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Culture, fertility and the socioeconomic status of women☆

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ABSTRACT

This paper aims to study the effect of culture on economic outcomes by focusing on one unique fertility norm in China: the belief of continuing the family line. Using the national representative household survey data, we successively examine the fertility behavior and socioeconomic status of women in regions of China with varying beliefs regarding continuing the family line. We show that this local fertility norm has positive and significant effects on the fertility behavior, including the number of births; sex selection biased towards boys; and the education, employment status, and income of women. We also show that the gender gaps in education, labor supply, and income are significantly larger in regions where the belief of continuing the family line is stronger. Our results are robust to the control for reverse causality issue by measuring the local fertility norm using the beliefs of the older generation.

1. Introduction

The socioeconomic status of women has long been studied in economics, and is a focus area of feminist economics. Most related studies consider childbearing and the gender-based division of labor in home production as the main determinants of female labor supply and earnings.[1] It is argued that childbirth, and the responsibility of providing the majority of childcare and other unpaid household services decrease female labor supply. These are important factors contributing to the gender gaps in earnings and occupational achievement. Studies by economists such as Fernández and Fogli (2009), have examined how individuals with a given set of preferences and beliefs interact with economic incentives to produce outcomes. More recently, a growing body of literature seeks to explain the fertility and work behavior of women from the perspective of culture, which refers to the social conventions and individual beliefs, or individual values and preferences (Alesina and Giuliano, 2013). This culture-related literature consistently shows that individual beliefs (Lehrer, 1995; Giavazzi et al., 2013) or cultural proxies (Antecol, 2000; Guinnane et al., 2002; Fernandez, 2007; Giuliano, 2007; Fernández and Fogli (2009); Almond et al., 2013) have a significant explanatory power for individual work and fertility-related outcomes.

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[1] Determinants of the labor market outcomes of women are traditionally investigated in the field of labor economics. Early relevant studies were reviewed by Killingsworth and Heckman (1986), and Altonji and Blank (1999). Some influential studies include Ribar (1992, 1995), Waldfogel (1997), Pencavel (1998), Klepinger et al. (1999), Jacobsen et al. (1999), Lundberg and Rose (2000), Greenwood et al. (2005), Blau and Kahn (2007), Attanasio et al. (2008), and Cascio (2009), among others.

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In this paper, we study the effect of culture on the fertility behavior, and more importantly, the socioeconomic status of women by exploring one unique fertility norm in China: the belief of continuing the family line. Chinese people traditionally desire to continue their respective family lines, and believe that only boys can do so. We argue that such a cultural norm is an important determinant of Chinese women's fertility behavior including childbirth and sex selection. As this belief increases the number of births, we expect it to indirectly affect female labor supply and earnings through the childbearing burden. This cultural norm may also directly affect the socioeconomic status of women because when only boys are expected to continue the family line, girls are disadvantaged, being less likely to receive investment from parents. Further, women are considered primarily responsible for giving birth to a boy, rendering them as "birth machines." This belief prevents them from engaging in socioeconomic activities. Finally, since women, rather than men, are conventionally responsible for providing childcare, this cultural norm will increase the gender gaps in labor supply and earnings. These arguments generate our testable hypotheses regarding the relationships between the fertility norm and the fertility behavior and socioeconomic status of women:

Hypothesis 1: The fertility norm has a positive effect on the number of children born to a woman and the likelihood of giving birth to a boy.

Hypothesis 2: The fertility norm has a negative effect on the socioeconomic status of women.

Hypothesis 3: The fertility norm increases the gender gaps in economic outcomes.

We empirically test the above hypotheses using data from the China Family Panel Studies (CFPS), a national representative household survey conducted in 2010. We find that this local fertility norm has a positive and significant effect on the number of births and the probability of having a son, given the number of births. We then show that this local fertility norm has a negative and significant effect on the education, employment status, and income of women, where the fertility effect is one important channel. We also show that the gender gaps in education, labor supply, and income are significantly larger in regions where the belief of continuing the family line is stronger. Our results are robust to the control for reverse causality issues by measuring the local fertility norm using the beliefs of the older generation.

Our paper has closely followed the rapidly increasing studies that examine the effect of culture on economic outcomes. Many of these studies, reviewed by Fernández (2010), use the epidemiological approach. This approach studies the variation in the outcomes across different immigrant groups residing in the same country. For example, Fernández and Fogli (2009) examined the work and fertility behavior of those women born in the United States (U.S.), whose parents were born elsewhere. They used past female labor force participation and total fertility rates from the country of ancestry as proxies for cultural beliefs, and demonstrated that these cultural proxies have positive and significant effects on the work and fertility behavior of women. The epidemiological approach has the merit of separating the effect of culture from the local economic and institutional environment. However, with cultural beliefs being proxied by economic variables, this approach fails to identify a specific cultural belief of significance. Few other studies, such as Tabellini (2010) and Giavazzi et al. (2013), examined the economic consequences of more specific cultural beliefs including trust and the attitude towards working. Our study contributes to this sparse literature by examining the effect of one specific cultural norm on the fertility and work behavior of women. Further, regions across China portray large variations in the fertility and work behavior, and cultural beliefs. Using data from China, we conducted a within-country analysis, which allows us to avoid country-specific confounders in regression. Previous studies often used cross-country datasets, where the country-specific differences in the fertility and work behavior could be attributed to differences in race, religious beliefs, and various institutional incentives.

By identifying the cultural determinant of fertility behavior, we provide a novel explanation for the spatial variation in fertility and sex selection in China. Previous studies, usually by demographers, on the fertility level in China, generally attributed the changes in fertility to the family planning policy and the broad socioeconomic developments (for example, Poston and Gu, 1987; Schultz and Zeng, 1995; McElroy and Yang, 2000; and Schultz, 2007). In addition, earlier studies on the sex ratio bias in China primarily focused on economic determinants such as the gender gap in earnings (Qian, 2008), old-age support (Ebenstein and Leung, 2010), or the family planning policy (Li et al., 2011). We also contribute to the traditional literature that studies the gender gap in education and earnings by showing how a prevalent cultural norm affects the labor market outcomes and the gender gaps in these outcomes directly and indirectly through its fertility effect.[2]

The rest of the paper is organized as follows. Section 2 presents our empirical strategy and econometric model. Section 3 describes the data. Section 4 reports the empirical findings on the effect of culture on the fertility behavior and socioeconomic status of women, as well as on the gender gaps in economic outcomes. Section 5 concludes.

2. Estimation strategy

Our primary goal is to estimate the effect of culture on the fertility behavior and socioeconomic status of women, in a linear regression, as follows:

$$Y = \alpha_0 + \alpha_1 C + \gamma X + u \tag{1}$$

[2] Gustafsson and Li (2000), Chi and Li (2008), Zhang et al. (2008), and Liu (2011) study the gender gap in earnings in China using decomposition methods.

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