China's burgeoning economy has benefited from a mobile and flexible labor force of rural dwellers who have moved to urban locations in order to take advantage of better paying industrial, construction, and service jobs. Internal migration increased from 70 million individuals in 1993 to 150 million in 2005, accounting for about one-third of all urban laborers. One important consequence of this large rural-to-urban migration of working age individuals is that those left behind in rural villages are predominantly older and younger dependents. In 2007 it was estimated that as many as 60 million children were left behind by their parents in rural villages– the vast majority of whom lived with or were cared for by their grandparents. Grandparent care is an adaptive response to labor market pressures that separate families and threaten the well-being of young children. At the same time, upward socioeconomic mobility, improvements in population health, and strong fertility controls in China have produced new dynamics for recent cohorts of older Chinese individuals and their families. These changes may enhance the ability of grandparents to provide grandchild care but may also reduce the demand for them to do so. This study examines both possibilities.

Improvements in the physical, psychological, and cognitive health, as well as lower rates of widowhood, among older Chinese persons should increase their capacity to provide care for their grandchildren. On the other hand, a more stringent family planning policy has resulted in fewer children (with smaller families of their own), producing fewer grandchildren who potentially need care. Fertility declines also mean that new cohorts of older adults will tend to have fewer sons. Since sons are far more prone than daughters to migrate without taking their young children, and are also privileged over daughters in the resources received from parents, the demand for grandparents to provide childcare services should diminish with the shrinking number of sons. Finally, increases in the income of the older population has likely increased the capacity of grandparents to provide care, while increases in the human capital of adult children has likely reduced their need to rely on grandparents to provide care for their young children.

In this study we compare grandchild care efforts within two age-matched cohorts of Chinese grandparents based on differences in their family, health, and social conditions. The sample used to address these issues is the Longitudinal Study of Older Adults in Anhui Province, China, a joint project of Xi'an Jiaotong University and the University of Southern California. Anhui Province is the fifth largest province in China, 80% rural, and relatively poor with a GDP that ranks 28th out of 34 provinces. Over twelve percent of its rural population is aged 60 years or older compared to only 8.5% of nation. The out-migration of working-age adults to the capital city (Hefei), Nanjing, and Shanghai accounts for the relatively high concentration of older adults. The study originated in 2001 with a random multi-stage cluster sample of 1,698 adults aged 60 and over selected from rural villages within townships of Chaohu city. The response rate was over 90%. Follow-up surveys were conducted in 2003, 2006, and 2009. In 2009 a new sample of *370* grandparents aged 60-68 was randomly selected from the same villages as the baseline sample to complement the *553* grandparents aged 60-68 surveyed in 2001. Grandparents were deemed eligible for consideration in our analysis if they had at least one grandchild 16 year of age or younger.

Mean ages between the two cohorts were nearly identical (62.9 yrs in 2001 and 62.8 yrs in 2009). Bivariate tests revealed that the more recent cohort had better functional health, better working memory, less depression, and were less likely to be widowed than the earlier cohort. In addition,

the more contemporary cohort had fewer children, fewer migrant sons, fewer grandchildren per child, and fewer grandchildren overall. Older respondents in the more recent cohort also had greater income and their adult children had greater education than those in the earlier cohort.

We examined the degree to which cohort differences in grandchild care efforts were mediated by health, family, and human capital differences between the cohorts. Cohort was measured with a dichotomous variable (0=2001; 1= 2009). Grandchild care was measured by a question repeated for each set of grandchildren in which at least one grandchild was age 16 or younger. Responses to the question "How often do you care for your grandchildren?" were scored on six point scale ranging from none (0) to everyday/all day (5). *Total care effort* was represented by summing this variable across all possible grandchildren sets (range from 0-25. Alternative specifications included a measure of *maximum care effort* assigning the highest value across all grandchildren sets (living in a skipped generation household considered as the most extreme). For this alternative specification a semi-continuous censored model was used. Family predictors included number of grandchildren, number of migrant sons, average family size of adult children, and whether the older respondent was married (vs. not married). Health predictors included functional health (sum of ADL/IADL problems), depressive symptoms (sum of six symptoms each rated on three point scale), and cognitive impairment (working memory measured as errors in serial-subtraction test). Socioeconomic predictors included personal income (log of personal + spousal income) and human capital of children as indicated by the highest education achieved by a child. Age and gender of respondents were controlled in all models.

We focus this paper on the total care effort and highlight one finding from the analysis of maximum care. There was no significant difference in total care provision between the contemporary (2009) cohort and the earlier (2001) cohort (7.3 vs. 7.6). This led us to consider whether mediators were exerted opposing effects on child care outcomes. Path analysis was used to predict grandchild care with censored regression (Tobit) because of the relatively high proportion of grandparents (29.4%) providing no care. Indirect effects of cohort on grandchild care through family, health, and social factors were tested. These models revealed that grandparents in the more contemporary cohort provided less care to their grandchildren than those in the earlier cohort because the former had fewer grandchildren, smaller grandchild-sets, more educated children, and fewer migrant sons. However, more contemporary grandparents tended to provide more care because they had fewer depressive symptoms. Evidence based on maximum care provided revealed that improvements in functional health across cohorts increased the odds that full time custodial caregiving was provided to at least one set of grandchildren.

We conclude that fertility decline has altered the opportunity structure for rural Chinese grandparents to contribute to the care of their grandchildren. Adult children's need for grandparent-provided childcare has declined as their economic status has improved and their families have gotten smaller. Reduced depression across cohorts of grandparents has increased their capacity to provide childcare and is likely related to the improved quality of life of older people in rural Chinese society. The challenging task of custodial grandparenting has been eased by improvements in the physical health of older adults. In sum, large scale social and economic changes in China have both reduced and enhanced grandparents' involvement in the care of their grandchildren, producing something of a dynamic equilibrium in care over time.