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About the authors:

Anna O. Gracheva - Independent Expert, MGIMO University, 76 Vernadsky Prospect, Moscow, Russia, 119454.

Stanislav N. Ivashkovsky - Ph.D. in Economics. Associate Professor, Department of Economic Theory, MGIMO University, 76 Vernadsky Prospect, Moscow, Russia, 119454.

ORCID ID: 0000-0003-4180-0592

Conflict of interest: the authors declare no conflict of interest.

Funding: the study was not sponsored.

For references: Gracheva A.O., Ivashkovsky S.N. Impact of economic crises of the XXI century on investment markets: stock market, venture, real estate market, gold and diamond market. *International Business Journal*, 2024, no. 1(7), pp. 92-114

Submitted for publication: 12 February 2024

Accepted for publication: 29 February 2024

THE IMPACT OF DIVORCE ON WOMEN'S LABOR SUPPLY

Yan Zhao

Jinghui Lan

East China University of Science and Technology (ECUST)

Abstract

Divorce brings changes to the parties' time use and economic conditions. In recent years, the divorce rates of urban and rural areas in China have continued to rise and caused many people to worry about the social stability and the welfare of women after divorce. This paper focuses on how divorce affects women's labor supply and wage income. Using data from the China Household Finance Survey 2013-2019, we find that divorce generally promotes the probability of women participating in market labor. This is also consistent with our understanding that divorce will cause most women's family income to decline significantly, thus they become more likely to participate in market labor to maintain their economic well-being. Our paper implies that women's economic welfare may not deteriorate at all after divorce, and thus their will about marriage should be protected by relevant law.

Keywords

Labor Supply, divorce, women, China, Labor Force Participation.

INTRODUCTION

Aggregate labor supply restricts economic growth and social development. However, in recent years, China's working-age population and labor participation rate have been declining, posing one of the biggest potential threats to China's long-term economic development. Starting from 1990s, with China's planned economic system transitioning to a market economic system, the previous mode of employment based on government distribution started to change. During the same period, with the privatization process of small and medium-sized state-owned enterprises, the government allowed enterprises to dismiss employees on their own, resulting in a large number of layoffs. At the same time, due to economic development, demand for a low-cost labor force rose. The government relaxed the population mobility restrictions based on the household registration system, and a large number of rural labor force began to migrate to cities. This has a significant crowding-out effect on urban residents with higher reservation wages, and the labor participation level of urban residents has dropped sharply [1]. According to data from the National Bureau of Statistics, China's labor participation rate dropped from 83.28% in 1990 to 75.61% in 2019, with a total drop of 7.67%. Women's labor participation rate dropped far more than men's, reaching 10.82% (79.39% to 68.57%).

During the same period, no-fault divorce became common in China. Actually, soon after China first allowed no-fault divorce in 1980, divorce rose sharply in 1981. With the new amendment of China's Marriage Law in April 2001, the divorce process was further simplified. Data from the National Bureau of Statistics shows that crude divorce rate rose from 0.55‰ to 3.36‰ between 1987-2019, and the absolute number climbed from 580,000 pairs in 1987 to 4.706 million pairs in 2019.

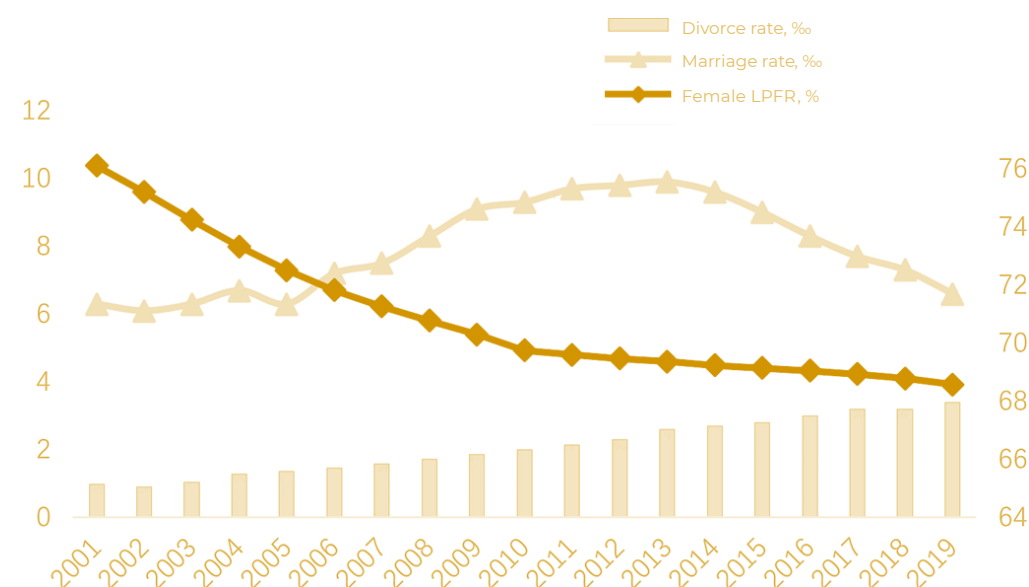


Fig. 1. China's crude divorce rate, crude marriage rate, and women's labor participation rate.
Source: Fang H., Gu Q., Xiong W., Zhou, L.A. Demystifying the Chinese housing boom. NBER macroeconomics annual. 2016. Vol. 30. No. 1. P. 105-166.

Figure 1 shows China's crude divorce rate, crude marriage rate, and women's labor participation rate over the past two decades. It is clear that by 2019, China's divorce rate showed a continuous upward trend, the marriage rate showed a rapid downward trend, while women's labor participation rate plummeted sharply at the same time.

Under traditional marriage theory, marriage enables partners to improve work efficiency through division of labor and risk sharing [2]. Traditional Chinese culture advocates "men outside, women inside": the husband works outside the home to earn income and the wife takes care of the family. The household's total income mainly depends on the male. With social development and women's rights awareness, more women started to work outside the household. In addition, the increased education period and rising proportion of women in college education lead to a greater incentive for women to work, which eventually improved their economic status significantly [3]. J.A.Burr et al. find that married women's happiness positively correlated with their labor participation rate [4]. The increased economic status means divorce becomes more feasible. For example, M.Marcén concludes that women's labor supply increases with the divorce rate [5].

With China's rapid change, how does divorce affect women's labor supply and wage? The literature shows that personal factors, family factors, and social factors may all play a role. Existing literature, however, focuses on marriage, barely mentioning divorce. We try to fill this gap in our research by focusing on the relationship between divorce and labor supply.

MODELS AND DATA

EMPIRICAL MODELS

The econometric model is extended as follows:

$$LEP_{it} = \alpha_0 + \alpha_1 divorce_{it} + \alpha_x X_{it} + e_{it}$$

Where LEP_{it} is a binary variable indicating whether the i th female individual participates in the labor market in year t , taking a value of 1 if participating in market labor, otherwise 0. $divorce_{it}$ indicates whether the i th female individual is divorced in year t , taking a value of 1 if divorced, otherwise 0. X_{it} is a collection of a series of control variables, such as age (age), education level (edu), health status (health), family care burden such as children (childnumber) or number of elderly people (oldnumber), family total assets (lnasset), family total income (lntotalincome), provincial per capita GDP (lngdp), and dummy variables for household location (rural) etc., influencing labor participation rate of individual characteristics and family characteristics variables [6-11]. The following equation is finally formed:

$$LEP_{it} = \alpha_0 + \alpha_1 divorce_{it} + \alpha_2 edu_{it} + \alpha_3 childnumber_{it} + \alpha_4 oldnumber_{it} + \alpha_5 health_{it} + \alpha_6 lnasset_{it} + \alpha_7 lntotalincome_{it} + \alpha_8 rural_{it} + \alpha_9 age_{it} + \alpha_{10} age_{it}^2 + \alpha_{11} lngdp_{it} + e_{it} \quad (1)$$

DATA

The data used in this paper comes from the four rounds of survey data from 2013 to 2019 in the China Household Finance Survey (CHFS) project conducted by the China Household Finance Survey and Research Center of Southwestern University of Finance and Economics. CHFS aims to collect relevant information at the household micro level, with samples distributed in 29 provinces, 367 counties (districts, county-level cities), 1481 communities, covering 40.011 households and 127.012 individuals. The total sample size is 465.109. After excluding samples with missing key variables and male samples, the focus

sample mainly limits to female legal working age within 18-55 years old, with a final selected sample size of 87,999. For labor participation measurement based on respondents' answers to the question "whether to work for income in the last week", at the same time, individuals who have work, as well as those who do not have work but the reason is unemployment or seasonal work and not in the working season, are defined as labor participation. For wage measurement based on respondents' answers to the question "how much after-tax monetary wage did you actually get from working last year", and logarithmic processing is performed in the empirical regression analysis.

Table 1

Descriptive Statistics for the Full Sample

Variable	Full sample	By Place of Residence	
		Urban	Rural
Labor participation rate	69.72%	67.47%	74.26%
Personal wage income	33381.41	35859.51	22692.52
Divorced or not	3.47%	4.15%	2.12%
Age	42.1	41.83	42.63
Children under 14 years old	0.65	0.59	0.76
Elderly people over 60 years old	0.44	0.39	0.54
Years of education	9.59	10.74	7.27
Health status	2.61	2.51	2.81
Residence location	0.33	0	1
Family total assets	1112353	1440104	452303.5
Family total income	97586.71	116037.5	60429.25
West region	27.43%	25.15%	32.02%
Central region	27.73%	24.81%	33.61%

Source: compiled by the author based on the China Household Finance Survey (CHFS).

From Table 1 variable descriptive statistics results can be seen:
First, in the full sample, women's labor participation rate is 69.72%. Urban residents' labor participation rate (67.47%) is lower than rural residents' (74.26%). The CHFS treats rural residents' farming as labor participation. Women's average wage is RMB 33381.41, and urban women's wage is far higher than their rural counterparts.
Second, in the full sample, the number of children under 14 years old is on average 0.65, and rural (0.76) is higher than urban (0.59). The number of elderly people over 60 years for rural (0.54) is also higher than urban (0.39). The reasons may be because raising a child is more costly in urban areas, and household in urban areas are smaller with elder people not living with their children.
Third, for education, women's years of education is on average 9.59 years, among which urban women's average years of education (10.74 years) is much higher than rural women's average years of education (7.27), which is consistent with almost all existing statistics. For income, family total assets and family total

income are respectively RMB 1,112,353 and RMB 97,586.71, among which urban households are far higher than rural households in both. This reflects the well-known expanding income gap between urban and rural areas in China.
Fourth and last, for the core explanatory variable of this paper, women's divorce rate in the sample is 3.47%, while urban women's divorce rate (4.15%) is much higher than rural (2.12%). According to China Marriage Report published in the year 2021, the divorce rates increased in both urban and rural areas. In rural areas, the divorce peak appeared around 30 years old, while in urban area, it peaked around 50 years old.

THE IMPACT OF DIVORCE ON WOMEN'S LABOR DECISIONS

Whether a woman's family income will decrease depends on the specific situation and personal choices. However, for women who do not work, divorce is likely to cause economic difficulties, especially if they need to raise children. In order to maintain the previous standard of living, these women need to participate in market labor to earn more income. To confirm the mechanism of the impact of divorce on the labor supply of single women who are not working, Table 2 shows the results of the Logit fixed-effects model regression on the full sample, where the dependent variable is whether or not to participate in market labor (yes = 1, no = 0).

Table 2

The Impact of Divorce on Women's Labor Decisions

LPR	Full sample	By Place of Residence	
		Urban	Rural
Divorce	0,3904*** (-0,148)	0,5066*** (-0,1785)	0,2086 (-0,2722)
Age	0,3454*** (-0,0357)	0,4147*** (-0,0457)	0,2082*** (-0,0585)
Age Square	-0,0036*** (-0,0004)	-0,0041*** (-0,0005)	-0,0024*** (-0,0007)
Number of Children	-0,2397*** (-0,0346)	-0,3902*** (-0,0515)	-0,1049** (-0,0477)
Number of Elderly People	0,0008 (-0,0447)	0,0304 (-0,0611)	-0,0109 (-0,0673)
Years of Education	0,0306*** (-0,0117)	0,0412** (-0,0168)	0,0169 (-0,0165)
Health Status	-0,1155*** (-0,0201)	-0,1041*** (-0,0272)	-0,1242*** (-0,0303)
Place of Residence	0,009 (-0,1881)		
Total Family Income	0,2659*** (-0,0249)	0,3752*** (-0,0335)	0,1123*** (-0,0376)
Total Family Assets	0,0643*** (-0,0174)	0,0627*** (-0,0224)	0,0542* (-0,0282)

Provincial GDP Per Capita	-1,7588*** (-0,1177)	-1,8524*** (-0,1597)	-1,6154*** (-0,1775)
Individual Fixed Effects	YES YES	YES YES	YES YES

The numbers in parentheses represent robust standard errors. *, **, * represent that the marginal effect result is significant at the 1%, 5%, and 10% significance levels, respectively. Source: compiled by the author based on the China Household Finance Survey (CHFS).**

Table 2 indicates the following. First, divorced women are more likely to participate in market labor, most likely because they need to increase their income or because they have gained more autonomy and opportunities to develop their careers, which is consistent with the conclusions drawn by some other articles [12-14].

Second, the impact of age on women's labor participation is an inverted U-shaped curve, that is, women's labor participation is lower when they are young and old, and higher when they are middle-aged. This is also related to factors such as education, marriage, childbirth, and family responsibilities faced by women at different ages. Overall, women are more likely to participate in market labor during middle age than during youth and old age.

Third, the number of children negatively affects women's participation in market labor. According to the World Bank report, the impact of the number of children in a family on women's participation in market labor is also affected by the age of the children. The number of elderly people over 60 years old in a family does not have a significant impact. Generally speaking, elderly people may need care from women, but sometimes the multi-generational family structure can help enable elderly people to help to take care of their grandchildren, which may improve women's labor participation rate [15-17].

Fourth, years of education have a significant positive effect on women's labor participation, which is consistent with most excising studies [18-20]. For physical health status, the better health, the higher likelihood of participating in market labor.

Finally, Table 2 further regresses the sample by place of residence and finds that urban women are more likely to choose employment after divorce, while divorce has no significant impact on rural women's labor supply. The reason is that, in underdeveloped rural areas, women are mainly engaged in farming and do not have as much autonomy in labor choices as urban women in developed areas.

CONCLUSION

This paper uses data from the China Household Finance Survey from 2013 to 2019 to form a panel data. Through the Logit model, it is found that divorce generally promotes the probability of women participating in market labor. This is also consistent with our understanding that divorce will cause most women's family income to decline significantly. Unemployed divorced women will be in a more difficult economic situation, so women are more likely to participate in market labor due to the decline in family income levels after divorce.

In recent years, the divorce rates of urban and rural areas in China have continued to rise and caused many people to worry about the social stability and the welfare of women after divorce. They even criticize the current law, which simplifies the procedure for women to file divorces. Our paper, however, demonstrates that women may actually become more active in labor market. Our paper implies that women's economic welfare may not deteriorate at all

after divorce. After all, divorce is a personal choice, and so is working.

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About the authors:

Yan Zhao - PhD in Economics, Associate Professor, School of Business, East China University of Science and Technology, 130 China Meilong Road, Shanghai, China, 200231.

Jinghui Lan - independent expert, School of Business, East China University of Science and Technology, 130 China Meilong Road, Shanghai, China, 200231.

ORCID ID: 0000-0003-4180-0592

Conflict of interest: the authors declare no conflict of interest.

Funding: the authors acknowledge the financial support from the Ministry of Education of the People's Republic of China (Humanities and Social Sciences Projects, Grant No. 18YJC790230).

For references: Zhao Y., Lan J. The impact of divorce on women's labor supply. *International Business Journal*, 2024, no. 1(7), pp. 115-122

Submitted for publication: 31 March 2024

Accepted for publication: 13 May 2024

PROACTIVE DECISION-MAKING OF GENERATION Z IN KAZAKHSTAN

Yuliya Frolova

KIMEP University

Abstract

The objective of this research paper is to assess the proactive decision-making of Generation Z in Kazakhstan. A quantitative approach was used for data collection and analysis. Respondents were invited to participate in the survey on a voluntary basis. They were asked to indicate their level of agreement with a list of 19 statements, using a 6-point Likert-type scale. A total of 380 valid questionnaires were returned back. The results suggest that young people are low on taking initiative and not strong in systematic identification of alternatives, but are much better at systematic identification of objectives, using a decision radar, and striving for improvement. The implications of these findings are discussed in the paper.

Keywords

Generation Z, proactive decision-making, taking initiative, striving for improvement, identification of objectives, identification of information, search for alternatives, decision radar, Kazakhstan.