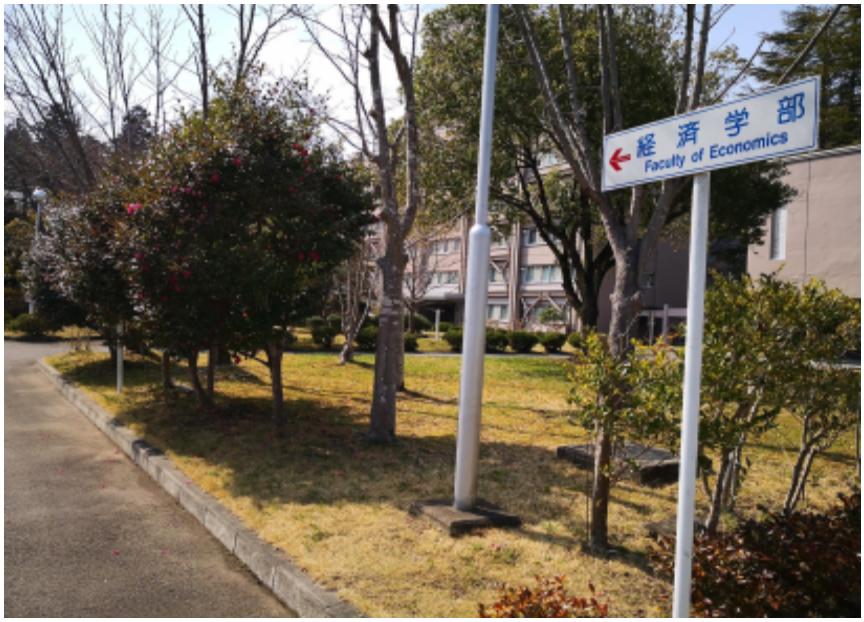
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<Special contribution>

Gender Inequality in Japan: The Incomplete Revolution

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Many cultures have significant historical and cultural traditions that prevent women from achieving equality and advancement and limit them to subordinate positions. Due to strict cultural standards, women in Japan are also subjected to tasks such as caregivers for elderly family members and main caretakers of children and the home. Despite the patriarchal atmosphere in which women were raised, Japan was able to modernize and become one of the first non-European countries to achieve high levels of wealth for its population. There are lessons to be gained from Japan's ability to improve its economic and social metrics while still holding traditional views that are antithetical to modernity. How can a society grow if many individuals have outmoded attitudes on gender equality in numerous areas?

Japan must turn a fresh page in its gender equality measures in order to write the next chapter. Despite some signs of change over the previous decade, the country's political and economic leaders are still stuck in a rut, as seen by the country's poor international rankings for women's participation in the workforce.

Despite some trials such as "Womenomics" and other relevant policies aimed at creating a "Japan in which women can shine," Japanese politics should determine how to move forward and whether to do so through largely voluntary efforts and targets legal quotas to increase the percentage of female politicians and corporate leaders.

There are various barriers to women's engagement in the male-dominated world of politics. We need to rethink how we run parliament, political campaigns, and local petition initiatives, among other things; we also need to make the process more transparent. By denying access to the process, the established structure – "the way things have always been done" – is preserved. As a result, women and people from minority groups who have traditionally struggled to participate in politics may be excluded.

Citizens have the capacity to influence politics by voting, thus we can bring about change by all of us being aware and taking action. What's more concerning is that many women are discouraged from running for office because they can not

garner support from the political establishment. As a result, it is vital to make the selection process more transparent and to create an atmosphere where individuals from all walks of life can participate in and impact change.

I would want to see further changes in the way regional legislatures and elections are arranged, so that not just Japan's main political parties, but also the grassroots, can foster participation in politics by a broad range of people, including women.

From the boardroom to the executive suite, equality is a must.

In the economic world, there is still a significant gender disparity. Women are underrepresented in executive and managerial jobs at the highest levels of business. Japan, in truth, continues to lag behind the rest of the globe. According to the Fifth Basic Plan for Gender Equality, corporate governance would be improved, including notification to the Financial Services Agency.

The amendment of the Corporate Governance Code, which will take effect in June 2021, has been debated in order to encourage corporations to establish numerical objectives for the recruitment of women and foreigners to management positions, as well as to publicly report on their progress. At the same time, not only must women be promoted to management and executive roles, but also efforts to encourage a work-life balance be taken so that employees at all levels

may continue to grow their skills and careers, and corresponding measures are progressively adopted. Instead of a rigid work style and career path, this will aid in the development of a more flexible labor market.

Model on Long-Term Care Insurance Benefits and Number of Children in Household

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1. Introduction

The aging problem has become one of the most critical global issues of the 21st century. To deal with the increasing demand for long-term care, the Chinese government has established pilot social long-term care insurance (LTCI) schemes in some cities in 2016. However, developing private LTCI is also vital to provide personalized, diverse, and high-level formal care. Since caring for children and caring for the elderly are both time-consuming activities and can either be provided within the household or bought from the market, the relationship between them needs to be better understood.

Only a handful of studies consider the LTCI schemes. Geyer and Korfhage (2015) conducted an empirical analysis on the background of the German social

LTCI system. The empirical results show that by providing benefits in kind, the caregiver is much more likely to participate in the labor market, whereas those who receive benefits in cash are less likely to do so. This implies that although the cost of benefits in cash may be lower, the benefits in kind can raise the labor participation rate and offset the negative effects of aging. Fu et al. (2017) research the Japan social LTCI system using difference-in-difference propensity score matching (DID-PSM) to estimate the Comprehensive Survey of Living Conditions (CSLS) data. They reported that the introduction of the social LTCI system in 2000 had a significant positive spillover effect on the labor market. Specifically, it resulted in higher levels of participation in the labor market for males while that for females remained the same. In another study by Azuma (2018) only focused on female caregivers the results were shown to be dependent on working status. That is, the introduction of LTCI provided regular workers with more flexibility to manage time for working, and non-working females had more time for leisure activities.

Only one paper from Miyake and Yasuoka (2016) considers the elderly care subsidy and the number of children. This paper uses a macroeconomic theoretical model to investigate the mechanism of the negative effect of informal care on fertility. Even though it is based on Japan's social system, it concludes that the government-provided elderly care subsidies, rather than childcare subsidies, impact increase the number of children and lead to further addressing problems caused by the low fertility rate. However, there are no microeconomic theoretical models on private LTCI.

The purpose of this paper is to theoretically examine whether long-term care insurance benefits have the effect of increasing the number of children in the household.

2. Model

Setting the care for the elderly in the household to be x, and the number of children to be n, the utility of a household is,

$$u=U(x,n),$$

where the income of the household is Y, the cost for elderly care is p_x, and the unit cost for childcare p_n. The budget constraint is,

$$Y = p_x x + p_n n,$$

Typical household optimization condition is,

$$u'_x / p_x = u'_n / p_n,$$

3. In the case of lump-sum benefit

Here, if the benefit from long-term care insurance is a lump-sum fixed amount B, the budget constraint becomes

$$Y + B = p_x \cdot x + p_n \cdot n.$$

In this case, only the income effect will occur due to the upward shift of the budget constraint

$$\partial x / \partial B > 0,$$

$$\partial n / \partial B > 0.$$

Therefore, long-term care insurance benefits always increase the number of children n^*.

4. In the case of partial benefits

Next, consider the case where the benefits provided by long-term care insurance partially reduce the burden on the household. Assuming that the proportion of the long-term care burden of the household that is paid by the long-term care insurance is b, the budget constraint formula is,

$$Y = p_x x - b p_x x + p_n n,$$

$$= (1 - b)\, p_x x + p_n n,$$

here, b is $0 < b < 1$. At this time, the household's self-pay ratio is expressed as 1- b. When $b > 0$, the spending for elderly care in the household is smaller than that of no insurance.

$$(1- b)\, p_x < p_{x,}$$

This indicates that the relative price of the long-term care burden changes, and that the slope of the budget constraint line changes.

The budget constraint line is,

$$Y = p_x\, x + p_n\, n,$$

$$x = -\left((p_n\, n) / (1- b)\, p_x\right) + Y / p_x,$$

Here, the slope of the budget constraint line increases as the benefit ratio b (> 0) increases.

$$-(P_n / ((1-b)\, p_x)).$$

At this time, the income effect increases both x and n, but according to the substitution effect, the relatively inexpensive x (long-term care) increases, but n(children) decreases.

5. In the case of exogenous long-term care

In the last section, x^* in the household is determined endogenously. However, in some cases, the amount of care given to $\boldsymbol{x}$ determined exogenously, according to the health level of the elderly. In this case, our model is,

$$u = U(\boldsymbol{x},\, n),$$

$$Y + B = p_x\, \boldsymbol{x} + p_n\, n,$$

or

$$u = U(\boldsymbol{x}, n),$$

$$Y = (1 - b)\, p_x \boldsymbol{x} + p_n n\ .$$

In either case, x is fix ec to br , so each household should invest all possible resources in n. As a result, the budget constraint formula is,

$$n = -(p_x / p_n) + (Y + B) / p_n.$$

So, $\partial n / \partial B$ is always positive, In the case of partial benefit,

$$n = -((1-b)p_x / p_n) + Y / p_n.$$

The $\partial n / \partial b$ is always positive.

Therefore, when the long-term care input is given exogenously, the increase in the long-term care insurance benefit B and the benefit ratio b always increase n^*.

References

Azuma, M. (2018). Japanese long-term care insurance and the time allocation of female family caregivers. 千葉経済論叢 *The proceedings of Chiba Keizai University*, (58), 13-31.

Fu, R., Noguchi, H., Kawamura, A., Takahashi, H., & Tamiya, N. (2017). Spillover effect of Japanese long-term care insurance as an employment promotion policy for family caregivers. *Journal of health economics*, *56*, 103-112.

Geyer, J., & Korfhage, T. (2015). Long‐term Care Insurance and Carers' Labor Supply–A Structural Model. *Health economics*, *24*

Miyake, A., & Yasuoka, M. (2016). *Which Should the Government Subsidize: Child Care or Elderly Care?* (No. 144).

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