# The Effects of Childcare and Eldercare on the Changing Patterns of Chinese 

 Women's Work Lives--1982 to 2000by

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This paper focuses on the work lives of prime-aged women in China. Theory tell us that substantial change in the way work is organized will affect the choices women (and their husbands) are making but labor supply theory seldom is able to predict the net effect of such changes. To learn more about the effect of China's substantial economic reform on the life course of Chinese women's work, we turn to empirical observation by comparing women's labor force and employment status in the three most recent population censuses: 1982, 1990, and 2000. The comparison allows us to examine how changes over time have affected the probability that women at various ages participate in labor markets.

We consider women's labor force participation decisions in the context of their families and their residential locations. Beyond the standard individual demographic characteristics of age, education, marital status, and ethnicity, we include a host of family, prefectural-and provincial-level variables that have not been traditionally used in studying the labor force participation rates of Chinese women. We are particularly interested in how the presence in the household of preschool and school-age children and/or the elderly and disabled affects women's likelihood of engaging in work outside the home. We also consider how contextual variables such as the unemployment rate in their area of residence, provincial average per capita income levels and provincial GDP growth rate affect labor force participation rates of women. Finally, we also try to control for differences in attitudes to women via three prefecture level variables: the percent of Muslims in the population, the infant sex ratio, and the sex difference in illiteracy rates.

We believe that urban and rural markets are fundamentally different and thus divide the population of women by urban and rural residence for both our descriptive and multivariate analysis. In the next step of our analysis, we will further divide the urban population (at least in the 2000 census) into migrant and non-migrant groups, to capture the effects of market segmentation.

Our initial findings reveal:

1) The mean level of labor force participation of prime-age urban women declined by 10 percentage points from 1982 to 2000 while over the same period prime-age rural women's labor force participation increased by 9 percentage points.
2) Descriptive analysis by 5 -year age cohorts reveals that urban labor force participation remains consistently high across the age cohorts from 23-27, 28-32, 33-37, 38-42 and then begins to decline for women age 43 and above. We observe, over the 18 year period from 1982 to 2000, an overall decline in labor force participation but no changes in the patterns over age cohorts.
3) A similar descriptive analysis of 5-year age cohorts for rural women shows that while in 1982 the age pattern of participation look appears quite similar to the urban pattern, by 2000 the rural age patterns are very different. In 2000, the labor force participation rates of rural women are higher (than in 1982 and 1990) at each age cohort and especially higher at the oldest ages. In 2000, the labor force participation rates of rural women are in the 89 to 93 percentage range for the 1822 through 43-47 age groups. For these rural women, the rates fall only slightly to 86 percent for those aged 48-52 and then decline to 46 percent for those aged 53 and over. The comparable number for urban women aged 53 and over is 14 percent.
4) The pattern by age for urban men resembles that of urban women, with less sizable declines from 1982 to 2000 and an older age of exiting the labor market such that the large decline in labor force participation happens after age 52. Rural men from age 23 to 52 are universally in the labor force in each of the three censuses. The data reveal an increase in labor force participation of older rural men in 2000 as compared to 1982 that is similar to what we observe for rural women.
5) In our preliminary multivariate analyses, which control for presence of children of various ages and the presence of an elderly or disabled household member, we find that the marginal effects of the variables related to care for urban women are increasing over time, implying that family considerations matter more in the freer urban labor market of the post reform era than they did in the pre or early reform era. Having a preschool child is shown to reduce urban women's labor force participation about 3 percentage points compared to having no child in 1982, 4 percentage points in 1990 and almost 8 percentage points in 2000 . For rural women, the effects of children and the elderly in the household are much smaller and to do show a trend over time.
6) The effect of marital status follows a similar pattern to child care in the sense that the effect of being married has a much larger (in absolute value) effect on urban women in 2000 than it did on women in 1982 or 1990. In 2000, married women are 13 percentage points less likely to be in the labor market than never married women. This controls for age and education and excludes those women who are under 23 , over 52 or are still in school. Widowed and divorced also emerge as relevant demographic categories for urban women by 2000; women in both categories have about 5 percentage points higher rates of labor force participation than married women. For rural women, the effect of being married versus never married on labor force participation is much smaller than for urban women and the effect decreases over the 18 year period. For rural women, being widowed or being divorced are not significantly different from being married in terms of labor force participation.
7) The above results are robust to various specifications for local conditions. We use a set of prefectural- and provincial-level variables to control for economic conditions and attitudes to women which are shown to have significant effects. We also estimate an alternative model with a full set of provincial dummies and find that the change in location controls has no effect on the results reported above.
