## A Welfare Analysis of Long-Term Care Insurance in Japan \*

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## Abstract

This study examines how long-term care (LTC) risks affect an individual's life cycle behavior and analyzes the roles of the long-term care insurance (LTCI) system in Japan, which houses the oldest population in the world and, therefore, has a public universal LTCI system. We build a structural overlapping generations model with two-sided altruism introducing two-stage family care arrangements between an older parent and adult children. This study quantifies the economic and welfare effects of the insurance system and evaluates the Japanese universal LTCI system with a benefits-in-kind, compared to alternative LTC policies. We find that universal LTCI protects households well against LTC risks in old age. Owing to a significant burden of care and in the absence of a universal LTCI system, households turn to informal care or a welfare programs. The welfare effects are strictly negative even if the government provides a lump-sum subsidy to each household. Further, we demonstrate that LTCI with a benefits-in-kind policy is more expensive than LTC with cash benefits, even though LTCI with a benefits-in-kind policy positively impacts caregivers' labor supply. However, the welfare effects of LTCI with cash benefits depend on the cash benefits' generosity.

**Keywords:** Social security, Long-term care, Long-term care insurance,

Overlapping generations model, Japan.

JEL Classification: D15, E6, E14, I10, I13

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