The total fertility rate in South Korea reached the replacement level in 1983 and continued to decline to lowest low level in 2001 (TFR=1.30). The latest estimate of the total fertility for 2004 is 1.08 (Korea National Statistical Office, 2006).

Studies on fertility behavior up to year 2000 indicate that the major factor associated with declining total fertility rate is the trend toward later marriage and less marriage. Singulate mean age at marriage among men increased from 27.3 in 1980 to 32.0 in 2005, and among women, it increased from 24.1 in 1980 to 28.8 in 2005. While age at first marriage is increasing the proportion of children being born to never married women remained at below 2% level (Korea National Statistical Office, 2005). This trend, with very small proportion of women having more than two children have resulted in continuing decline of total fertility rate in the past 20 years (Choe and Park, 2006; Choe and Kim, 2003; Jun, 2004).

The most recent national fertility data conducted in 2003 show signs of a new trend: significant decline in marital fertility and increase in childlessness within marriage since 2000. The first birth interval which showed little change until 1995 began to show increasing trend. The percentage of women who give birth to first child within two years since married dropped from 88% among those who got married before 1995, to 61 percent among those who got married after 2000. Undoubtedly, increasing age at marriage in recent years contributes to this trend. But a multivariate analysis shows that even when we control for the effects of age at first marriage, the effect of marriage cohort on first interval remains large and statistically strong. If the new trend continues to hold, period total fertility rate would not increase even when the increase age at first marriage stabilizes and the "tempo effect" diminishes.

This paper will take a closer look at the first birth interval as well as fertility intentions among South Korean women using the 2003 National Survey of Fertility and Family Health data together with 2000 census (2% sample). The analysis plans are designed to gain better understanding on the causes of decline in marital fertility as well as continuing decline of fertility. We are especially interested in estimating the effects of economic hardship, difficulty in combining work and family life, cost of children's education, and attitudes on family and childbearing on fertility behavior among South Korean women. Some details of the analysis are of described below.

1. First birth interval
It is well known that the delay of first birth has a large effect on both the period and cohort fertility. Our analysis will estimate the effects of individual/household characteristics including women's and husbands' education, age, age at first marriage, survival status of parents and parents-in-law at the time of marriage, and type of women's employment before marriage, and women's preference to work outside home. We will create indicators of perceived cost of child raring from attitudinal questions on what the respondent think is appropriate support for children including the cost of higher education, marriage, and financial assistance after marriage.

2. Fertility intention

The dependent variable for this part of analysis will be (a) whether or not the respondent plan to have more children, and (b) total desired number of children based on the number of surviving children at the time of survey and the number of additional children the respondent plan to have. Analyses of recent survey data in Korea indicate that the implied level of fertility based on desired number of children match the actual fertility level about three years later quite well. The analysis will include additional family-level variables such as current employment status and conditions of woman, and economic status at the time of survey. Furthermore, using 2000 census data, community-level covariates indicating work-family compatibility, such as availability of child-care facilities, distribution of type of employment of women in the community, and proportions of employees with long commuting time, will be created and their effects will be estimated. Merging of community data from census and the survey data is straightforward using small administrative area as the unit of community.

Data and Method
The survey collected information from national probability sample of 13,976 households and 9,579 ever-married women aged 15-59 residing in the selected households from 194 primary sampling units. The 194 enumeration districts will be collapsed into 58 communities by combining adjacent enumeration districts so that each community will have reasonable number of households. Number of respondents in a community ranges from 51 to 361 and the mean number of respondents per community is 165.

Relevant variables available in the 2000 census include use of childcare facilities for preschool and primary school children, economic activities, and commuting time.

We will use multilevel discrete hazard model for the analysis of first birth interval and multilevel logistic regression and OLS for fertility plan.