

Influence of Social Security on the Fertility Intention of Second Child——Based on the Research of Chinese General Social Survey

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Abstract. With the reform of population policy, the second child is fully open, and the research on the willingness of young people can explore the practical effects of the second child policy. Based on the Chinese General Social Survey (CGSS2013), this paper uses Probit model to measure the following conclusions: first, having basic medical insurance and commercial endowment insurance can improve people's willingness to have a second child. Second, men, married and rural Registered residence will also increase people's willingness to have a second child. Third, a healthy physical condition has an inhibitory effect on the fertility willingness of the second child. Fourth, the family of the son has been considered by the children and the children, and there is a stronger willingness to have a second child without the worries of raising children and preventing the elderly.

Introduction

The National Health and Family Planning Commission recently released the "Statistical Bulletin on the Development of Health and Family Planning in China in 2016". According to the bulletin data, according to the statistics of hospitalized live births, the number of newly born babies in the country in 2016 was 18.46 million, an increase of more than 2 million from 2013, and the total fertility rate increased to 1.7 or more. Willingness is lower than the floating population in the province. The total fertility rate is an important reference data for population decision-making and represents the average number of children born to each woman during the period of childbearing age in a country or region. In general, the total fertility rate to maintain intergenerational replacement needs to reach the level of 2.1. Obviously, there is still a certain gap between the sum of 1.7 and the basic indicators, but it has already rebounded significantly from the 1.18 in 2010. In fact, before the State Council approved the "Report on Good Family Planning Work" in 1971, China's total fertility rate was basically above 5.3, and it has been declining year by year. In May 1991, the CPC Central Committee and the State Council made Strengthening the decision on strict control of population growth in family planning work, clearly implementing the current birth policy, and strictly controlling the population growth and then falling below 2.1.

The birth of the family planning policy was aimed at controlling populations in a planned way and turning population pressure into a human resource advantage. With the advancement of time, the family planning policy has brought about tremendous changes in the age structure of our country. The fluctuation of the working-age population has declined and the degree of aging has deepened. Therefore, in 2013, the resolution on adjusting and improving the birth policy was buffered by a separate two-child policy. In 2016, a comprehensive two-child policy was introduced.

However, the number of births in 2017 was 17.23 million, a decrease of 630,000 from 2016. The suppressed birth of the two children seems to have been released, and the fertility rate has not been a stable increase. The research on the fertility willingness of women of childbearing age can be effective. To analyze current fertility phenomena and to grasp the future demographic dynamics.

There are many studies on the influencing factors of fertility willingness. From the micro level, Zi Chen (2007) believes that income and birth costs are still the most important factors affecting people's fertility willingness. People have a strong choice in the choice of fertility rate. Altruistic considerations[1]. Wei Chen (2011) believes that women's personal background, childbearing status and birth policy have an important impact on the differences in fertility willingness and fertility

behavior, and whether children born with fertility can survive is also an important factor in women's decision to re-fertility[2]. Liang Ma (2016) believes that the one-child boy has a significant negative impact on the parents' willingness to have a second child, and this effect is more pronounced for urban residents and fathers[3]. From a macro perspective, Liping Zhang (2015) believes that the impact of socio-economic factors such as the improvement of urbanization level, the level of education and years of growth, and the expansion of population mobility has led to an increasing trend of low-willing people, especially in urban areas. Region, lower age and higher education population[4]. Wei Chen (2006) believes that migration has a very significant impact on fertility. The fertility rate of urban migrants is not only significantly lower than that of rural population, but also lower than that of urban population. The fertility rate of the long-term displaced population is lower than that of the recently displaced population[5]. Yanyan Mao (2013) believes that the formulation of birth plans is an important driving force for achieving fertility willingness[6]. This paper is based on the Chinese General Social Survey (CGSS2013) data to analyze the impact of the concept of old-age care on the fertility willingness of the second child.

Literature Review

Becker (1988), who established the formal micro-foundation for fertility decision-making in the neoclassical paradigm, first discussed family decisions closely related to reproductive behavior, such as birth weight, birth quality, and human capital investment, under the framework of utility maximization. The theoretical research on the impact of social security on the number of births is mainly carried out under the neoclassical framework of maximizing household utility[7]. Barro & Becker (1989) initially explored the negative impact of the increase in the social security tax rate on the number of births under the one-way altruistic assumption[8].

There are many social security systems in China. Zaigui Yang (2009) research shows that the social co-payment rate has an adverse effect on fertility rate and the personal account contribution rate has no effect on fertility rate[9]. Yimeng Zhu (2015) believes that having a job has a significant negative impact on women's fertility willingness. Among them, the fertility willingness of two children who work for married women of childbearing age is 8.43% lower than the willingness of two children without working and married women of childbearing age[10]. Tianyu Wang (2015) believes that the new rural cooperatives with subsidies based on the theoretical analysis of the Becker family decision-making model have two effects: on the one hand, the relaxation of the family budget constraints by the new rural cooperatives enhances the family's willingness to bear, on the other hand, the new farmers The replacement of the anti-aging function of raising children reduces the family's willingness to bear, and the latter dominates[11]. Yiwei Liu (2017) believes that social endowment insurance not only significantly reduces the probability of residents' choice of birth, but also reduces the number of children born to the residents. Different pension expectations have different effects on residents' fertility willingness, and the relationship between pension expectation and social endowment insurance It plays a regulatory effect[12]. Chuankun Kang (2018) believes that the impact of insured on the willingness of sons and daughters of different incomes in urban areas is significantly different: high-income residents are more inclined to reduce the willingness to give birth to daughters, while low-income residents are more inclined to reduce the willingness to have children[13]. Most scholars agree that the social security system has different effects on people with different characteristics. This paper hopes to compare the above conclusions based on the data of CGSS2013.

Data and Variables

Data Source

The empirical data in this paper is derived from the Chinese General Social Survey data (CGSS2013) conducted by the Department of Sociology of Renmin University of China in 2013. The survey is a nationwide, large-scale sample survey project that uses a four-level stratified sampling plan that covers multiple levels of individuals, families, communities, and societies, with a view to focusing on trends in social change.

Since this article mainly studies the impact of social security on the fertility willingness of the second child, women of childbearing age are theoretically defined as women between the ages of 15 and 49. Therefore, the standard for screening samples is under 49 years old, which is also in line with the United Nations World Health Organization definition of youth. After eliminating the missing values of the samples and screening the variables that meet the requirements, the number of samples satisfying the condition is 4,214.

Table I Descriptive Statistics of Sample Variables

Variable Descriptive Statistics				
Explained Variable	Mean	Standard	Minimum	Maximum
Second child fertility willingness (with = 1)	0.7282867	0.4448957	0	1
Explanatory variables				
Basic medical insurance (with =1)	0.8839582	0.320313	0	1
Basic pension insurance (with = 1)	0.6271951	0.4836082	0	1
Commercial medical insurance (with = 1)	0.1177029	0.3222942	0	1
Commercial pension insurance (with = 1)	0.0844803	0.2781398	0	1
Sex (male = 1)	0.540579	0.4984098	0	1
Marriage (married = 1)	0.8103939	0.3920358	0	1
Registered residence(rural=1)	0.5638348	0.4959672	0	1
Education (high school and above = 1)	0.4518272	0.497733	0	1
Personal annual total income (log)	9.990061	1.012047	5.010635	13.59237
Health status (healthy=1)	0.7990033	0.4007931	0	1
Number of children (with = 1)	0.7885619	0.4083768	0	1
Number of sons (with =1)	0.535121	0.4988242	0	1

Table I is a descriptive statistic for the variables of the sample. As can be seen from the table, about 72.8% of the respondents have a second child's willingness to give birth, and about 88.4% of the respondents enjoy basic medical insurance, and about 62.7% of the respondents enjoy basic old-age insurance, indicating China's basic medical insurance. The coverage is higher than the basic pension insurance. At the same time, the proportion of respondents holding commercial medical insurance and commercial pension insurance is small. From Table I, the number of respondents who have already bred is relatively large, and the number of respondents with sons accounts for about half of the total number.

Interpreted Variables

The explanatory variable taken in this paper is the willingness to have a second child. In the questionnaire of Chinese General Social Survey CGSS2013, A37 is "If you have no policy restrictions, how many children do you want?" Because this study studies the second-child fertility willingness, and the model adopted is Probit model, it will be subject to The interviewer replied that the situation of having two children and above is considered to have the second child's willingness to give birth, and the value is 1 and the value of 0 means that there is no willingness to have a second child.

Main Explanatory Variables

The main explanatory variable of this paper is social security. In the survey of China's comprehensive social survey CGSS2013, A61 is "Do you currently participate in the following social security projects?". The first type is urban basic medical insurance / new rural cooperative medical insurance / public medical care, this article is collectively referred to as basic medical insurance, and will participate in the assignment of 1, the rest of the value of 0; the second is urban / rural basic pension insurance, this article is collectively referred to as the basic Endowment insurance, will participate in the assignment of 1, the rest of the assignment of 0; the third is commercial medical insurance, will participate in the assignment of 1, the rest of the assignment of 0; the fourth is commercial pension insurance, will participate in the assignment of 1, the rest of the assignment of 0. The regression of the explanatory variables is mainly combined with four forms of insurance.

Other Explanatory Variables

In addition to the main explanatory variables, there are several control variables. The first is some basic demographic control variables, including gender, marriage, Registered residence nature, income, etc. This article divides the education level of the respondents into high school and below

and high school and above, mainly because there is no special city in this paper. Residents and rural residents, therefore, the high school as a dividing line, mainly considering the income of the rural households, the possibility of obtaining a university degree is low. In the questionnaire of Chinese General Social Survey CGSS2013, A15 is “You think your current physical health is:”, this article will assign “healthy” and “very healthy” to 1, and the rest will be 0. A criterion for determining whether a respondent is healthy.

In addition to the basic demographic control variables, a set of control variables is added. The number of children corresponds to A68 in CGSS2013 “How many children do you have?”, if the respondent answers 1 or more, count as an existing child and assign 1 to it. In order to be more precise, and to explore whether the thoughts of patriarchal women have an influence on the willingness to have a second child, the number of sons reported in A68 is 1 or more, and the name of the control variable is the number of sons.

Measurement Model and Empirical Results

Measurement Model

Because the explained variable second birth expectation is only willing and unwilling, it is a discrete selection model. If the linear probability model LPM is selected, it may happen that the predicted value is less than 0 or greater than 1. In order to avoid this, the Probit model is used for verification. Table II The impact of social security on the fertility willingness of the second child The data in the regression results are the model coefficients, and the last column is the marginal effect of the model three.

Wang Tianyu(2015)believes that the new rural cooperatives with subsidies based on the theoretical analysis of the Becker family decision-making model have two effects: on the one hand, the relaxation of the family budget constraints by the new rural cooperatives enhances the family's willingness to bear, on the other hand, the new farmers The replacement of the anti-aging function of raising children reduces the family's willingness to bear, and the latter dominates. The sample used by Wang Tianyu is the survey object of all rural residential areas in CHNS. This paper hopes to verify that when the sample is extended to all residents, the impact of social security on the willingness to have a second child is still greater than the income effect.

Empirical Results

Table II is the basic regression results, in which model 1 contains only the main explanatory variables of this paper; model 2 is the demographic characteristics of gender, marriage, Registered residence characteristics, education level, income status and health status as control variables; It is based on the model 2 to add fertility characteristics, that is, whether children have been bred and whether they have had sons. Gradually adding control variables is to make up for the error that is missing from some important variables related to the main explanatory variables. The variable initially has no significant effect on the dependent variable. After adding the new variable, it becomes significant. Then the newly added variable is the intermediary. variable.

From Table II, we can see that with the increase of control variables, the original significant basic pension insurance and commercial medical insurance become insignificant, indicating that the regression of the original model may be pseudo-regression, missing important variables, and the equation has endogeneity problems. .

From the regression results in Table II, the significant positive marginal effects of holding basic medical insurance and commercial pension insurance on the second child's willingness to have a birth are 4.65% and 6.22%, respectively, which is different from Wang Tianyu's (2015) conclusion. Although it is impossible to decompose the income effect and the crowding out effect, the marginal effect is positively indicating that holding basic medical insurance and commercial endowment insurance promotes the willingness of the respondent to have a second child, indicating that for the respondent, social insurance for the family budget The relaxation of restraint enhances the family's fertility willingness effect, and the income effect prevails, making people willing to have a second child. In addition, although basic pension insurance and commercial health insurance are not significant and the coefficient is negative, we can guess that the respondents believe that the basic pension insurance does not meet their needs, and the rate of commercial medical insurance is not as high as the basic medical insurance. We can only think that the guarantee of the formal medical

system makes people more willing to have a second child. Those who have spared the opportunity to buy commercial pension insurance are more concerned about their own pension problems, so they have more motivation to raise children and prevent old age.

Table II Impact of Social Security on the Fertility Willingness of the Second Child

Interpret variable	Regression result			
	Model 1	Model 2	Model 3	Marginal effect
Basic medical insurance (with = 1)	0.231454*** [0.066955]	0.149258** [0.068195]	0.146079** [0.068419]	0.0465473** [0.0217722]
Basic pension insurance (with = 1)	-0.090761** [0.045836]	-0.000298 [0.048032]	-0.000721 [0.048301]	-0.0002297 [0.015391]
Commercial medical insurance (with = 1)	-0.135343* [0.081214]	-0.059835 [0.083249]	-0.060757 [0.083662]	-0.0193599 [0.0266538]
Commercial pension insurance (with = 1)	0.132389 [0.095787]	0.190536** [0.096915]	0.195260** [0.097537]	0.0622183** [0.0310398]
Sex (male = 1)		0.151011*** [0.043586]	0.159422*** [0.043839]	0.0507988*** [0.0139137]
Marriage (married = 1)		0.252873*** [0.053061]	0.141810* [0.076047]	0.0451869* [0.024204]
Registered residence(rural=1)		0.327861*** [0.051283]	0.319669*** [0.051513]	0.1018606*** [0.0162169]
Education (high school and above = 1)		-0.062005 [0.053009]	-0.026107 [0.054126]	-0.0083187 [0.0172455]
Personal annual total income (log)		-0.026957 [0.024680]	-0.02401 [0.024785]	-0.0076506 [0.007895]
Health status (healthy=1)		-0.148412*** [0.054539]	-0.139571** [0.054728]	-0.0444734** [0.0174066]
Number of children (with = 1)			-0.034608 [0.080856]	-0.0110276 [0.0257625]
Number of sons (with = 1)			0.292712*** [0.050497]	0.0932709*** 0.015921
Constant term	0.466654*** [0.060225]	0.430092* [0.249394]	0.346351 [0.251350]	
Sample size	4214	4214	4214	

In addition to the main explanatory variables affecting the fertility willingness of the second child, other control variables also have an impact on the fertility willingness of the second child. It can be seen from the regression results that the estimated effects of the various control variables are basically in line with expectations. The positive marginal effects of male and married on the second child's fertility will be 5.08% and 4.52%, respectively, because men's preference for ancestry and stable marriage are the conditions for the birth of the second child. In addition, the rural household registration can significantly increase the willingness of the second-born child to be interviewed, with a marginal effect of 10.1%. The reason may be that the rural economic development level is relatively backward, and the traditional concept of raising children's anti-aging and inheritance is more important for residents holding rural Registered residence. Large, residents with rural Registered residence have a stronger desire to give birth due to the traditional concept of fertility.

It is worth noting that the health status has a significant negative effect on the fertility willingness of the second child, and the marginal effect is -4.45%. This result is consistent with Zhu Yimeng (2015) and Wang Tianyu (2015), indicating that the health care respondent has a second child. The fertility willingness is weak. The possible explanation is that the respondents who are healthy are more likely to give up the opportunity to give birth to a second child to enter the labor market because of the opportunity cost and the time and money required to raise the second child. In addition, the respondents who are healthy are not raised. Children's worries about old age.

The paper also found that the family with sons is more inclined to have a second child, and the marginal effect is 9.33%. This seems to conflict with the concept of raising children and preventing old age. It is also possible that the actual situation is that the family with sons has no After the succession of the ancestors, I hope that the birth of the daughter as a transfer, we also know that there are fertility daughters in the countryside to support the eldest son of the family. Due to the limitation of measurement level and the length of the article, there is no way to discuss the robustness and endogeneity of the model, and it is impossible to carry out supplementary analysis. Therefore, the correctness of the conclusion remains to be tested.

Conclusion

This paper verifies the impact of social security on social security's willingness to have a second

child, and finds that having basic medical insurance and commercial endowment insurance can increase people's willingness to have a second child. In addition, male, married and rural Registered residence will also increase people's willingness to have a second child. A healthy physical condition has an inhibitory effect on the fertility willingness of the second child, because healthy young people are more willing to give up the second child for good work and future employment development. The family of the son has been considered by the children and the children, and there is a stronger willingness to have a second child without the worries of raising children and preventing the elderly.

The enlightenment of this article is that the second child policy is not the only way to encourage childbearing. With the country's vigorous development of people's livelihood, social security can also play a role in mediating the population. According to different characteristics of the community, the social security can be To optimize the population structure and improve the quality of the population. As a supplementary system, the social security system can form a good cooperation with the children's pension, and can encourage residents to make more reasonable considerations in childbirth. Therefore, while implementing the second child policy, they should fully consider the differences between regions and the high fertility group. Guide them to reduce their fertility willingness and increase their fertility willingness for low-fertility groups.

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