

Life-cycle Consumption in an Aging Economy: The Case of Korea

JUNG Dongjae*

This paper estimates the changes in the life-cycle profiles of consumption due to changes in age-specific death rates—one of the most important causes of population aging. Household Income and Expenditure Survey data is used for the estimation. The results show that consumers choose lower levels of non-durable consumption as age-specific death rates decrease, suggesting that they substitute current consumption with future consumption in response to increased life expectancy. While these consumption decreases are observed in overall ages, they appear notably large at ages close to retirement, approximately after the age of 50. A historical simulation based on the estimation results and changes in age distribution between 1995 and 2016 suggests that aggregate per capita consumption decreased constantly, by an annual average of 0.9%. Both the changes in individual consumption due to lowered age-specific death rates and the changes in age distribution due to population aging played an important role in these per capita consumption decreases. Prediction results suggest that per capita consumption may decrease further until mid-2030, and that the individual consumption modification will emerge as the main channel while the changes in age distribution will work in the opposite direction with the past.

* Economist, Monetary & Credit Policy Research Team, Monetary Policy Department, Bank of Korea (Tel: +82-2-759-4997, e-mail: djjeong@bok.or.kr)

■ I thank HONG Kyungsik, Director General of Monetary Policy Department, KIM Tae-Jeong, Director of Monetary Policy Research Division, OH Hyung Seok, Team Head of Monetary & Credit Policy Research Team, SONG Sang Yoon, Economist of Labor Market Research Team, OH Ji Yoon, Research Fellow at the Korea Development Institute, and anonymous reviewers for their useful comments.

■ The contents of this paper represent the personal opinion of the author and do not necessarily reflect the official views of the Bank of Korea. Any report/citation of this paper should specify the name of the author.

I. Introduction

II. Model Specification and Data

III. Estimation Results

IV. Simulation

V. Conclusion