



The glorified mothers of sons: Evidence from child sex composition and parental time allocation in rural China

Yi Fan^a, Junjian Yi^{b,*}, Ye Yuan^b, Junsen Zhang^c

^a Department of Real Estate, National University of Singapore, Singapore

^b Department of Economics, National University of Singapore, Singapore

^c Department of Economics, Chinese University of Hong Kong, Hong Kong



ARTICLE INFO

Article history:

Received 11 January 2016

Received in revised form 25 August 2017

Accepted 20 November 2017

Available online 24 November 2017

JEL classification:

C23

J13

J22

Keywords:

Son preference

Sex composition of children

Parental time allocation

ABSTRACT

We study the effects of sons versus daughters on parental joint time allocation between the labor market and the household. Using data from the China Health and Nutrition Survey from 1989 to 2006, we apply a fixed-effects model to control for cross-household heterogeneity in son preference. We find that the birth of sons rather than daughters significantly reduces maternal time spent on household chores, which we argue represents an increase in maternal intra-household bargaining power. However, the effects of sex composition of children on paternal time allocation and maternal time on labor-market activities are weak or mixed. Results are robust to a series of sensitive analyses.

© 2017 Elsevier B.V. All rights reserved.

1. Introduction

The sex ratio, measured as the number of males per 100 females, has been rising drastically in China in recent decades. The normal sex ratio is 103–106; China's rose rapidly from 111.9 to 119.9 between 1990 and 2000 (NBS, 2002), and persisted till 2010.¹ China's biased sex ratio has raised global concerns among both academic researchers and policy makers. Extensive literature has documented the socioeconomic consequences of the rising sex ratio, such as for old-age support (Ebenstein and Leung, 2010), household saving rate (Wei and Zhang, 2011), and crime (Edlund et al., 2013). We estimate the effects of child gender on parental time allocation between the household and the labor market in the context of the rising sex ratio in China. Previous literature has studied the effect of an increased sex ratio on household labor supply (Chiappori et al., 2002; Cruces and Galiani, 2007; Lundberg and Rose, 2002), but few have studied the effect on parental joint time allocation between the household and the labor market. In China, the effect of child gender on parental joint time allocation has received little attention, yet is especially important due to the biased sex ratio.

* Corresponding author.

E-mail addresses: rstfyi@nus.edu.sg (Y. Fan), junjian@nus.edu.sg (J. Yi), ye.yuan@nus.edu.sg (Y. Yuan), jszhang@cuhk.edu.hk (J. Zhang).

¹ The most prevalent explanation for the increasing sex ratio is the implementation of the one-child policy, exacerbated by the traditional son preference and the spread of ultrasound machines (Ebenstein, 2011; Li et al., 2011). Almond et al. (2015) propose that China's rural land reform might also explain this phenomenon.

Estimation of the effects of child gender on parental time allocation is subject to potential endogeneity caused by the unobserved time-invariant heterogeneity in son preference. On the one hand, couples with stronger son preference are more likely to exercise gender-selective abortion under the one-child policy and with the access to ultrasound technology. On the other hand, son preference can affect intra-household time allocation. [Cain et al. \(1979\)](#) demonstrate that in patriarchal societies with stronger son preference, women tend to specialize in household chores while men specialize in market work. Thus, the unobservable cross-household heterogeneity in son preference may bias ordinary least squares (OLS) estimates of the effects of child gender on parental time allocation.

We employ a fixed-effects (FE) estimator to address unobservable cross-household heterogeneity in son preference. Based on Chinese Health and Nutrition Survey (CHNS) data from 1989 to 2006, our main FE estimates consistently show that the presence of sons significantly reduces maternal time spent on household chores. Specifically, mothers with a first-born son spend 37.9% less time on household chores—or 6.8 h per week—than mothers with a first-born daughter. Nonetheless, the estimated effect of child gender on paternal time allocation is weak or mixed, as is the effect on maternal time spent on labor-market activities.

Interpretation of our empirical finding is challenging: How do we distinguish between the preference- and constraint-driven effects of child gender? We investigate three theoretical channels proposed by the literature: the bargaining-power effect, the demonstration effect, and the specialization effect. Our results present clear and strong evidence for the bargaining-power effect, which is driven by preference: Mothers of sons spent significantly less time spent on household chores than mothers of daughters. Moreover, we use leisure time and private consumption as alternative measures of bargaining outcomes and present evidence that sons raise maternal bargaining power. Our findings are consistent with [Li and Wu \(2011\)](#), who find that mothers with a first-born son have a greater role in household decision-making than mothers with a first-born daughter. In contrast, we find weak or mixed evidence for specialization and demonstration effects, which are mainly driven by budget constraints.

We also estimate the effect of child gender on grandparents' co-residence. Multigenerational co-residence is common in rural China, and the interaction between co-residing grandparents and grandchildren is frequent ([Zeng and Xie, 2014](#); [Wu and Li, 2014](#)). We present evidence that paternal grandparents are significantly more likely to co-reside after the birth of first-born sons than daughters, possibly to compensate for the reduced maternal time on household chores. However, no similar response is observed from maternal grandparents. This finding echoes the son preference in rural China: Paternal grandparents reward mothers who give birth to sons by co-residing and sharing household chores. This finding also bolsters the bargaining-power explanation.

We further implement a series of sensitivity analyses. First, we show that there exist no prior observable household heterogeneities that predict the gender of the first child. Second, we show that birth spacing between the first and second births does not differ by the first-child gender, and male-biased abortion is unlikely to bias our main results. Third, we show that FE results are robust to the geographical differences in the access to sex-determination technology and the stringency of the one-child policy. Last, we employ an instrumental variable (IV) estimation using the number of paternal brothers as an instrument for child gender composition. The IV estimates are consistent with our main results. Overall, these robustness analyses support our finding that the birth of a son significantly increases the mother's intra-household bargaining power.

Our study contributes to the literature in three ways. First, we distinguish between preference- and constraint-driven effects of child gender on parental household-workplace time allocation. We present strong evidence for the bargaining-power effect, which is preference-driven, and show weak or mixed evidence for the demonstration or specialization effect. Second, to the best of our knowledge, our study is the first to systematically investigate the effect of child gender composition on parental joint time allocation in a developing country. In addition, we address the endogeneity due to cross-household heterogeneity in son preference by applying an FE estimation. Lastly, we propose and test a new mechanism by which grandparents co-reside and share household chores to compensate for the reduced maternal chore time after the birth of sons. This mechanism sheds light on our understanding of the relationship between son preference and family behavior, especially in developing countries where extended families are prevalent. The rest of the paper is organized as follows. Section 2 discusses the conceptual framework. Section 3 describes the data. Section 4 specifies the econometric model. Section 5 presents and interprets the main results. Section 6 conducts robustness checks, and Section 7 concludes. Additional figures, tables, and discussions can be found in the online Appendix.

2. Conceptual framework

In light of the literature, this section discusses three conceptual channels by which child gender affects parental household-workplace time allocation.

2.1. Bargaining-power effect

This channel is associated with son preference. The birth of sons brings higher utility to fathers who prefer sons to daughters. In a standard divorce-threat bargaining model ([McElroy and Horney, 1981](#)), the birth of sons, relative to daughters,

Download English Version:

<https://daneshyari.com/en/article/7242690>

Download Persian Version:

<https://daneshyari.com/article/7242690>

[Daneshyari.com](https://daneshyari.com)