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Gender preferences for children in an era of low fertility

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Short abstract (200 words)

Literature evidences that fertility intentions can be driven not only by the desiderated number of children, but rather by gender preferences. If previous studies traditionally focus on preference for son fueling progress to the third child, more recently the attention has been attracted by a new unexpected preference for daughter and on the crucial passage to the second child.

This paper gets an insight on gender preferences in a plurality of low fertility contexts to investigate whether such preference is in act toward son or daughter, how it varies by gender or socioeconomic individual background, by the composition of actual offspring, by country of residence, but also by the desired characteristics of the ideal child. Answers to the question: "If you could have only one child, would you prefer it to be a son or a daughter?" – collected in eight low-fertility countries by a web-survey in 2021- are analyzed. Results confirm in some countries a marked son preference, in others a daughter one, while in a few it does not matter at all. Results from multinomial logit models evidence that the individual-level drivers of gender preference vary across countries, genders and sex of the first child.

Keywords: gender preferences, low fertility, comparative studies

Extended abstract

Background and research questions

An emerging research strand suggests that the relationship between the number of children and fertility preferences could be not as straightforward as postulated by the economic theory, since couples may adopt differential stopping behavior depending on their preferred gender composition of children, regardless the desired offspring size (e.g., Toulemon and Testa, 2005; Fuse, 2010; Tian, 2015; Jones et al., 2023). In this line of thought, a boy preference is most often observed in less developed countries (e.g. in Nigeria -Milazzo, 2014- or in China, India and South Korea -Das Gupta et al. 2003) or in older cohorts in Europe or US (Dahl and Moretti, 2008; Saarela and Finnas, 2014). Previous literature has already documented that, instead, in several context characterized by declining fertility, the choice of having a third birth can be driven by the search to have a son: therefore, the parity progression ratio to third child is higher for those having two daughters (e.g., such as among Finns in Andersson et al. 2006).

The rationale for the son preference has been partly driven by cultural values (as the lineage continuity) and influenced by prevailing gender ideology, which attributes different values according to the sex of the child. However, in many cases, especially in rural context, this can be also motivated by economical reason as a son is estimated as being a net contributor to the family economy. The patrilocal habits can also emphasize the idea that a daughter is an investment that will be lost once she will be grown up, as after her marriage she will be destined to provide her services to help her husband's family, rather than her own one.

Recent studies on sex preferences for children in Europe (Cukroewska-Torzewska and Grabowska, 2023) confirm the already known European preference for mixed- sex of offspring, (i.e. that women who have two children of the same sex are more likely to give birth to a third child; e.g. Andersson et al. 2006; Hank, 2007; Hank and Kohler, 2000; Mills and Begall, 2010), but surprisingly they also evidence an unexpected preference for having daughters, reflected in an increased probability of not having a second child if the first is a girl (e.g., Miranda et al. 2018). The same result was also found by Blau and coauthors (2020) who suggest a mechanism that could explain it: given that women and men tend to prefer children of their own sex, the finding of lower fertility among women with a firstborn girl may reflect their greater bargaining power in the family of new generation and therefore their higher gender equal role-sets.

Different fertility intentions based on gender of the first child has been recently and unexpectedly documented also for the Italian contemporary context in combination with women's domestic burden (Garcia Pereiro et al. 2024). The authors found indeed that positive fertility intentions of women have a clear gradient: those of mothers who had a boy remain stable independently of their domestic burden while those of women having had a girl changes according to the burden, i.e. lower intentions at low levels of housework burden and higher with higher level of burden. In other words, it emerges that women in a very traditional role-set, i.e. doing most domestic chores, are willing to have an additional child even with a high domestic workload, particularly

if they have a firstborn daughter. The authors thus suspect that there is an underlying mechanism of a gender preference in act, but strongly dependent from women's socioeconomic and cultural background (Garcia Pereiro et al. 2024). In that study, however it remains unclear why more traditional women, i.e. those performing the bulk of household chores, are not satisfied with only one daughter and desire to increase their offspring. They might look for a son, or they might think that having another daughter – according to the traditional gender roles – could be more “helpful” with housework and care chores. This last rationale is in line with the results of a previous study focusing on young adults living in the parental home in Italy, which reveals that daughters contribute remarkably more to domestic work than sons (Mencarini et al. 2017).

In Asia the picture is changing fast. In Japan and South Korea, sex preference for children has gradually shifted from son preference to a remarkable daughter preference over the past few decades, despite the persistence of a quite traditional gender ideology (Fuse, 2013; Chun and Das Gupta, 2022). In Japan the effect of gender role attitudes on one's child gender preference differs for men and women: interestingly, while daughter preference is associated with nontraditional gender role attitudes for men, daughter preference is associated with traditional attitudes for women (Fuse, 2013).

Results of a few previous studies reinforce the need to consider gender ideology as influencing individuals' reproductive behavior, to understand whether fertility intentions and choices can be influenced by potential parents' distinct preferences for the sex of their offspring. We agree with Cukroewska-Torzewska and Grabowska (2023) that in context with very low fertility when studying fertility intentions, it is worthwhile to focus on how the sex of the first child affects the progression rate to the second pregnancy, rather than only on the sex composition of the first two and its impact on the progression rate to the third. Preliminarily, however, it would of paramount importance to get an-sight on the unexplored characteristics of gender preference (toward son or daughter) in a plurality of low fertility context in order to investigate whether it is in act, how it varies by gender or socioeconomic individual background, by the composition of actual spring, by country of residence, but also by the desired characteristics of the “ideal” child.

Our study tries to fill this research gaps on focusing of the sex preferences of both men and women in a plurality of low fertility contexts. To overcome the unavailability of large representative survey on this topic, we rely on a web survey carried out in 2021.

Data and methods

Data is drawn from a survey carried online from December 2021 to February 2022 by Kantar (except in Singapore where Toluna was used). Both Kantar and Toluna are leading international survey companies with extensive experience in each of our sampled countries. They maintain large national online panels by employing various recruitment methods such as e-newsletter campaigns, opt-in email, co-registration, social media, as well as both internal and external affiliate networks to ensure representative population coverage. In this study, a stratified quota sampling based on age and gender was used for each country: One fourth of the

sample consists of women aged 25 to 39, one fourth is men of the same age, one fourth is women aged 40 to 50, and the last fourth is men of the same age. We also over-sampled by race and ethnicity in the United States and in Singapore. After some cleaning, we ended up with a final sample consists of 20,141. There were around 2,500 individuals per country, with a larger US and Singapore sample ($N = 3,500$) and smaller Norway sample ($N = 750$; see Aassve et al. 2024).

The respondents – no matter if parents or not - were asked to answer the following question: “*If you could have only one child, would you prefer it to be a son or a daughter?*” The possible response items are: a son, a daughter or it doesn’t matter.

These countries have been selected to ensure institutional and cultural variation as well as to incorporate differences in low fertility: Singapore and South Korea are characterized by an extreme low fertility, just or below 1 child per woman; Italy, Spain, Japan, and China are around the threshold of lowest-low fertility of 1.3; and the United States and Norway are above it. A further valuable characteristic of this survey is that the sampled cases differ along several relevant structural dimensions, including kinship ties and gender norms (more traditional in East Asia compared to Europe).

Besides some insightful descriptive analysis to illustrate country-level and individual-level distribution of gender preferences, we carried out a multinomial logit model separately per country and by gender in order to contrast at individual level those who express a net preference for either a son or a daughter with those answering that it does not matter.

Model estimations include several control variables already suggested by the literature as possible relevant determinants of gender preference: level of education (lower than lower tertiary, lower tertiary, higher tertiary), age class (25-34; 35-44; 45-50), composition of actual offspring (childless, 1 boy, 1 girl, 2 mixed, 2 same sex, 3 or more), weekly our in the labor market (less than 21, 21-39, 40 or plus); self-evaluation of income level with regard to the average (lower, about the same, higher), religiousness (yes or no), sibling composition (only child, all sisters, all brothers, mixed), respondent’s mother educational level (primary or less, secondary or tertiary), respondent’s mother employment (employed or not).

Preliminary findings

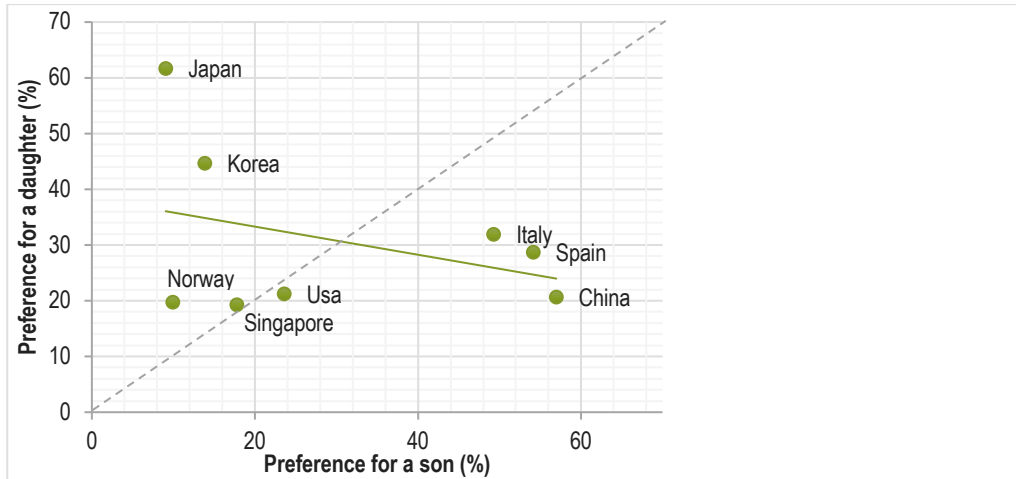
As shown in Fig. 1, the gender preference varies considerably across country: we can distinguish a first group of countries that express a balanced and moderated sex preference (Singapore, Norway and the US), a second one where the sex preference is dominant and for daughters (Japan especially and South Korea), while in the third one it is also dominant but it is in favor of sons (Italy, Spain and China).

The proportion expressing a net sex preference, depends clearly by the sex of the respondent - as illustrated in Fig. 2. In countries with a clear preference for a son (Italy, Spain and China), both men and women share this predilection with similar intensity; in the US, where the sex preference are neutral overall, men reveal a stronger preference for a son; the same can be said for Singapore where however men’s preference for a son is just slightly higher than for women. Norway shows the highest proportion of neutral respondents of all, but

among those who express a preference, the respondents prefer a child of their own sex. In Korea and above all in Japan, the preference for a daughter is virtually expressed by the same proportion of male and female respondents (Fig. 2)

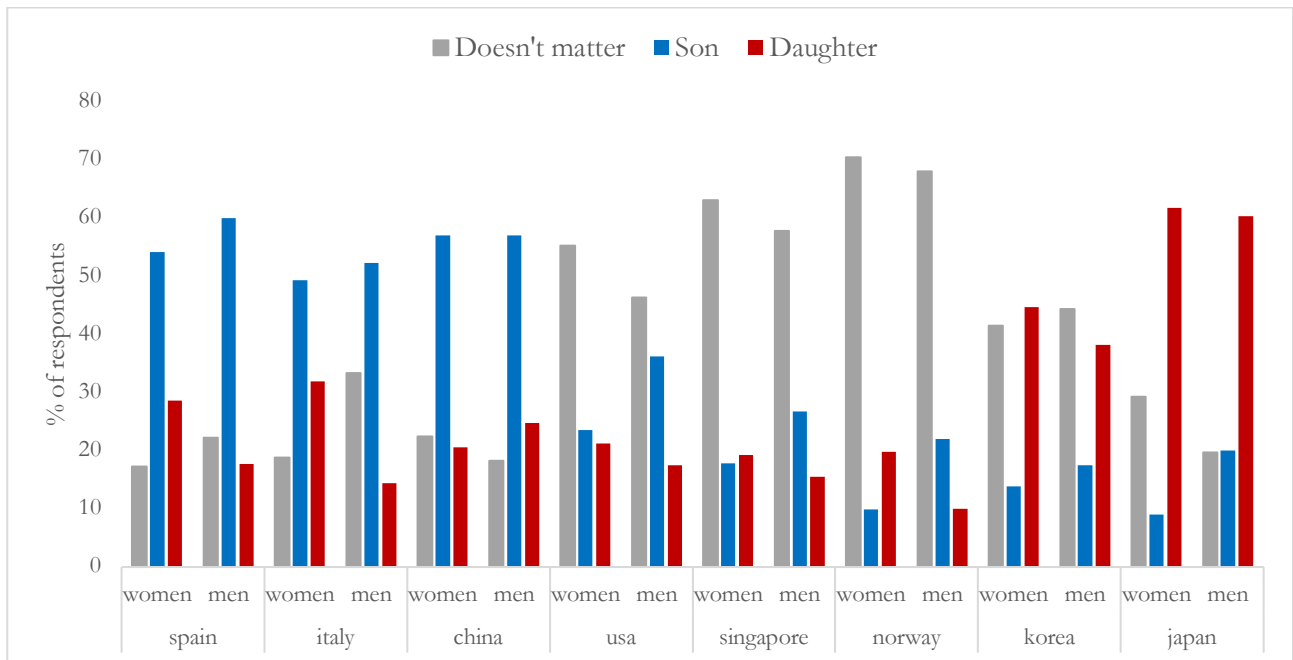
Preliminary results from multinomial logit models evidence that the individual-level drivers of gender preferences vary across countries, but also by genders and depends strongly on the sex of the first child.

Figure 1. Preference for a daughter and for a son – if one could have only one child –, in 8 low fertility countries



Source: own elaboration, 2021 web survey.

Figure 2. Sex preferences – if one could have only one child –, by country and sex of the respondent, (percentage of respondents)



Source: own elaboration, 2021 web survey.

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