3+ Children</th>
</tr>
</thead>
<tbody>
<tr>
<td>West Germany</td>
<td>3.7</td>
<td>41.6</td>
<td>61.7</td>
<td>81.5</td>
</tr>
<tr>
<td>East Germany</td>
<td>1.3</td>
<td>4.3</td>
<td>6.8</td>
<td>13.0</td>
</tr>
</tbody>
</table>

Source: Kolotil & Doebritz 1999: 83
Table 8. Backgrounds and the basic concept of family policy

<table>
<thead>
<tr>
<th>Backgrounds</th>
<th>Basic concept of family policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any arguments and policies to promote births are tabooed still today due to nightmare memories about pro-natalistic policies accompanied racial discriminations under the Nazi regime.</td>
<td>No hesitation to promote labour participation of women (and fertility) for expanding of labour supply source(in future) under the slogan of &quot;build up the Socialist Nation&quot;.</td>
</tr>
<tr>
<td>The government should be responsible for family according to constitutional prescription (1949) but act only in a subsidiary function to marriage and family and avoid any intervention to individual affairs.</td>
<td>In spite of many historical trials (e.g. Renner-Mayr-Entwurf in 1929), the government has provided various family policy measures to alleviate the financial burden of child rearing family.</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Table 9. Maternity and parental leaves</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Germany after unification</th>
<th>Austria</th>
<th>Switzerland</th>
<th>the Netherlands</th>
</tr>
</thead>
<tbody>
<tr>
<td>14 weeks maternity including 6 weeks before birth, 100% of wage replaced. Fortibbance of firing after 4 weeks pregnancy. Take up rate is almost 100%.</td>
<td>16 weeks maternity, 100% of wage replaced. Take up rate is almost 100%</td>
<td>16 weeks maternity (Forbiddance of working). Sharing to father Maximum10 weeks is possible. Two weeks more for multiple birth. Replacement rate of salary varies in cantons.</td>
<td>16 weeks maternity and 2 days paternity. 100% of wage replaced. Take up rate is almost 100%.</td>
</tr>
<tr>
<td>3 years parental or child rearing leave, full or part time job until child's 8th Birthday, income-tested two years Child Rearing Allowance (Erziehungs geld) related 3 years Job Protection. Acknowledgement of the rearing period in pension law. Female take up rate is 96%. Female proportion of all takers is 97.5% (1998)</td>
<td>Parental leave replaced by child care allowance for 30 months one parent or 36 months if child care is shared by both parents Flat rate, high rate for single- and low-income parent allowance. Previous employment requirement eliminated. Female proportion of all takers is 99% (1998).</td>
<td>Right to part-time work until child's 8th birthday</td>
<td>6 months parental leave per parent, unpaid. Female take up rate is 40%. males 9% (1995)</td>
</tr>
<tr>
<td>The right for a working adult in a two-worker family to remain at home up to 10 days per year to care for an ill child under age 12. For single mother care needs for long period.</td>
<td>Family care leave for employee 1 Week per year. Since 1993, Max 2 weeks for disease care of child under 12. 100% of wage replaced since 1998, short cutting of working hours is possible. Care needs for long period.</td>
<td>Child adoption leave in adoption of little child under certain ages, lengths of leave and replacement rate of salary vary in cantons.</td>
<td>Family leave- 10 days/year= 2 days emergency leave.</td>
</tr>
</tbody>
</table>

Source: The Clearinghouse on International Developments in Child, Youth and Family Policies at COLUMBIA UNIVERSITY
Table 10. Early childhood education and care

<table>
<thead>
<tr>
<th>Germany</th>
<th>Austria</th>
<th>Switzerland</th>
<th>the Netherlands</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coverage rates for infants under 3 (2000) was 5%-West and 50%-East, administrated by state welfare bureau for working parents, none parents, low income parent, State and local government, plus parent fees(income related, max 16%-209696 costs).</td>
<td>Concentration of child care centres in large cities, West-East disparity, not enough for care needs. Coverage rates for infants under 3 (2000) was 3%.</td>
<td>Child care services are administrated fully by canton, commune, and operated by Private organization with public financial support. Not enough for care needs.</td>
<td>For until the 1990s, child care was seen as a task and responsibility of the parents. Recently, the development of facilities delays to increasing demands. Not enough for care needs. Coverage rates for infants under 3 (2000) was 4%.</td>
</tr>
<tr>
<td>Coverage rates for children aged 3-5 was 85%(2000). 50% in places in West, morning and afternoon places without care during lunch break. Administered by state educational bureau, State and local government + parent fees. Exception for Vienna, morning and afternoon places without care during lunch break.</td>
<td>Traditionally, Kindergartens are well developed. Coverage rates for children aged 3-5 was 80%(2000). Administered by state welfare bureau, State and local government + parent fees. Except for Vienna, morning and afternoon places without care during lunch break.</td>
<td>Preschools are operated mainly by private school or corporations. Concentration of public support in South.</td>
<td>Kindergartens are well developed. Coverage rates for children aged 3-5 was 95%(2000). Administered by Local Health services and Fire department, opened 7:00AM-6:00PM all year. Financing by Public (33%), employer(25%), clients(42%)</td>
</tr>
<tr>
<td>Primary school 8: 00-12:30. Meal provisions are few. Minimum teaching hours are 525 annual hours at about 7 years-old, 766 annual hours at about 10 years-old.</td>
<td>Primary school 8: 00-12: 00 or 13:00. Meal provisions are few. Minimum teaching hours are 630 annual hours at about 7 years-old, 750 annual hours at about 10 years-old.</td>
<td>Teaching hours in primary education are 883 hours per year.</td>
<td>Primary school 8: 00-12: 00 and 13:15-15:30. Meal provisions. Child care during lunch break. Minimum teaching hours are 880 annual hours at about 7 years-old,1000 annual hours at about 10 years-old.</td>
</tr>
</tbody>
</table>

Source: The Clearinghouse on International Developments in Child, Youth and Family Policies at COLUMBIA UNIVERSITY

Table 11. Tax deductions and child allowances

<table>
<thead>
<tr>
<th>Germany</th>
<th>Austria</th>
<th>Switzerland</th>
<th>the Netherlands</th>
</tr>
</thead>
<tbody>
<tr>
<td>DM3,456 per Parent (DM6,912 for lone parent) per year, only for high income parent without child allowance.</td>
<td>700 ATS per child, not income related, at lease exemption of a half of the substance minimum</td>
<td>No child benefit.</td>
<td>Child benefit for children under 27, only for high income parent without child allowance.</td>
</tr>
<tr>
<td>Tax abatement for the education of dependent children: annually, DM 1,800 per child,DM 2,400 over 18 at home, DM 4,200 not at home, only for parent with child</td>
<td>Tax exemption for own earn family and for lone parent family: 5,000 ATS per year, for low income family, cash payment instead of tax exemption.</td>
<td>Nothing in particular.</td>
<td>Tax exemption for the cost of child day care, only in the case of full time job. Child under 12 over 5 days per week</td>
</tr>
<tr>
<td>100% of wage replaced for employee, DM 25 Birth grant per day for Maternity leave, special needs children receive benefit (no age limit)</td>
<td>100% of wage replaced for employee, 300ATS Birth grant per day for self-employed, farmer, additional grant for special needs children</td>
<td>Birth grants. Replacement rate of salary varies in cantons.</td>
<td>100% of wage replaced for employee</td>
</tr>
<tr>
<td>Max DM 600 per month income related child rearing allowance until child's second Birthday including maternity leave allowance.</td>
<td>Monthly 5.565 ATS child rearing allowance for employee, Monthly 1,000ATS little child rearing allowance until 1st Birthday for parent without child rearing allowance</td>
<td>Nothing in particular.</td>
<td>Monthly 960 guilders for maximum 18 months, child rearing, disease care or education leave allowance.</td>
</tr>
<tr>
<td>DM 270/month for 1st and 2nd, DM 300/month for 3d, DM350/month for 4th and subsequent child. Child must be under 18 ( under age 21 if unemployed, 27 if student, no limit if disabled).</td>
<td>From 1,450ATS/month to 2,350ATS/month varies at child age. Child must be under 19 (26 if student, no limit if disabled), payed to only one of parents.</td>
<td>Federal program, 160 francs/months for first 2 children,165 francs/months for 3rd and subsequent children. Child must be under age 16 (20 if unable to work and not received full disability pension, 25 if student).</td>
<td>Range from 321.92 guilders per quarter for family with one child under age 6 to 641.69 guilders per quarter for family with 6 children between 12 and 17. Adjustment made twice a year on basis of price index changes.</td>
</tr>
<tr>
<td>Assistance for education ( BAöG), Vocational Training Allowance under the Employment Promotion Act, Housing allowance (Wohngeld), Child allocation under the Home Ownership Assistance Act</td>
<td>Advance maintenance payments to minor children, various public social insurance schemes. Assistance for education.</td>
<td>Various public social insurance schemes.</td>
<td>Housing allowance to low income family (above all to female lone family). Public medical insurance schemes for low income family.</td>
</tr>
</tbody>
</table>
References
BMUJF (Bundesministerium für Umwelt, Jugend und Familie), 1999a. Zur Situation von Familien und Familienpolitik in Österreich, 4. Österreichischer Familienbericht, Band 1
Höhn, C., 1997. ""Fertility and Family Policies in Germany: Experiences from One to Two to One Germany". The Journal of Population Problems, 53-2, pp. 1-15 (Japanese)


Lesthaeghe, R., 2001. "Postponement and recuperation: Recent fertility trends and forecasts in six Western European countries. (Austria, Belgium, France, Germany, Switzerland and the Netherlands)


Acknowledgements
I would like to thank
  C. Höhn, J. Dorbritz in BiBiB
  R. Gisser in IFD
  B. Fux in University Zürich
  Nico van Nimbergen, G. Beets, E. Van Imhoff in NIDI
  And many other researchers
for their assistance.

Toshihiko HARA
(Hokkaido Tokai University)

hara@di.htokai.ac.jp