Very low fertility and policy responses in Japan: An overview of recent research covering the last two decades

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Abstract

Since the late 1970s, Japan's total fertility rate has been below the replacement level (about 2.1 children per woman), and has remained below 1.5 since 1995. After the turning point of the "1.57 shock" in 1990, the Japanese government introduced a string of policy measures, which included upgrading child-support allowances and childcare services, instituting and promoting childcare leave, promoting gender equality, and supporting young people's employment. However, there have been no signs of a recovery in fertility so far. In this paper, we exhaustively review recent research on the causes of very low fertility in Japan and policy measures implemented by the government since the 1990s, and shed light on some new viewpoints. We stress the importance of cultural background in searching for the causalities, and propose a reorganization of public policies around family policies in a broad sense.

1. INTRODUCTION

Today, the fertility of most industrialized countries has fallen below the replacement level (fewer than 2.1 children per woman). Among such countries, the total fertility rate (TFR) of some has dropped under 1.5. Such a low level of fertility (a TFR of below 1.5) is called "very low fertility" (Caldwell and Schindlmayr 2003). More than 30 countries in Europe and East Asia are at this level; Japan has experienced very low fertility continuously since 1995. Moreover, the TFR of some countries has dropped below even 1.3 (refer to Kohler, et al. 2001, 2002; Billari and Kohler 2004; Billari 2008). Such "lowest-low fertility" emerged in Italy and Spain in the early 1990s, before also emerging in a few East Asian countries after 2000. Japan's TFR dropped to 1.29 in 2003 and has since been languishing around 1.3 (the lowest record was 1.26 in 2005).

This paper first aims to provide a brief summary of recent research on very low fertility and policy responses in Japan. In Japan, the "1.57 shock" of 1990 (mentioned later), in particular, was an epoch-making event. From this turning point, the government began a chain of policy measures to address low fertility. Hence, our review will focus on the approximately 20 years after 1990. Through this exhaustive review, we will try to shed light on some new viewpoints on both the causes of and policies toward very low fertility in Japan.

2. THE EMERGENCE OF VERY LOW FERTILITY IN JAPAN

2-1. Fertility trends in Japan after World War Two

Figure 1 shows the trends in the annual number of births and TFR in Japan from 1947 to 2007. There was a baby boom just after World War Two, at which point 2.5 million or more babies were being born per year. However, there was a rapid decline in fertility after that. From the mid-1950s through the first half of the 1970s, the TFR was somewhere around two. The rate was stable for some time, with the exception of 1966, the so-called year of the fiery horse (*hinoe-uma*). According to superstition, a woman born in this year is believed to cause the premature death of her husband. Therefore, the rate went down to 1.58. From the middle of the 1970s, it dipped below the replacement level, and a state of so-called low fertility has continued thereafter. In particular, in 1989, the TFR dipped below the 1.58 marked in 1966, setting a record low of 1.57. This is called the "1.57 shock," and triggered and raised awareness among citizens. The rate continued to decline after that, recording a lowest-ever 1.26 in 2005.

2-2. Recent fertility trends in developed countries

Figure 2 shows the TFR of the advanced economies, as well as South Korea. In all of the countries, the rate has been below 2.1 recently, meaning that they are in a state of below-replacement fertility. But what is particularly interesting is that the borderline of 1.5 is crucial. That is, it marks the border between moderately low fertility and very low fertility. McDonald (2008) has also emphasized this borderline of 1.5, and it has a very special and significant meaning. When we look at the long-term situation, apart from temporary changes, for countries in which the TFR is higher than 1.5, it has never dipped below 1.5. Once it has gone below 1.5, the rate has never recovered above 1.5.

A map showing the classified levels of TFR by country (Figure 3) shows the geographical characteristics. Among the advanced economies, the moderately low fertility group (Group 1) includes North European countries, West European countries, the USA, Canada, Australia and New Zealand. On the other hand, the very low fertility group (Group 2) includes South European countries, Germany, East European countries, former Soviet Union countries, Japan and South Korea.

Intriguingly, the very low fertility region is a continuum from the West to the East of the Eurasian continent. This uneven geographic distribution cannot be explained by economic conditions alone. Rather, it implies that there must be some historical and cultural background, a point that we will come back to later.

2-3. Future fertility trends in Japan

According to the medium variant of the population projections released by the National Institute of Population and Social Security Research (NIPSSR) in December 2006, based on the 2005 Census, Japan's TFR from 2005 through 2055 is expected to vary within a range between 1.21 and 1.29 (eventually reaching 1.26 in 2055) (Figure 4). This means that Japan will have little prospect of getting out of lowest-low fertility. In terms of the eventual TFR figure in 2055, it is 1.55 on the high variant and 1.06 on the low variant. In other words, the high variant case would see the TFR move barely above the very-low fertility level, while in the low variant case, it would be even more stagnant, in the lowest-low category. Therefore, very low fertility is not only a current challenge for Japan, but a problem that is going to continue for at least 50 years from now. If this low rate continues, the number of babies born per year will be very low. Currently, it is barely above one million per year, but after 50 years, the new babies per year will be below 500,000.

3. CAUSES OF VERY LOW FERTILITY IN JAPAN

Now, what are the causes behind this very low fertility? We will look at the mechanism as well as the background factors in demographic research.

3-1. Demographic mechanism

(1) Quantum effect or tempo effect?

While the tempo effect has played an important role in the mechanism of low fertility, actual cohort fertility (quantum) has declined in recent years (Beppu 2001, 2005; Suzuki 2003; Kaneko 2004).

(2) Decline in nuptiality or decline in marital fertility?

In Japan, extramarital births accounted for only 2.03% of all births in 2005, and cohabitation is also exceptional. Therefore, the change in fertility rate can be broken down into the respective contributions of changes in the marriage rate and changes in the marital fertility rate. According to a simulation analysis, about 70% of the TFR decline between 1975 and 2000 was due to changes in marriage behavior, and 30% to changes in marital fertility behavior (Iwasawa 2002). However, in the decade between 1990 and 2000, about 60% of the TFR decline was attributable to changes in marital fertility behavior (Refer to Suzuki 2005).

(3) Decline in willingness to marry/bear children or postponement?

While the willingness to marry/bear children has been kept unchanged, both the first marriage rate and marital fertility rate have declined. According to the national survey by the NIPSSR, the willingness of young people to get married and have babies has not gone down. Rather, they are postponing marriage or childbearing, resulting in a reduction in the first marriage rate or the marital fertility rate.

(4) Effect of fertility control such as contraception and induced abortion?

Another topic related to the mechanism of low fertility is the issue of fertility control and sexuality. With regard to Japan's very low fertility, some outside

observers may suppose that there has been an increase in the number of induced abortions, or that there are powerful contraceptives used in Japan. However, this is not the case. In fact, the opposite is true: the number of induced abortions, as well as the abortion rate, has continued to decrease (Figure 5). Figure 6 shows an international comparison of the percentages of women of reproductive age currently using contraception. As the figure illustrates, Japan has the lowest rate of contraceptive use amongst the advanced economies (Sato and Iwasawa 2006). At the same time, the pattern of contraceptive methods in Japan is very different from other industrialized countries (Figure 7). There are many couples using highly effective methods in Western countries. By contrast, couples using oral contraceptives account for only 2% in Japan, with most Japanese couples using condoms for contraception. Thus, Japan must be a very unique country, in that very low fertility has occurred without the spread of oral contraceptives.

It is something of a mystery. Demographers are now beginning to concern themselves with changes in sexual behavior among Japanese couples (Sato 2008; Sato et al. 2008; Suzuki 2006; Kitamura 2008).

3-2. Background factors

(1) Research approaches

In this section, we will look at the background factors. There are three approaches: (1) the economics approach (perspectives such as utility/disutility and cost/benefit); (2) the sociological approach (perspectives such as values, norms, and gender, family and social systems); and (3) the medical and biological approach (perspectives such as fecundity).

(2) Current focuses

Here, we will highlight some of the important approaches in current demographic research on Japan's very low fertility.

1) Delayed transition to adulthood

"Transition to adulthood" is a new concept that has attracted attention, first in sociology and later in population studies in Japan. Graduates from school find a job,

leave their parental home, find a partner and make a new family. This is the complete sequence. In today's society, it is the acquired role expected of an adult. In advanced economies, this process has been slowing down in all countries, which is closely related to low fertility. The reason why the transition to adulthood is being postponed is that, on the one hand, thanks to economic growth after World War Two, an affluent society has been created and young people have attained higher levels of education, acquiring a wider range of lifestyle options as a result. However, today the high economic growth has ended and globalization is occurring throughout the world. The impact of these two factors on young people has resulted in instability in employment and increased insecurity towards the future (Miyamoto 2007).

2) Other socio-economic factors

The mismatch or difference between males and females in views about marriage among single people is often cited by researchers as a socio-economic background factor for the very low fertility in Japan. Even if they do get married, there may be a sense of the large economic and psychological burden of childbearing, meaning that they become hesitant about bearing children if they think about the difficulties of balancing work and childbearing (Osawa 2007). This is said to be partly due to Japan's "corporate culture," where priority is given to work rather than one's private life. Refer to Retherford, et al. (2001), Matsuo (2003), Takahashi (2004), Rindfuss, et al. (2004), Tsuya (2005), and Rosenbluth (2007).

3) Historical and cultural factors: Strong familism and weak "couple culture"

Lastly, we would like to focus on the historical and cultural factors. Some researchers raise the possibility that there is a deep-rooted familism, or family-oriented viewpoint, in countries with very low fertility like Japan. In other words, Japanese have a very strong focus on family and vertical relationships, such as between parent and child, and there is less focus on horizontal relationships, like the partnership between the two genders. Moreover, it is said that there is a weak concept of gender equality in Japan.

The point is that, in all countries where fertility has dropped below the replacement level, the marriage rate has also decreased. In terms of the relationship between types of partnership among the two genders and the ways in which fertility has changed, we can draw an explanation. In countries with strong

horizontal relationships or a “couple culture,” the decline in marriage rate does not bring such a great decline in fertility due to the compensatory increase in cohabitation and extramarital birth (Figure 8, the upper right circle). On the other hand, in countries with a weak couple culture, the decline in marriage rate translates directly into lower fertility, and thus they drop into very low fertility (Figure 8, the lower right circle).

As mentioned above, there are two types of fertility levels in developed countries today: Group One countries in which the TFR is lower than 2.1 but higher than 1.5 (moderately low fertility) and Group Two countries where the rate is below 1.5 (very low fertility). When we look at the long-term trends in fertility in the advanced economies, the differences between these two groups could be explained by changes in the cultural climate. In our hypothesis, illustrated in Figure 9, we regard the opening up of opportunities for women beyond the household and the spread of fertility control methods as the two basic social forces that universally lead to fertility reduction in most countries. However, two different reactions have occurred. In countries with a “couple culture,” there has not been such a great decline in fertility, while there has been a severe drop in fertility in countries without a “couple culture.”

Incidentally, it is possible that the fertility level of Group One countries was slightly lower than that of Group Two countries before the start of the long-term process of fertility decline. This is based on the conjecture that a certain percentage of the population never married throughout their lives in the countries of Group One. If this hypothesis is correct, then we would have to say that this is rather ironical and paradoxical, seeing as how the traditionally strong family system that typically appears in Japan and South Korea was, in a sense, originally established to ensure the reproduction of families and the population. At any rate, it is an important challenge to further analyze this historical and cultural climate and perspectives (Refer to McDonald 2000; Namihira 2001; Matsumoto 2001; Dalla Zuanna and Micheli 2004; Suzuki 2006).

4. POLICY RESPONSES IN JAPAN

We can list the major relevant measures after the "1.57 shock" of 1990 as follows (Refer to Atoh 2002; Ogawa 2003; Sato 2008).

(1) Upgrading child-support allowances (1991, 2000, 2004, 2006, 2007)

The amount of child allowances was increased several times and the age coverage of children was expanded.

(2) Upgrading childcare services

Childcare services are also being expanded. The Angel Plan was first established for the fiscal year 1995-1999 period, and has been renewed every five years since, in the form of the New Angel Plan (FY2000-2004) and the Child and Childbearing Support Plan (FY2005-2009). More recently, we have been trying to review styles of working, and the government's plans now include measures to support young people in becoming more autonomous and independent.

(3) Instituting and promoting childcare leave

The Childcare Leave Law was established in 1991, entitling all workers, regardless of gender, to take leave within one year after the birth of their children. The law was reformed as the Child and Family Care Leave Law in 1995, and has continued to be promoted since its establishment.

(4) Promoting gender equality

The Basic Law for a Gender-Equal Society was established in 1999, and we are continuing to try to promote increased gender equality.

(5) Expressing government commitment

The Basic Law for Measures to Cope with a Low Birth Rate Society was established in 2003. In this law, the state expressed its awareness of low fertility in Japan and commitment to dealing with the issue.

(6) Promoting efforts by local governments and companies

Another law entitled the Law to Promote Support Measures for Raising the Next Generation was also established in 2003. Under this law, local governments and companies are encouraged to try to support childbearing among couples.

5. CONCLUDING REMARKS

In this paper, we exhaustively reviewed recent research on the causes of very low fertility in Japan and policy measures implemented by the government since the 1990s.

The total fertility rate in Japan has fallen below the replacement level (about 2.1 children per woman) since the late 1970s, and has remained below 1.5 since 1995. In the area of demographic mechanisms for the occurrence of very low fertility, our examination of four major discussion points found that (1) the quantum effect is more important than tempo effects, (2) the decline in nuptiality contributes more than the decline in marital fertility, (3) the postponement of marriage/childbearing is more important than the decline in willingness, and (4) there is no effect on the fertility changes from fertility control such as contraception and induced abortion. In the area of background factors, we focused on the delayed transition to adulthood and other socio-economic, historical and cultural factors. We stressed the importance of cultural background, characterized by strong familism and a weak "couple culture," in searching for the causalities of very low fertility, particularly in the East Asian countries of Japan and South Korea. We are also paying attention to a tendency in Japan for young men and women to not be active enough to find partners. Atoh (1998) has called this situation an "immature dating culture" (Refer to Sato and Iwasawa 2008).

Since the turning point of the "1.57 shock" in 1990, the Japanese government has introduced a string of policy measures, which have included upgrading child-support allowances and childcare services, instituting and promoting childcare leave, promoting gender equality and supporting young people's employment. Two new laws enacted in 2003, the Basic Law for Measures to Cope with a Low Birth Rate Society and the Law to Promote Support Measures for Raising the Next Generation, demonstrate that the state is taking a serious stance regarding this population issue. However, there have been no signs of a recovery in fertility so far.

With regard to policy interventions aimed at raising the number of births, there are many challenges in democratic countries including Japan. It is difficult for a government to interfere in marriage or childbearing decisions, owing to the potential disturbance of privacy and individual freedom. In addition, there has been little discussion so far on the relationship between fertility and public policy in Japan, and there is a tendency for "family policy" to be interpreted in a narrow

sense. The word “family” in Japanese sometimes reminds us of a traditional and paternalistic family system, arousing resistance from feminists and liberals. However, just recently, there have been new ideas advocated regarding family and individual life, such as reproductive health and rights, gender equity and work-life balance (the compatibility between work and personal/family life). We should say that now is the time to reorganize public policies around family policies in a broad sense.

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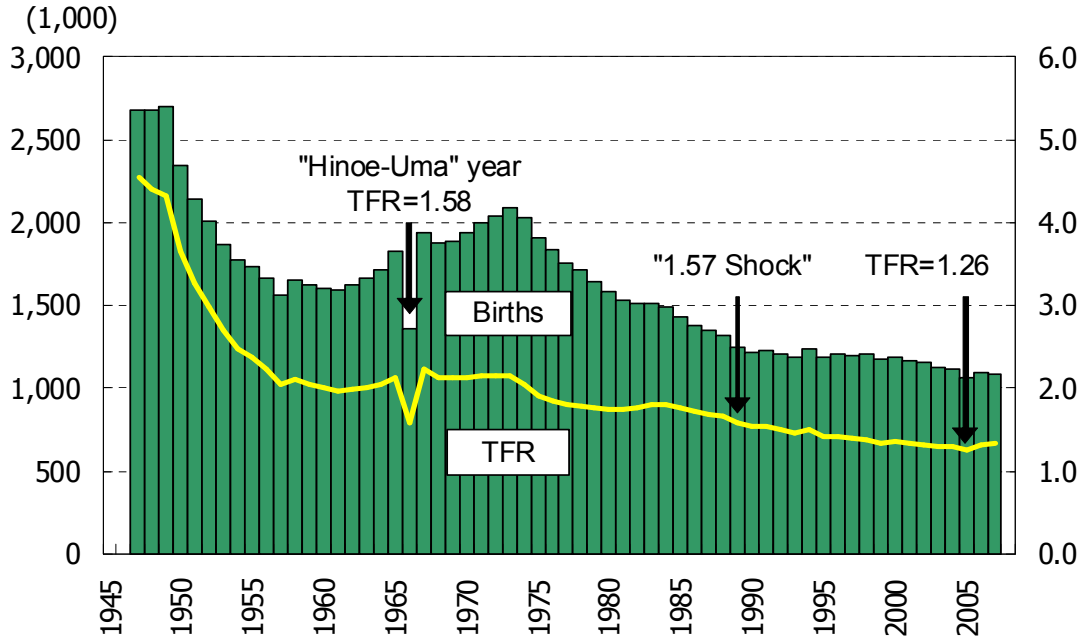
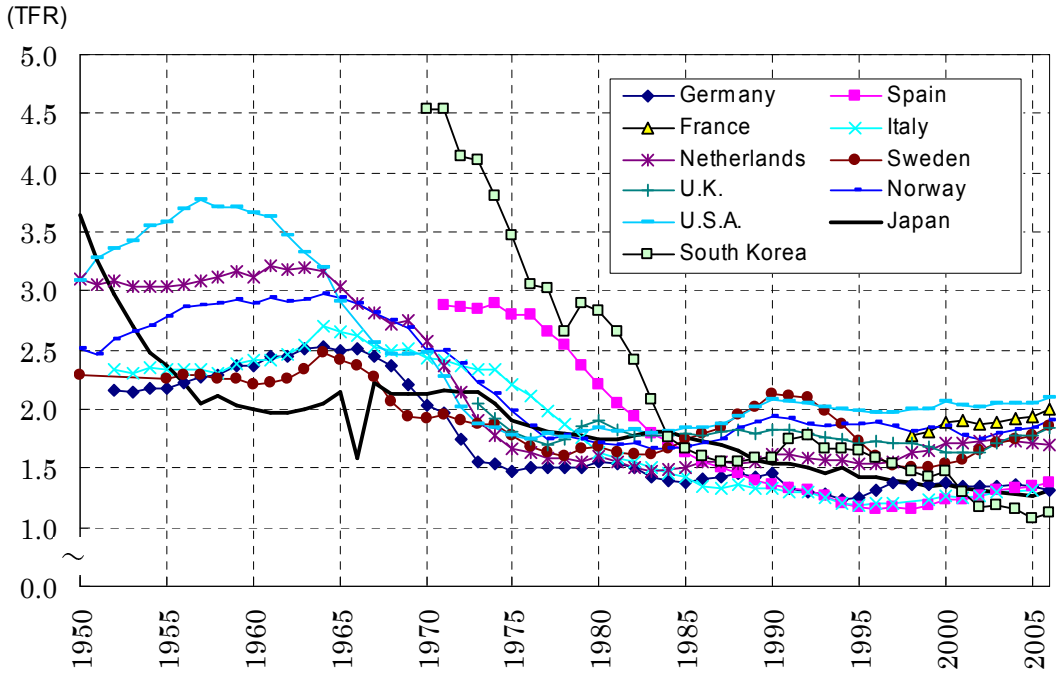
Figure 1. Annual Number of Births and Total Fertility Rate in Japan: 1947-2007



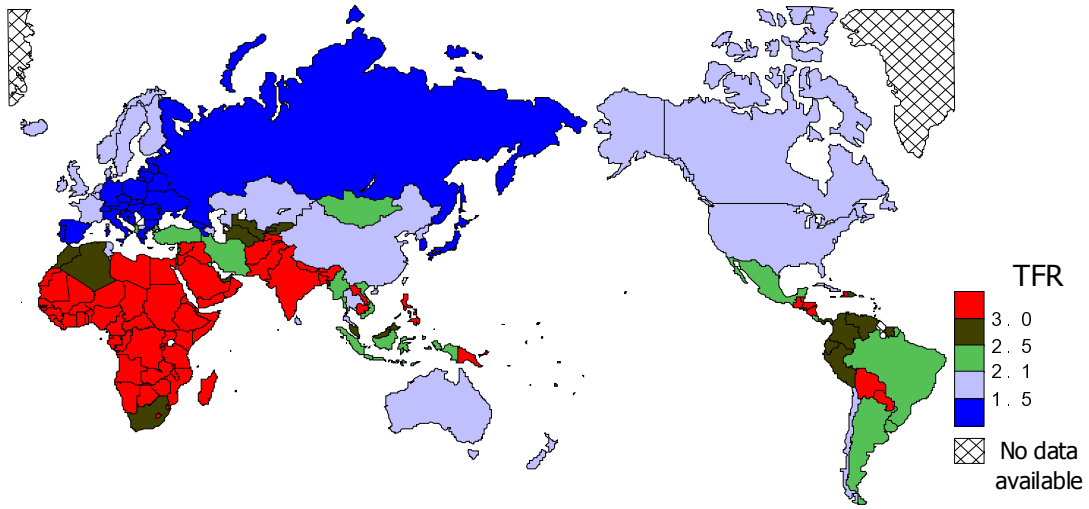
Source: Ministry of Health, Labour and Welfare. *Vital Statistics of Japan*.

Figure 2. Total Fertility Rates in OECD Countries: 1950-2006



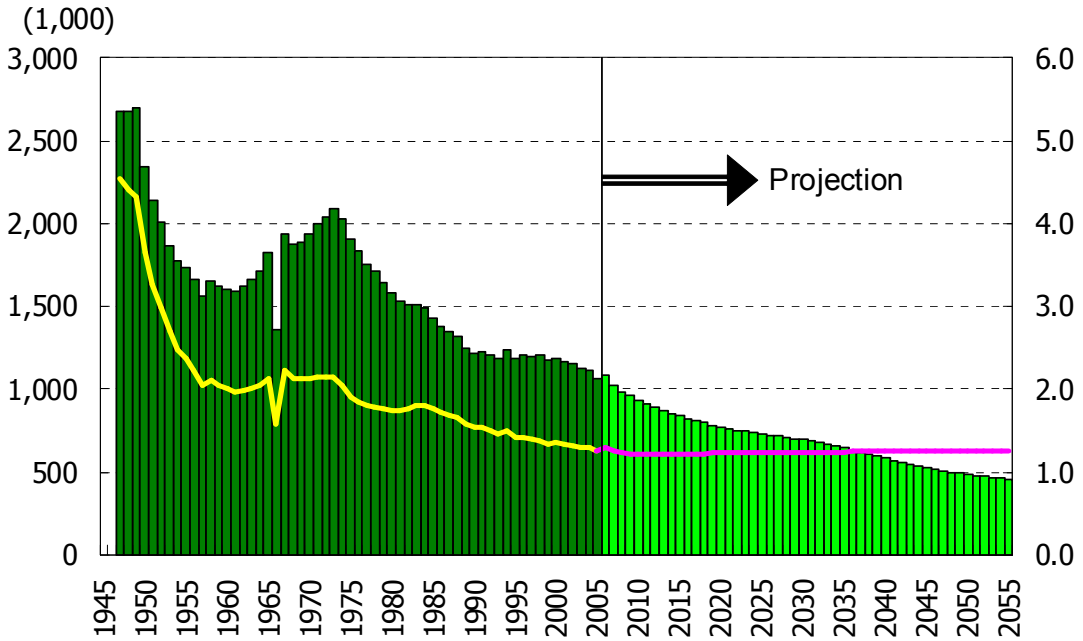
Source :Eurostat, *Population and Social Conditions*, U.S. National Center for Health Statistics, *National Vital Statistics Report*, and *Vital Statistics of the United States*, Japan National Institute of Population and Social Security Research, *Journal of Population Problems*, Korean Statistical Information Service.

Figure 3. Total Fertility Rate by Country, 2000-2005



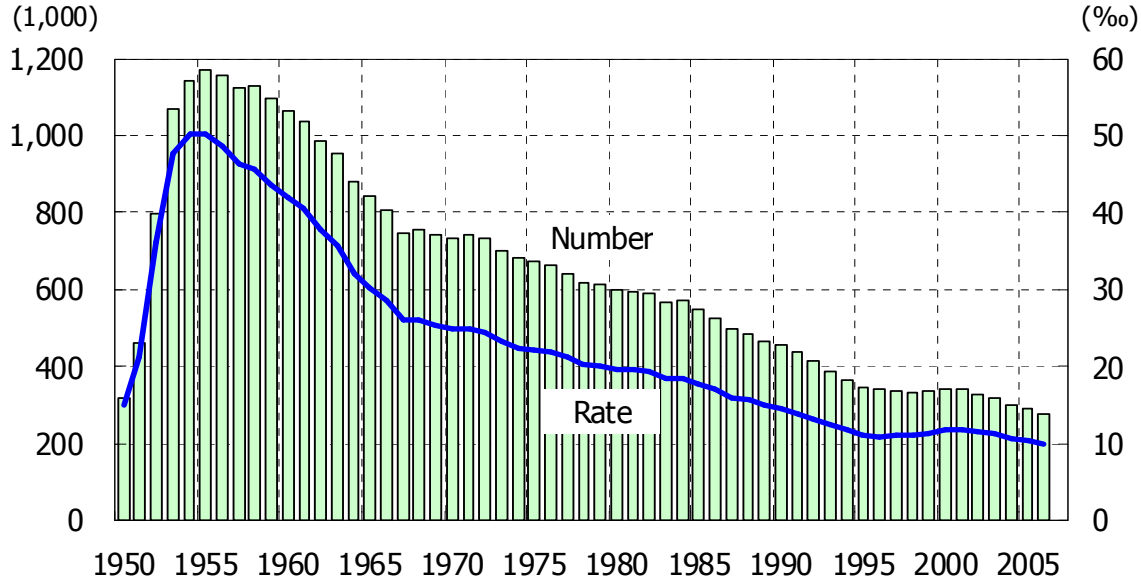
Source: UN, *World Population Prospects: The 2004 Revision* (Medium Variant).

Figure 4. Number of Births and TFR in Japan: 1947-2055



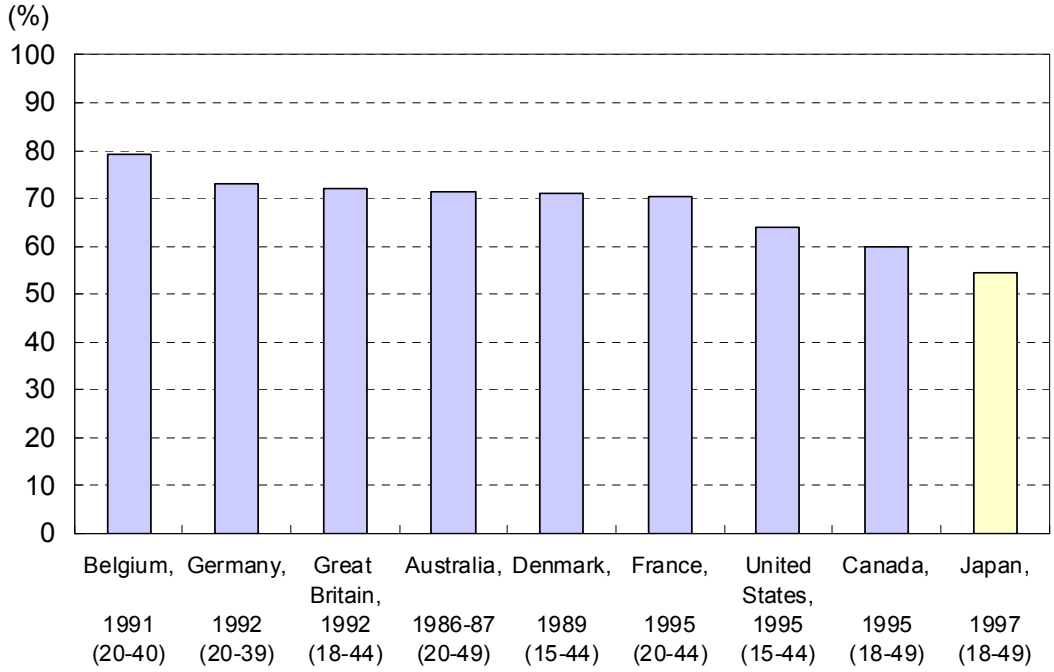
Source: Japan National Institute of Population and Social Security Research. *Population Projections for Japan:2006-2055*.(Medium Variant).

Figure 5. Induced Abortions in Japan: Number and Rate, 1950-2006



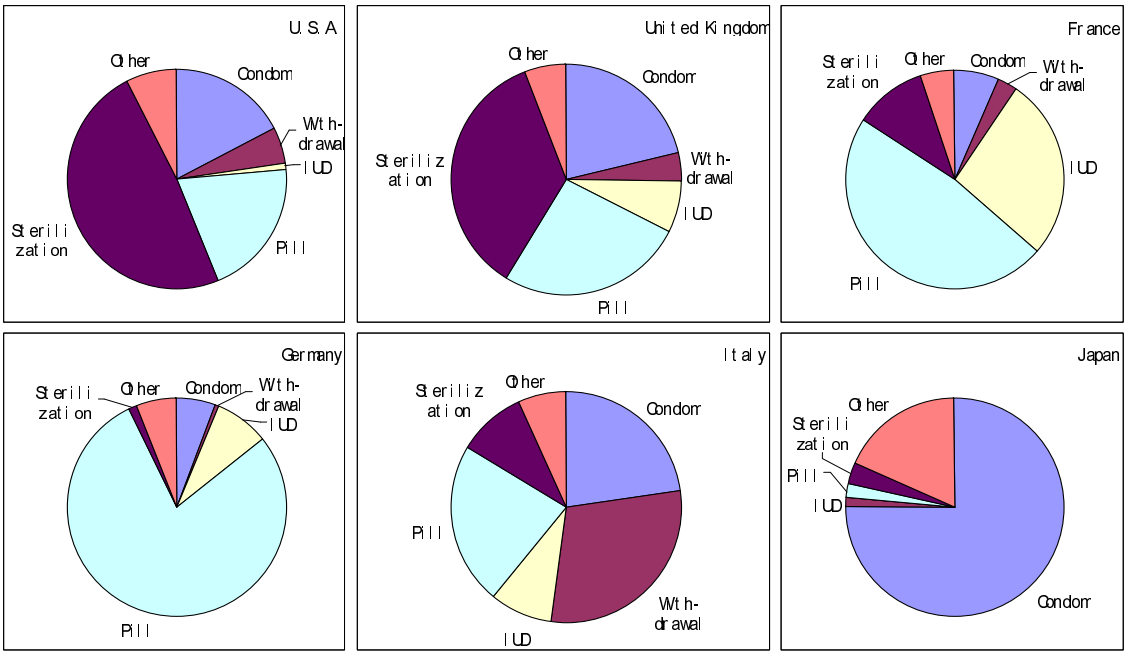
Left axis: annural number of induced abortion.
Right axis: induced abortion rate per 1,000 women aged 15-49.
Source: Ministry of Health, Labour and Welfare, *Eugenic Protection Statistics* (1950-95), *Maternal Body Protection Statistics* (1996-2001) ,and *Report on Public Health Administration* (2002-06).

Figure 6. Percentage of women currently practicing contraception in selected industrialized countries



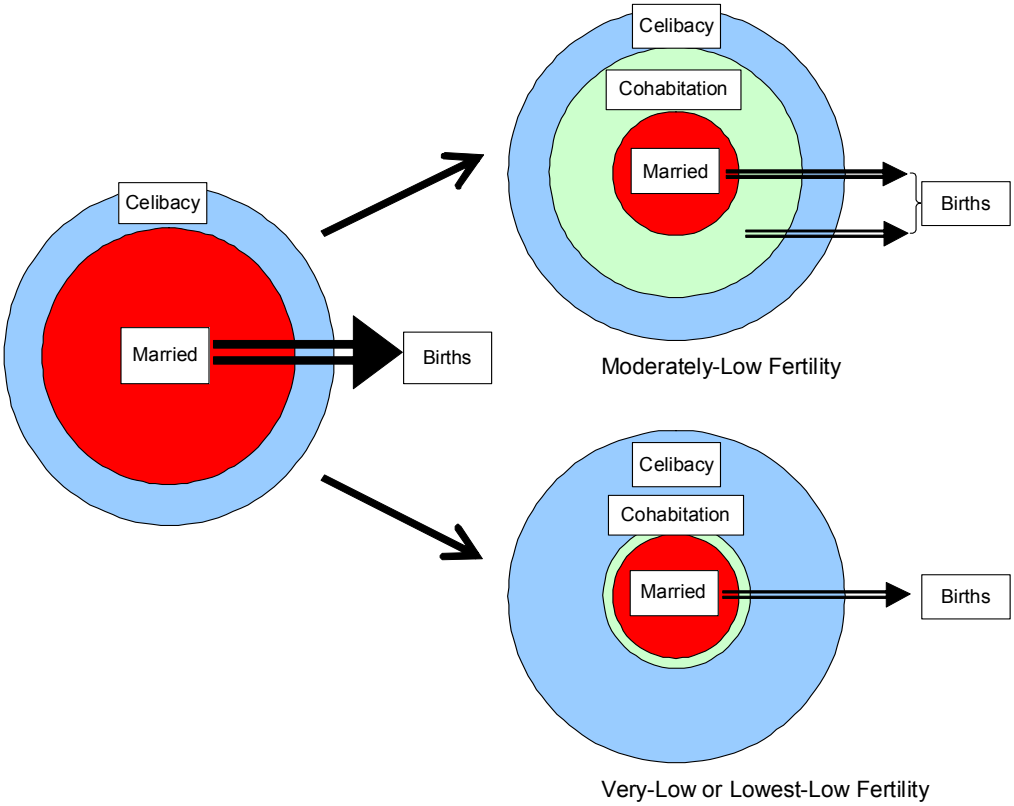
Source: Sato and Iwasawa (2006).

Figure 7. Difference in Methods of Contraception



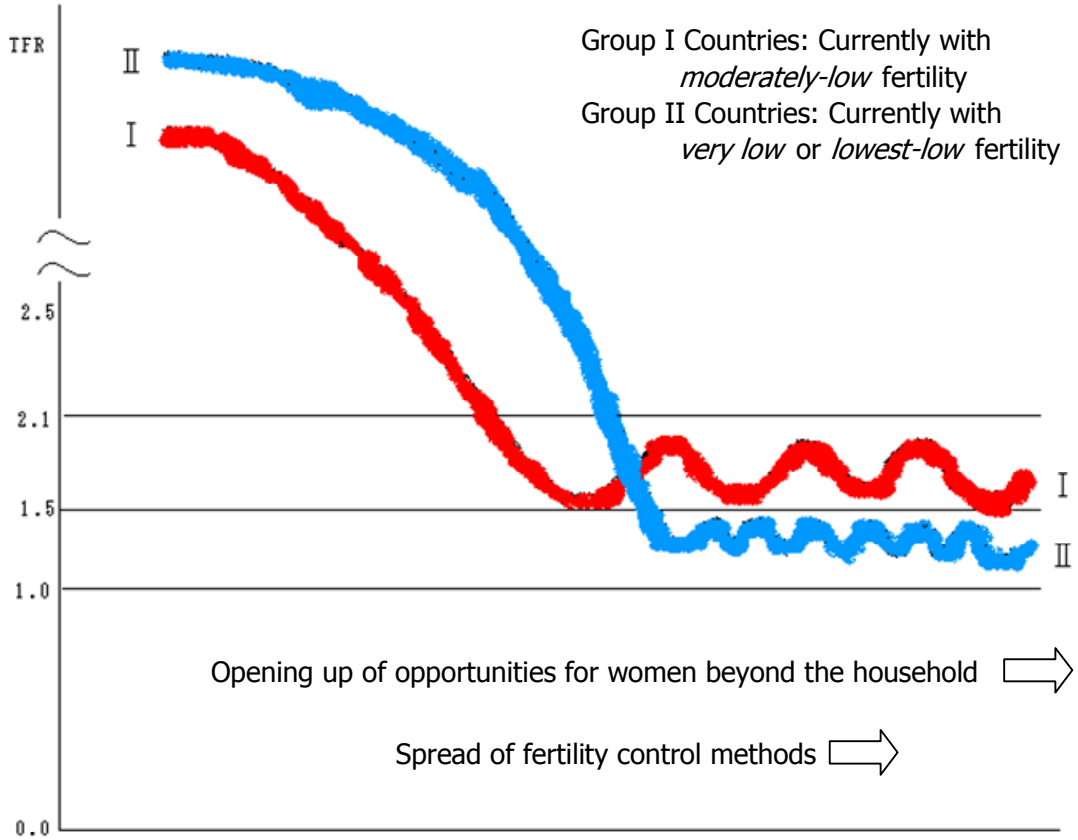
Source: UN. *World Contraceptive Use 2005*, Japan National Institute of Population and Social Security Research. *13th Japanese National Fertility Survey in 2005*.

Figure 8. Two Types of Partnership Transitions: (1) to Moderately-Low Fertility, (2) to Very-Low or Lowest-Low Fertility



Source: Sato (2008).

Figure 9. Two Types of "Culture" and Fertility Transition (Hypothesis)



Source: Ryuzaburo Sato (unpublished).