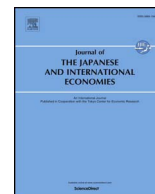




Contents lists available at ScienceDirect

Journal of The Japanese and International Economies

journal homepage: [www.elsevier.com/locate/jjie](http://www.elsevier.com/locate/jjie)

## How does informal caregiving affect daughters' employment and mental health in Japan?

Takashi Oshio<sup>a,\*</sup>, Emiko Usui<sup>a,b</sup>

<sup>a</sup> Institute of Economic Research, Hitotsubashi University, 2-1 Naka, Kunitachi, Tokyo, 186-8603, Japan

<sup>b</sup> Institute for the Study of Labor (IZA)

### ARTICLE INFO

#### Keywords:

Informal caregiving  
Employment  
Work hours  
Labor supply  
Mental health

#### JEL Classification Codes:

J22  
J14

### ABSTRACT

We examine the association of informal caregiving with daughters' employment and mental health in Japan, using the 2008–2014 waves of the Longitudinal Survey of Middle-Aged and Older Adults, a large and nationally representative panel survey of middle-aged Japanese individuals. We find that caregiving reduces the probability of employment by only 3.2%, after controlling for time-invariant individual heterogeneity, and is not associated with either the hours or days worked per week by working caregivers. We further observe that employment does not add to the psychological distress already being experienced by the caregivers as a result of their caregiving role.

### 1. Introduction

The use of female labor is currently a major policy challenge in Japan due to the declining prime working-age population and the rapidly increasing elderly population, due to reduced fertility and longevity of the elderly. Increasing the participation of women in the labor market is crucial for the growth of Japan's economy. However, Japan is a country in which approximately 70% of elderly care is provided at home, mainly by women (Cabinet Office, 2015). Therefore, it is essential to investigate whether and how informal caregiving by women might negatively affect their level of employment.

As discussed by Bauer and Sousa-Poza (2015) and Lilly et al. (2007), many previous studies conducted in other advanced countries—mainly in the United States and Europe—have shown that the effect of informal caregiving on employment is relatively limited, even though caregiving and low levels of employment are combinedly prevalent. However, the association between caregiving for elderly parents and the female labor supply in Japan has not yet been fully investigated.

We use the 2008–2014 waves of the Longitudinal Survey of Middle-Aged and Older Adults, a large and nationally representative panel survey of middle-aged Japanese individuals. From the cross-sectional dataset, we find a negative association between caregiving for elderly parents and women's labor supply at both the extensive margin (employment probability) and the intensive margin (hours worked conditional on employment). However, after controlling for time-invariant

individual heterogeneity by fixed-effects models, we observe that informal caregiving reduces the probability of employment only modestly—by 3.2%. Furthermore, working women do not reduce their hours or days worked per week at the onset of caregiving for their elderly parents.

We further investigate how work affects the association between informal caregiving and caregivers' mental health. It is well known that informal caregiving has an adverse impact on caregivers' mental health (Coe and Van Houtven, 2009; Hiel et al., 2015; Oshio, 2014; Pinquart and Sörensen, 2003). However, whether employment exacerbates the adverse impact of caregiving has not been sufficiently studied either within or outside Japan. We find that work neither increases nor decreases the adverse impact of caregiving on the mental health of caregivers.

Overall, our results suggest that informal caregiving does not appear to be a significant deterrent to employment among middle-aged women in Japan. This may be because Japanese women tend to work shorter hours and have limited responsibility at work; in many cases, they can participate in informal caregiving without needing to significantly adjust their labor force participation. This situation is consistent with our observation that employment does not add to the caregivers' psychological distress.

The paper proceeds as follows. Section 2 reviews the literature on how providing informal caregiving affects caretakers' level of employment and their mental health. Section 3 provides details about the data

\* Corresponding author.

E-mail addresses: [oshio@ier.hit-u.ac.jp](mailto:oshio@ier.hit-u.ac.jp) (T. Oshio), [usui@ier.hit-u.ac.jp](mailto:usui@ier.hit-u.ac.jp) (E. Usui).

<https://doi.org/10.1016/j.jjie.2018.01.001>

Received 14 October 2017; Received in revised form 26 December 2017; Accepted 2 January 2018  
0889-1583/ © 2018 Elsevier Inc. All rights reserved.

and descriptive statistics of the sample. Section 4 presents the main estimation results, including the effect of informal caregiving on (1) employment; (2) hours of work conditional on working; and (3) caregivers' mental health. Section 5 concludes the paper.

## 2. Background

Many studies in the United States and Europe have examined the effect of informal caregiving on employment. These studies have raised the possibility that the observed large negative association between caregiving and employment may be biased for two reasons. The first reason is endogenous selection into caregiving, as women with a weaker attachment to the labor market are more likely to take on the caregiving role. To control for the potential endogeneity of caregiving, we applied the instrumental variable (IV) approach. Previous studies have used measures of parental health, such as health status and/or daily activities, as instruments for informal caregiving (Crespo and Mira, 2014; Meng, 2012; Nguyen and Connelly, 2014; Van Houtven et al., 2013), as well as the number of the woman's siblings (Coe and Van Houtven, 2009). Second, researchers have been concerned that time-invariant unobserved individual heterogeneity may be related to caregiving because caregivers may differ in human capital investment or experience. To control for individual heterogeneity, previous studies have used a fixed-effects (FE) approach (Leigh, 2010; Meng, 2012; Van Houtven et al., 2013).

Studies in the United States and European countries that have used these two approaches have found a limited association between caregiving and women's probability of working. These studies have also found that caregiving is associated with a relatively moderate reduction in work hours (Bolin et al., 2008; Lilly et al., 2010; Meng, 2012; Van Houtven et al., 2013). Therefore, studies from the United States and European countries imply that caregivers may be able to adjust their working hours and may not have to exit the labor force to care for elderly parents.

However, the link between informal caregiving and work has not been studied extensively in Japan. Using repeated cross-sectional data from the Comprehensive Survey of Living Conditions released by the Ministry of Health, Labour and Welfare, Sugawara and Nakamura (2014) show that the presence of coresiding elderly parents who require care reduces the probability of coresiding, middle-aged women continuing as regular workers. Using repeated cross-sectional data from the Labor Force Survey and the Employment Status Survey, Kondo (2017) finds that the availability of long-term care (LTC) facilities is not related to the labor force participation of middle-aged women. However, neither of these studies focuses directly on the way that caregivers' employment decisions are affected by caregiving activities because the data used in these two studies lack information on (i) whether all of the elderly parents (namely, father, mother, father-in-law, and mother-in-law) are alive, and (ii) whether middle-aged people who have living elderly parents actually provide them with care.

Two studies use panel data to control for individual heterogeneity in Japan. Shimizutani et al., (2008) observe that the introduction of a public long-term care insurance (LTCI) scheme in 2000 increased the probability of female caregivers being employed and increased the number of days per week and hours per day worked by female caregivers (Tamiya et al., 2011). In contrast, Fukahori et al. (2015) find that the LTCI system does not mitigate the adverse impact on the employment of middle-aged individuals who reside with an elderly person needing care. Because of these contrasting results regarding the impact of informal caregiving on caregivers' employment, this issue should be investigated using a large and nationally representative sample in Japan.

Meanwhile, as mentioned above, a growing number of studies have demonstrated that informal caregiving increases the psychological distress experienced by caretakers (Coe and Van Houtven, 2009; Hiel et al., 2015; Oshio, 2014; Pinquart and Sörensen, 2003; Sugihara et al.,

2004). However, these studies have not examined the effects, if any, that working could have on caregivers' mental health. One might assume that caregivers would feel more stressed if they continue to work because of reduced leisure and personal time. However, the multiple roles performed by people may just as likely have positive mental health outcomes (Adelmann, 1994; Moen et al., 1992). Particularly, participating in the labor force has been shown to have a favorable impact on the mental health of middle-aged and elderly individuals (Hao, 2008), and retirement tends to have a negative effect on one's health (Kim and Moen, 2002). Hence, it is interesting to examine whether work adds to, or reduces, caregivers' psychological distress. Caregiving and continuing to work in the labor market may exacerbate psychological distress due to a decrease in leisure time; however, the performance of multiple fulfilling roles may also reduce psychological distress.

## 3. Data and descriptive statistics

### 3.1. Data

We use panel data from the Longitudinal Survey of Middle-Aged and Older Adults, conducted by the Japanese Ministry of Health, Labour and Welfare. The survey began in early November 2005 with a sample of 34,240 individuals aged 50 to 59 years, and these individuals have been surveyed every November in subsequent years. The initial response rate of the survey was 83.8%, with a subsequent attrition rate ranging from 1.2% to 9.8%. Because of the large sample size and low attrition rate, as well as the availability of information on (i) parent(s) or parent(s)-in-law who are still living; (ii) care needs of those alive; and (iii) which of those elderly parents are being cared for by the respondent, this survey is one of the most effective ways to study the association between informal caregiving and the employment and mental health of middle-aged women in Japan.

We focus on women, who are usually considered reliable resources for providing informal care for elderly parents, especially in Japan. Japanese women often face a situation of having to decide whether to (i) provide care for their elderly parents while continuing to participate in the labor market or (ii) stop doing one in order to focus on the other. We restrict our sample to female respondents between the ages of 50 and 59 who have at least one living parent or parent-in-law. We exclude women over age 60 from our sample, considering that their work decisions are likely to be affected by pension and retirement policies: workers in Japan can claim pensions starting at age 60, and the mandatory retirement age is often between the ages of 60 and 65.<sup>1</sup> We also limit our sample to the years 2008–2014 because the data from the earlier waves—between 2005 and 2007—do not include information on the family member(s) requiring care. We are left with a total of 21,788 observations for the 7415 female respondents in the sample.

Regarding employment, the respondents are asked whether they have a paid job. The indicator variable for employment is defined as 1 if the respondent has a paid job and 0 otherwise. Those who have a paid job are then asked about (i) their average hours worked per week and (ii) their average days worked per week during October—the most recent month because the survey is conducted in early November—of the survey year. Regarding informal caregiving, the survey asks whether the respondents provide care to their immediate family (including father, mother, father-in-law, and mother-in-law), and if they do so, the family member(s) who receive care. We consider a respondent an informal caregiver if she cares for at least one of her parent(s) or parent(s)-in-law or both.

As instrumental variables for the caregiving decision, we use four indicator variables for the demand for care for the father, mother,

<sup>1</sup> The results remain largely unchanged even if we include women aged 60 years or above.

Download English Version:

<https://daneshyari.com/en/article/8954591>

Download Persian Version:

<https://daneshyari.com/article/8954591>

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