

## The Economic Factors for the Declining Birthrate

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**Abstract** This paper examines economic factors affecting the declining fertility rate in Japan. A major cause of this continuous decline is the increasing participation of women in the labor force. This, in turn, increases the opportunity costs of having children for a family. These opportunity costs are closely related to the scarcity of full-time jobs for women due to the fixed employment practices of major Japanese companies. A crucial policy for stabilizing the fertility rate is to reduce the opportunity costs of women by increasing child-care services and promoting the creation of jobs for those who are beyond the child-rearing age.

### 1. Introduction

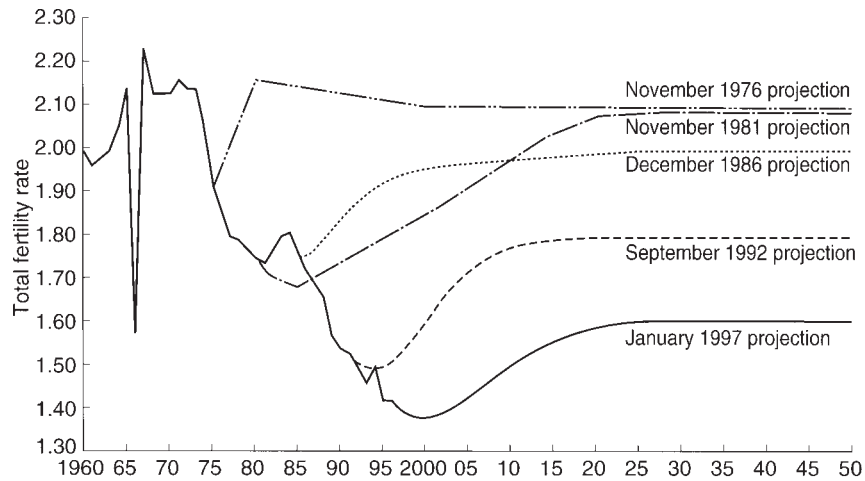
The number of births in Japan has constantly declined since the second peak of the postwar period in 1973, when the first postwar baby boom “mass” generation had its children. There were fewer births in 1995 (1,190,000) than in 1966 (1,360,000), the particular year, occurring once every 60 years, according to the Chinese calendar, in which it is believed that a girl born will grow up to be a shrew and will have difficulty finding a spouse, and when people refrain from having babies. This decline in births is confirmed by the total fertility rate (TFR). The TFR decreased from 4.5 births right after the war to 1.42 births in 1996. The current TFR is far below the level (2.08 births) required to stabilize the population. It is almost certain that the reproductive-age population started falling in 1995 and will be followed by a decline in the population as a whole at the beginning of the twenty-first century.

According to the median projection published at the beginning of 1997 by the National Institute of Population and Social Security Research, the TFR is likely to recover in the year 2000, after which it will remain at the 1.6 level. In the past, every new population projection tended to make a downward revision in the fertility rate, as shown in Figure 1. Population projections are not the only predictions that turn out to be wrong. However, unlike economic and other estimates, population projections are always revised in the same direction, suggesting some problems in the estimating methodology.

The prospect that fertility rates will recover quite soon assumes that there has been no major change in the desire for marriage and having children based on

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Source: National Institute of Population and Social Security Research, Future Population Projections of Japan-Medium Variant.

Figure 1 Revised fertility rates of previous population projections

surveys of couples' planned number of children. It has also been observed that the lowered fertility rate caused by late marriages can be recovered by late births. The fact that people's attitudes and behaviors are constantly changing invalidates the traditional methodology for estimating population based on the assumption that past attitudes and behaviors will be unchanged in the future. In Japan, as in countries in the West, the greatest elements of change are women's increased employment and hence their enhanced economic status.

In this paper, women's expanded employment will be first addressed as a major contributor to the lowered birthrate in postwar Japan. Second, the problem of higher opportunity costs will be considered as women's employment is linked to the country's traditional employment practices. Third, a microeconomic analysis will be made of the influence of childbirth on women's employment behavior. Finally, new policy directions to cope with the declining birthrate will be proposed.

## 2. Factors Leading to Lowered Birthrates and the Problems Involved

Before addressing the difficulties posed by fewer children, we must ask ourselves why the declining population is a problem. The global population is ever increasing. Indeed, overpopulation in large cities of Japan is notable. Some believe that if the Japanese population continues to decrease in the twenty-first century, people will be able to enjoy a higher standard of living. Others endorse the principle that

the government should not interfere with individual family decisions about having children, such as the “have more children, increase the population” policy as it was during the wartime.

Certainly, there are rich nations with small populations such as in Scandinavia. The problems lie not in the size of the population but in the process of population reduction. Children are future consumers as well as workers to support production activities. For the past two decades, the population of Japan has increased by about 1.1% annually. The large population has been the source of a highly qualified labor force and the driving force for the country’s economic growth. These conditions will change drastically in the early twenty-first century, when, according to current projections, the population of Japan will be half of its present size of 123 million; one hundred years later, it will be reduced to 60 million people. If birthrates decline even further than the median projection, the population will become much smaller in the future.

Another problematic aspect of this pattern of decrease is that it will create greater gaps in the age distribution of the population. A relative decline in the working-age population is occurring largely among younger generations. Heavier burdens to support the aged population will be placed both on the government and on families. Working generations will suffer from a lowered income as well as increased taxes and social security contributions. Hence, it is not feasible for the Japanese to enjoy better living conditions with a smaller population without chaotic congestion in large cities, while maintaining the present high standard of living.

If the ongoing decrease in the birthrate is a result of people’s rational decision making, the government should not interfere. If, however, conventional institutions and practices are not responding to socioeconomic changes and thus are affecting couples’ reproductive behavior, it is desirable for families and the society generally that the government take action to remove such socioeconomic obstacles.

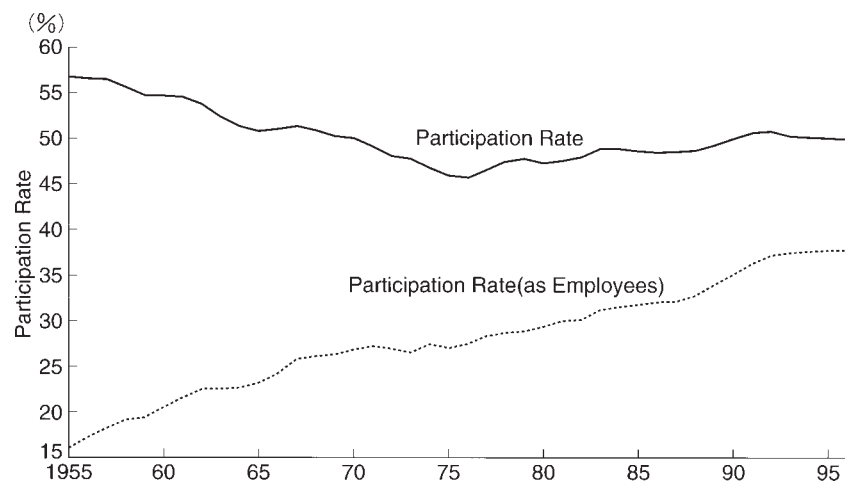
It is no longer possible to prevent the influence of a smaller population of young people as a result of fewer births in the last several decades. When comparing 1992 population projections, which predicted early recovery of the birthrate, with the revised ones for 1997, the rates of the elderly population do not make much difference for the year 2020, but those for the second peak of the elderly population in 2050 differ as much as 5%. This suggests that a policy to recover the birthrate will require many years to bear fruit, a fact that should be considered in formulating such a protocol. The policy on birthrates developed today may produce irrevocable results in the future. In this sense, it is similar to the global environmental issue.

### 2. 1. Causes of Reduced Birthrates

Chronologically, two primary factors are responsible for the reduced birthrates in postwar Japan. The sharp drop in the birthrate toward the end of the 1950s — after the postwar baby boom — was caused by a drastic decrease in families with more than four children, due to a decline in infant mortality, ever-expanding urbanization, and a reduction in self-employed households, which formerly had many children. These factors were no longer observed in the 1960s, and the fertility rate per family remained stable at 2.1, the population replacement level.

The continuous dip in the birthrate over the last two decades has been a result of the tendency among young people not to marry. This has been a major reason for fewer births. According to the 1995 census, almost 50% of Japanese women between the ages of 25 and 29 were unmarried. A survey by the Ministry of Health and Welfare in 1990 found that there was a direct relationship between women's ages on their first marriage and their educational background. The average age at marriage for four-year university graduates was 28.1, 2.2 years older than that for high school graduates. Furthermore, women who lived in Tokyo married even later — at an average of 29.1 years. Considering the pace of delayed marriages, it is probable that by 1997 the latter figure had risen to over age 30. This corresponds to the extremely low TFR in Tokyo of 1.07.

The increasing number of women who marry later in life is closely associated with the rise in their rate of employment and the improvement of their economic status. Yet it is often pointed out that a higher percentage of women were employed in the 1960s than today and thus the effect of their recent increased employment should not be overemphasized. Such a notion, however, does not take into account

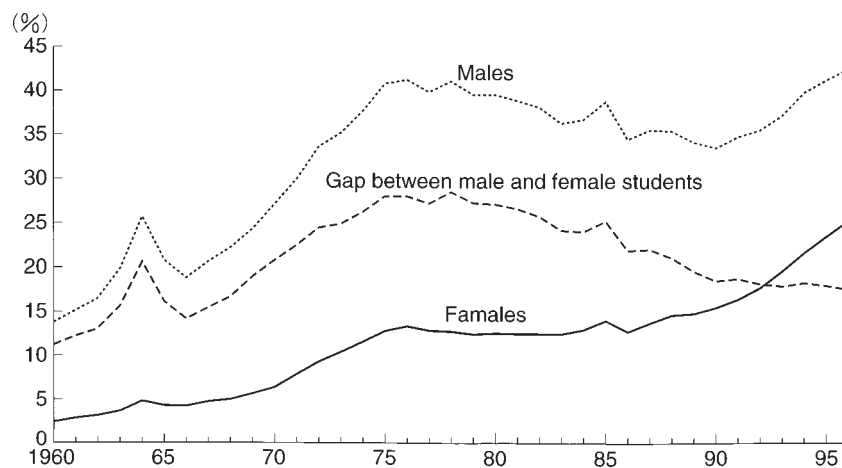


Source: Management and Coordination Agency, Labor Force Survey Annual Report.

Figure 2 Women's participation in the labor force

the difference in the nature of women's jobs before and after 1975. Before 1975 working women were mostly self-employed, whereas after that year a larger proportion were employed by others. The percentage of employed women over age 15 continued to increase, whereas that of self-employed women decreased. As a result, the employment rate of women as employees has been higher in recent years (Fig. 2).

Moreover, lately the rate of women advancing to four-year universities, an indicator of the improved quality of employed women, has accelerated, and the gap between male and female students has narrowed (Fig. 3). Not only has the number of women entering higher educational institutions increased, but also more female students are majoring in law, economics, science, and engineering — fields that offer better-paid jobs — instead of just traditionally women-concentrated areas such as literature and education (Fig. 4). In 1995, 23% of Japanese women entered universities, compared to 41% of the men. Given the recent tendency, this percentage will be higher in the future. An important factor enabling women to receive a university education is the high income of their families to pay for it. The number of children in a household is also significant. When the average middle-class family had four or five children, parents were inclined to send their sons to a university and their daughters to a two-year college at the most. Today, when there are only two children in a household, both of them are likely to receive a university education regardless of their gender. Hence, if the present trend continues, a “lower fertility cycle” will emerge; less children — permitting girls to advance to higher education — higher women's employment rates — later marriages — low fertility rates.



Source: Ministry of Education, Ministry of Education Statistics Directory.

Figure 3 Advancement to 4-year university by gender

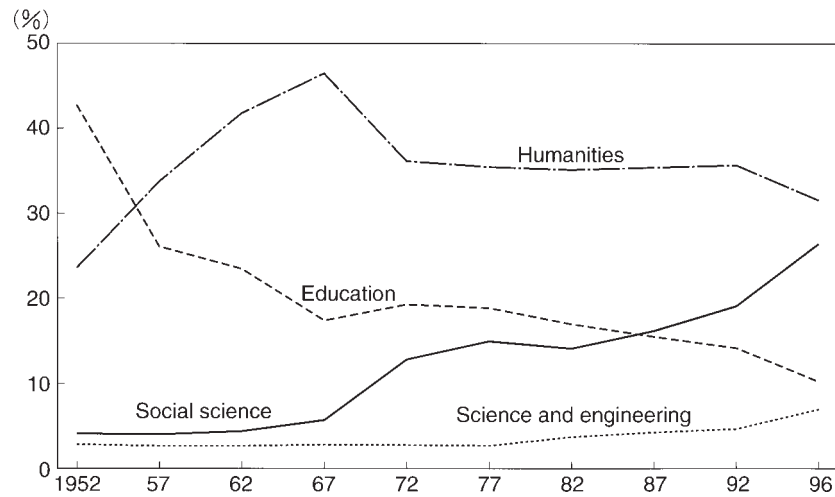


Figure 4 Majoring faculty of female students at universities

## 2. 2. Marrying Late or Never Marrying

In previous population projections, fertility rates were seen to be recovered on the ground that even though young people tended to marry at a later age, they would marry eventually and have children. In fact, fertility rates showed a constant drop among people in their twenties but rose among those in their early thirties. Also, in fertility surveys more than 90% of unmarried women replied, "I am intending to marry some time." As such, the higher rate of unmarried young people was considered to be a temporary phenomenon that would not lead to a permanent increase in the number of unmarried people.

However, careful attention should be given to the results of attitudinal surveys on marriage, because the demand for marriage is latent and becomes apparent in certain situations. A major reason for the overestimation of fertility in previous population projections is the changed economic environment, in which the "cost" of women for marriage tends to rise. Whether to marry or not is a question of the past, when, for women, marriage was considered as a livelihood and equivalent to getting a permanent job.

Modern women's behavior is based not on two-step thinking — "decide to marry first, and find a spouse next" — but on continuous thinking — "keep working until I find an ideal future spouse." In other words, if they do not meet a potential spouse, they dare not marry even by lowering their selection criteria. Just as in the case of labor supply, the concept of "reserved demand," meaning "I marry myself," can be applied. (When the market is in recession, a farmer chooses to have his family consume the products that he grows, or the owner of a rental house lives in the house himself.) A single life gives a woman the luxury of privacy even if her

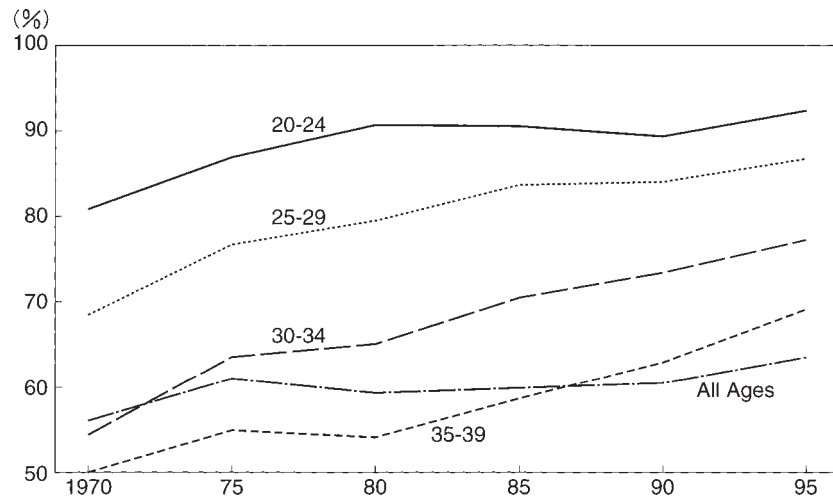


Figure 5 Narrowing wage differences between male and female workers  
(Ratio of female workers' wages to male workers' wages)

income may not allow a luxurious life. Therefore, it is only when a woman meets a very attractive man that she agrees to marry even at the cost of sacrificing her privacy.

Reflecting changes in the labor market and women's rising level of education, the wage gap between male and female workers in their twenties and thirties has narrowed (Fig. 5). This further raises the cost for a working woman to resign her job for the purpose of marriage or child-rearing. As such, the ongoing changes in the marriage behavior of young women, including the increase in the number of those who never marry, cannot be regarded as simply the preference for late marriage rather than for no marriage at all.

### 3. The Influence of Japanese Employment Practices

When women receive a higher education and better employment opportunities become widely available to them, the opportunity cost for those who marry goes up and the percentage of unmarried people eventually rises. This is a common phenomenon in industrialized countries. In Japan, the traditional practice of ensuring workers long-term employment heightens the opportunity cost of women for child rearing.

Typical employment practices adopted by large companies and government offices in Japan include:

- 1) Recruiting workers right out of school and ensuring them lifelong employment.

- 2) Utilizing promotion systems and wage scales that are closely linked to workers' age and years of service.
- 3) Organizing trade unions at the company/organization level rather than according to type of job.

Under a system providing selected workers — centering on new recruits — with a sequence of intensive on-the-job training, these practices lead to the fixed division of roles between male and female workers within a company or a company group.

Companies ensure their workers long-term employment not because of their paternalism, but because they want to recover their investment in workers' training. The seniority-order wage system serves to contain workers within one company on the premise of long-term employment by distributing an employee's wages across a total working life, with larger proportions paid out in later years. This system makes it difficult for a female employee to continue working while taking care of her child for the following reasons:

First, chronic overtime work is taken for granted by both employers and employees as a means to return to the company its investment in the employees' training and to ensure their long-term job security. Such a system has two advantages: it raises the average capacity usage ratio of human resources, and it provides a buffer against a recession by reducing the number of hours worked instead of the number of employees. In such an environment, working mothers find it difficult to remain in their jobs on a full-time basis unless they have their own mothers who are willing to take care of their grandchildren.

Second, frequent personnel relocations and transfers are norms of Japanese companies in view of workers' training through accumulating experience. Those employees who give precedence to a company's convenience over their own are regarded as major players, whereas those who do not are secondary players, and their roles are divided accordingly. When either of a working couple is relocated, it is usually the wife who quits her job to stay with her husband. This is one of the chief reasons why women stop working for child-rearing.

Third, midcareer full-time employment opportunities are scarce. Because a worker is trained by one company, wages are paid in accordance with the position awarded and, usually, the number of years worked from the time of employment right after graduation school. If a woman wants to work again after she finishes child care, what she can find is usually a supplementary job with a flat wage. Thus, the opportunity cost for a woman who leaves a company to marry or have a child compared to her potential lifelong wages while maintaining her job is quite substantial. The 1997 White Paper on People's Life by the Economic Planning Agency gives some estimates of the possible foregone income due to child-rearing for women over a working life. One estimate compares two average 2-year college graduates employed at age 20. Suppose one of these women gets married and has



her first child at 27, when she quits her job, has a second child at 31, and then resumes working on a part-time basis at 32, whereas the other one continues working on a full-time basis until her retirement age. The potential income of the former woman if she had kept working during the five years she spent raising her children would be 19 million yen. The difference between the two incomes from age 32 to retirement would be 44 million yen including retirement benefits, since the wage scale for midcareer part-time employees is much lower than that for workers who are employed right out of school.

Some may argue that such a situation is not specific to Japanese companies. However, if workers' training is not totally dependent on employers but can be obtained by the employees themselves at institutions of higher education and other training facilities or through various work experiences, then midcareer employment opportunities for full-time workers could be expanded. If a worker's expertise in a specific field is properly valued in a company, he or she might be relieved of the obligation of being relocated or of working overtime. This would promote the sharing of household chores and child care by husband and wife and facilitate the continued employment of working mothers.

#### 4. Microeconomic Analysis of Reproductive Behavior

##### 4.1. Overview of Existing Research Studies

Studies linking women's employment and lowered fertility rates in Japan abound. Analyses using chronological data are provided by Osawa (1993), Ohbuchi (1982a, 1982b), Ogawa and Mason (1982), and others. Osawa's study shows that women's increased participation in the workforce, supported by rising wages in the marketplace, has acted to suppress fertility rates. Using data from the five annual population censuses from 1970 to 1985, by prefecture, Ogura and Deckle (1992) make a cross-sectional economic analysis of fertility rates based on prefectural data. According to them, women's hourly wages and land prices are the significant factors in reduced fertility. They also point out that the lowered fertility rates of the 1980s, though due to the increased number of women marrying later in life, were triggered by their increased participation in the workforce. Harada and Takada (1991), on the other hand, show negative correlations between fertility rates and women's wages, and between fertility rates and housing costs.

As a verifiable analysis by individual household, Matsuura and Shigeno (1996) estimated married women's reproductive and employment behaviors using the 1989 Household Survey and Savings Tendency Survey. The explanatory variables for the fertility function were the husband's income and assets. The expenditures of each household for culture and entertainment were used to judge the quality of a

child's life. The target families were those who owned their own homes without a mortgage, whose husbands were white-collar workers, and who had a mother — of either husband or wife — living in the household. Similar explanatory variables were applied to the employment function. Due to limited data, the target households for analysis excluded self-employed workers. Among the wives, no distinction was made between full-time and part-time workers. A more recent study by Nakamura and Ueda (1997) reveals that a working mother's educational background and the availability of child day-care centers are decisive factors in the decision on whether to continue working.

#### 4. 2. Analysis of Married Women's Employment Behavior

Based on the above studies, three factors determining the number of (under-18 unmarried) children of married women are considered: first, the family income,

Table 1 Analysis of married women's employment behavior

Variable <sup>1)</sup>	Coefficient	$\frac{\partial \text{Employment probability}}{\partial \text{Independent}}$
1. Self-employed (vs. not employed)		
Household income <sup>2)</sup>	-0.000087	0.00001
Number of children <sup>3)</sup>	-0.244101***	-0.00560
Age <sup>4)</sup>	0.031226***	0.00567
Presence of persons in need of care	-0.235802*	0.00209
Presence of a healthy elderly woman <sup>5)</sup>	0.001022	-0.01251
Constant	-1.917775***	-0.36612
2. Employed (vs. not employed)		
Household income <sup>2)</sup>	-0.000325***	-0.00007
Number of children <sup>3)</sup>	-0.402790***	-0.07950
Age <sup>4)</sup>	-0.013532***	-0.00567
Presence of persons in need of care	-0.487615***	-0.10078
Presence of a healthy elderly woman <sup>5)</sup>	0.166209**	0.04040
Constant	1.065789***	0.40557
Number of samples	6,093	
Log likelihood	-6210.81	

\*\*\* Significant at the 1-percent level.

\*\* Significant at the 5-percent level.

\* Significant at the 10-percent level.

Notes:

1) Dependent variable is the employment behavior of married women under 60.

1 = Self-employed, 2 = Employed by others, 0 = Not employed.

2) Total income of the household except for the subject's wage income.

3) Number of children aged 6 and below.

4) Age of the respondent.

5) Presence of an elderly woman between 60 and 70 living in the household except for those who are in poor physical condition and are able to take care of themselves in daily life.

which provides the means (income effect) for bringing up children; second, the mother's wages, which have elements of both income effect and opportunity cost (substitution effect) if she stops working to take care of a child; and third, the availability of child care services, which will reduce a working mother's opportunity cost. For example, if a healthy elderly woman lives in the household, she may be able to care for the working mother's child or children. From this point of view, an analysis was made using individual data sheets of the 1992 Basic National Livelihood Survey by the Ministry of Health and Welfare. The following analysis is based on the findings of Yashiro, Oshio, Ii, et al. (1997).

The probability that married women under age 60 are either self-employed (including as a family worker) or employees of someone else is estimated in comparison with women who remain unemployed throughout their lives. Self-employed women and female employees are distinguished because of the significant difference in opportunity costs for these two types of employment. The explanatory variables used here are the household income, woman's age, number of children, and presence in the household of a healthy elderly woman or a person in need of care.

The number of children is a meaningful factor in the reduced probability that a woman will work as an employee. On the other hand, the presence of a healthy elderly woman living in the same house pushes the mothers' probability of being an employee upward. In the case of self-employed mothers, children do not lower their employment rates, and the effect of an elderly woman in the same house on the mother's work is insignificant. In other words, a trade-off between continued employment and child care occurs only in the households of women employed by others (Table 1).

#### 4. 3. Factors That Determine the Number of Children an Employed Woman Will Have

In deciding how many children to have (based on an approximation of the number of under-18 unmarried children in the families surveyed), a married woman will consider the income level required by a household to pay child care expenses, the income from her own wages as an opportunity cost of child care, her age, the presence of a healthy elderly woman in the household to support child care, type of employment, her husband's occupation, the location of their residence, etc. (Table 2).

The survey results indicate that parameters of the household income, the woman's own income from wages, and the presence of a healthy elderly woman in the house were statistically significant and the directions of their effects were as expected. Older mothers have more children, but the degree of increase gradually becomes smaller, showing a nonlinear pattern. For families living in large cities,

Table 2 Fertility analysis (OLS)

Variable <sup>1)</sup>	Case 1	Case 2 <sup>2)</sup>
Subject's wage income <sup>2)</sup>	-0.000617***	-0.000652***
Household income <sup>3)</sup>	0.000069***	0.000071***
Subject's age	0.629610***	0.630620***
Square of subject's age	-0.008575***	-0.008593***
Husband's self-employed dummy <sup>4)</sup>	0.051516**	0.051056**
Presence of a healthy elderly woman <sup>5)</sup>	0.170529***	0.167253***
Residence in a large city <sup>6)</sup>	-0.109981***	-0.107759***
Husband's white-collar worker's dummy <sup>7)</sup>	-0.094691***	-0.093519***
Constant	-9.474066***	-9.464529***
Number of samples	14,214	14,214
R <sup>2</sup>	0.1713	0.1704

\*\*\* Significant at the 1-percent level.

\*\* Significant at the 5-percent level.

\* Significant at the 10-percent level.

Notes:

- 1) Dependent variable is the number of children (under 20, unmarried) of a married woman between 20 and 45.
- 2) Subject's wage income is adjusted to be a part-timer's wage. In practice, if annual income is less than 500,000 yen, her income is considered to be 500,000 yen.
- 3) Total income of the household except for the subject's wage income.
- 4) Is husband self-employed? 1 = yes, 0 = no.
- 5) Is there any woman in her sixties in the household who does not need to be cared for? 1 = yes, 0 = no.
- 6) Does the subject live in a large city? 1 = yes, 0 = no.
- 7) Is husband a white-collar worker? 1 = yes, 0 = no.

restrictions imposed by housing conditions appear to constitute a greater factor in limiting the number of children. If husbands are white-collar workers, they generally have higher educational backgrounds (although educational data were not obtained in this survey) and tend to prefer giving better quality by providing with higher education by limiting the number of children rather than having more children. It was found that self-employed households (including farm households) have significantly more children than others. This may suggest that such households need more children to provide the labor or that they wish their children to succeed them in the enterprise. At the same time, it demonstrates that the trade-off between self-employment and child care is weaker than it is for employed workers because the self-employed family can adjust their work hours more easily.

One problem with this analytic method is the bias caused by the lack of data on the potential income of nonworking wives. Wives who had to quit their jobs because of the incompatibility of child care and employment had no income, and they were regarded to have a zero opportunity cost for child care. An attempt was made to assume that the reservation wage (the wage level in the marketplace below which no one will work) for nonworking wives was set to be 500,000 yen per year,

calculated from the wage distribution of part-time women workers. An estimate was then made considering this amount as an opportunity cost for nonworking wives, but it actually did not show any notable difference.

As a next step, the target for analysis was limited to working women with spouses to determine the influence of their jobs on the number of children they had. The attributes of working mothers with one child and with more than two children were compared with those of working women with no children (Table 3). The purpose of this breakdown was to see how much a woman's trade-off between employment and child care is influenced by an additional number of children.

It was found that working mothers with two or more children suffered greater opportunity costs than those with only one child, and that the employment promotion effect of an elderly woman living in the household was greater as the number

Table 3 Multinomial Logit Analysis of Fertility

Variable <sup>1)</sup>	Coefficient
1. One child (vs. none)	
Subject's wage income	-0.000824***
Household income <sup>2)</sup>	0.000319***
Subject's age	0.367711***
Square of subject's age	-0.004358***
Presence of a healthy elderly woman <sup>3)</sup>	0.406950***
Residence in a large city <sup>4)</sup>	-0.270676**
Husband's white-collar worker's dummy <sup>5)</sup>	-0.282271***
Constant	-7.039632***
2. Two or more children (vs. none)	
Subject's wage income	-0.001484***
Household income <sup>2)</sup>	0.000447***
Subject's age	2.268487***
Square of subject's age	-0.030520***
Presence of a healthy elderly woman <sup>3)</sup>	0.588888***
Residence in a large city <sup>4)</sup>	-0.556268***
Husband's white-collar worker's dummy <sup>5)</sup>	-0.300444***
Constant	-39.473470***
Number of samples	6,870
Log likelihood	-5409.8000

\*\*\* Significant at the 1-percent level.

\*\* Significant at the 5-percent level.

\* Significant at the 10-percent level.

Notes:

1) Dependent variable is the number of children of a married woman between 20 and 45 with a job: one child or two or more children (vs. no children).

2) Total income of the household except for the subject's wage income.

3) Is there any woman in her sixties in the household who does not need to be cared for? 1 = yes, 0 = no.

4) Does the subject live in a large city? 1 = yes, 0 = no.

5) Is husband a white-collar worker? 1 = yes, 0 = no.

of children increased. This suggests that when a working mother is expecting another child, a trade-off between continuous employment and child care is further strengthened if her income is high and she receives little child care support.

#### 4. 4. Views on Child Care Support

It is in principle up to individual persons and families whether to have a child or not. However, given the magnitude of the eventual impact of their decisions on the nation's labor supply and social security system, it is important to formulate governmental policies that will eliminate social factors preventing people from having children. A family decision on having a child is made after consideration of income level and the expenses involved in bringing up a child. Among the ever-rising expenditures in raising children, "education cost" is the largest item. Surveys on household expenditures reveal that the higher the income, the greater the ratio of investment in the education of children to their incomes. It is not because people think that "we want to have fewer children because the cost of education is so high," but rather that "we will have a small number of children and invest the larger amount in their education." This change in emphasis from quantity to quality of the children lies behind the increasing demand for education. Thus the largest cost of child-rearing is not necessarily the cost of education but the mother's opportunity cost incurred as a result of her suspending employment. This opportunity cost is pushed upward by Japanese employment practices such as long-term employment, long working hours, and promotion and wage systems based on seniority; it is further increased by the lack of child care services outside the family. The incompatibility of child care and employment is widely understood by women before marriage, and there is no doubt that women who are committed to their jobs will hesitate to marry because of this constraint, accounting for the strong social pressure for having a child to married couples in Japan.

### 5. Policy Implications

In Japan, the decrease in fertility per se is a serious problem, but it can also be understood that social distortions are reflected in the declining rate of marriage and childbirth. The current decrease in the birthrate is one of the consequences of rapid economic growth and women's improved economic status with traditional social systems unchanged. A key to stopping this decline lies in the reform of existing social systems, including employment practices and family systems, so they will respond to these economic changes. This paper has focused on a woman's trade-off between continued employment and child care, and on the need to raise both employment rates and fertility rates by reducing the obstacles to them.

To recover the birthrate in the future, Japan must establish a social policy to

ensure the availability of child care support systems instead of leaving the responsibility of child care with women alone. The same approach is used to provide security for the elderly. In the past, elderly care was basically borne by the family and the need of children to support their parents' in their later life was emphasized. Now, however, the elderly are supported by public pension and medical insurance systems.

The principal elements to be considered in formulating child care support systems are as follows. First, the basic premise is that women's employment will be expanded. Because their social advancement is regarded as the major cause of the declining birthrate, policies that will return women to the home are often proposed. But retrieving the gender roles of the traditional family system is not feasible in today's life. It would be like establishing a policy to supply all our agricultural products within our national borders in this age of an increasing international division of work. Before attempting to determine whether a policy will be advantageous, however, we should consider first whether it is feasible. Now that it is obvious that starting in the year 2000, Japan's labor force will decline due to a birthrate decrease that has already occurred, a more realistic policy would be one that enables women to continue working while taking care of their children. The answer, therefore, lies in the improvement of child care facilities. This is not to suggest the upgrading of existing public day care centers, which target mainly low-income families and which have strict user criteria. What is needed is an environment in which child care services can be a viable business in the era of an aging population. The public expenditures allocated for the administration of costly public day care centers should be channeled to support facilities managed by the private sector. At the same time, the public sector should be responsible for monitoring and ensuring the adequate administration of private day care centers and of protecting the users' interest.

Second, the existing tax system as well as social security system should be reformed to ensure equality for all women regardless of their employment status. The current systems favor full-time housewives on the tacit premise that housewives devote themselves to child care and to household work outside the employment sector. They enjoy greater advantages in taxes and social security contributions than working wives and unmarried women. These preferential systems should be abolished, and the funds gained by this action should be directed to child care support. With the elimination of these systems, the desire of full-time housewives for employment could be met, whereas presently it is suppressed by the fear of losing the tax benefits by exceeding maximum amount of a housewife's annual income (one million yen per year) that is eligible for a tax-exempt status of husband's income. . . . Social systems should be neutral to the diverse types of employment for women.

And third, various Japanese employment practices discouraging female labor force participation need to be changed. Enhanced day care centers will help working women continue to work. But even if the standards of these facilities are much improved, some women will find it difficult to use them while their children are still infants, or to take child care leave for several years. If the employment system allows women to return to their former positions after taking child care leave, the opportunity cost of quitting their jobs to care for their children would be largely reduced. By contrast, current employment practices consider male employees as the mainstream workers of a company and female employees as supporting workers, for they may quit or suspend their work for child care at any time. This system is based on the premise of long working hours, including overtime work, the frequent transfer and relocation of jobs within the firm, and conventional gender roles. The controversial question of reforming long-standing employment practices should also be examined from the viewpoint of declining birthrate arising from women's desire to continue working while they take care of their children.

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