

Consumption at Old Age and Lifetime Labor Supply in Rural China

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Research question

- Pension system (rural) China in its infancy
- Boys have economic value as providers for their elderly parents
 - They provide income and services
 - Girls less valuable: join husband's family
- One child policy
- What is the impact of number/gender of children on LIFETIME labor supply and earnings of their parents?
 - Income effect: adults with sons work less than families without sons
 - Focus on lifetime rather than immediate impact
- What are the welfare effects of the one child policy?
 - Impact of pension system on preference for sons

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Data

- The China Health and Nutrition Survey
 - Representative household panel from Eastern China
 - Panel data: HHs are followed over time
 - Long period: 1989-2009
 - 3,795 initial HHs; 6,910 HHs in 2009
 - Interview-based
- Sample construction
 - Drop all HHs with missing data for either spouse
 - Drop all women who are never married
 - 29% of families (48% of observations) are dropped
 - Info on demographics, labor supply and child-composition

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Methods

Two questions, two approaches:

- Impact of children on labor supply
 - Reduced form approach
 - Number of children and gender composition are endogenous
 - Those HHs that benefit most from son might do selective abortions
 - Instruments: sex of firstborn and period in which couple married (changes in first child policy)
- Welfare effects of the one child policy
 - Structural model of savings and labor supply
 - Allows to predict the effects of policy changes that have not occurred

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Conclusions

- Having no boys leads to increase in labor supply and higher formal earnings
- Proposed explanation: daughters leave the family, while boys stay with family and provide money and/or services
- Structural model is under construction

Strengths

- Highly relevant question; first to look at the long run labor supply effects of the one child policy
- And first to look at economic rationale for preference for sons
- Methods well tailored for research question at hand
- Rich data (Chinese HRS)
- Good discussion of possible endogeneity issues with child composition
- Ambitious goal of formulating structural model of labor supply and savings

Data

- Substantial loss of data due to missing info and dropping all never married women – any indication that this hurts representativeness?
 - Are HHs that are eventually dropped different in the first wave?
 - Are unmarried partners common in China? (especially in recent years)
- Unclear whether “ignoring” cases of abortion and infant mortality means observations (or HHs) are dropped from the sample
- What about adoption? Is that another way to manage composition of children?
 - Data on abortion and miscarriages are noisy; does possibility of giving away children for adoption introduce measurement error in family composition? Could that measurement error be related to instruments (if adoption is more prevalent in some of the policy periods)?

Reduced-form analysis (I)

- Any idea why gender of firstborn is exogenous? (Clever defense in paper, namely the gender imbalance is not there for first child, but why would that be the case? Seems expensive to be forced to have 2 children...)
- Is year of marriage really exogenous? Did people time their marriage (and thereby children) such as to reduce the impact of the one child policy? (so that only people who don't need sons are "affected")
 - Does education offer a way to adjust the timing of a marriage?
- Would be nice to see OLS estimates for comparison
- Would be nice to report tests for weak instruments (but probably difficult due to presence of interaction terms with endogenous variables)
- Which groups of people are affected by instruments?

Reduced-from analysis (II)

- You mention that people married before 1975 are unaffected by the one child policy, but they are affected if they already had a child in 1975 yet wanted more children afterwards
- First stage coefficients are surprising: group that was "unaffected" by policy is 2.8% less likely not to have a son yet group that was subject to mild one child policy is 10.3% less likely not to have a son
- Are the dependent variables in the second stage reported in table 4 "hours PER WEEK" and "YEARLY income"?
 - If WEEKLY: weird that an average increase in hours of a full day per week (age 40-60) does not yield significantly higher income
 - If YEARLY: then the effect on labor supply is really small (economically not significant)

Reduced-form analysis (III)

- Story is framed in terms of the effect of children on retirement, but is that actually measured?
 - Effect on earnings and on hours worked
- You analyze HH total labor supply and earnings, why not check impact for men and women separately?

Structural model (I)

- Even if model is estimated on HHs age 45 and older, can you really assume here that gender composition of children is exogenous?
 - Agents are forward-looking: those who anticipate that they will not accumulate wealth for retirement are more likely to have managed their family to provide for them
 - Initial conditions problem
- Even in context of a unitary model, you could calculate HH utility as the sum of two distinct sub-utility functions to capture taste for joint leisure (depending on how you model labor supply)

Structural model (II)

- Authors argue that effect of having a daughter is similar to negative wealth shock and that the results are therefore relevant for Western countries. But "shock" of getting a daughter is probably anticipated. Also, timing is particular (early in the lifecycle): what kind of shock are you thinking about? (this is like playing a lottery in which odds are 50%)
- Why not develop structural model into a separate paper?

Minor comments

- Page 5: order in which sections is introduced is a little awkward (first 3, then 2, 4 is skipped)
- Page 15: do the below 50/above 50 graphs refer to different cohorts or can individuals move from one to the other?
- Page 18: you first mention that you will include a flexible time trend in the model, then it seems that you have year-dummies instead
- Page 18: there are 4 groups in the data in terms of institutional periods for the one child policy (not 3 as mentioned)