

This PDF is a selection from a published volume from the National Bureau of Economic Research

Volume Title: Fiscal Policy and Management in East Asia, NBER-EASE, Volume 16

Volume Author/Editor: Takatoshi Ito and Andrew K. Rose, editors

Volume Publisher: University of Chicago Press

Volume ISBN: 978-0-226-38681-2

Volume URL: http://www.nber.org/books/ito_07-1

Conference Date: June 23-25, 2005

Publication Date: October 2007

Title: Comment on "Population Aging, Fiscal Policies, and National Saving: Predictions for the Korean Economy"

Author: Laurence J. Kotlikoff

URL: <http://www.nber.org/chapters/c0901>

Our projection suggests a drastic decrease in asset holdings due to population aging and fiscal policies. The prediction may exaggerate the decreasing trend of asset holdings and savings rate, since our approach is a partial equilibrium approach. A general equilibrium approach needs to be considered for the future research, because the general equilibrium change in factor prices (i.e., rise in rate of return to capital) resulting from decrease in capital stock, mitigates the drastic downward trend of asset holdings.

References

- Auerbach, Alan J., and Young Jun Chun. 2006. Generational accounting in Korea. *Journal of Japanese and International Economies* 20 (2): 234–68.
- Auerbach, Alan J., Young Jun Chun, and Ilho Yoo. 2005. The fiscal burden of Korean reunification: A generational accounting approach. *FinanzArchiv* 61 (1): 62–97.
- Auerbach, Alan J., and Laurence J. Kotlikoff. 1992. The impact of the demographic transition on capital formation. *Scandinavian Journal of Economics* 84 (2): 281–95.
- Auerbach, Alan J., and Philip Oreopoulos. 2000. The fiscal impacts of U.S. immigration: A generational-accounting perspective. *Tax Policy and the Economy* 14:123–56.
- Besanger, Serge, Ross S. Guest, and Ian McDonald. 2000. *Demographic changes in Asia: The impact on optimal national saving, investment, and the current account*. IMF Working Paper no. 00/115.
- Bovenberg, A. Lans, and Harry ter Rele. 2000. Generational accounts for the Netherlands: An update. *International Tax and Public Finance* 7 (4): 411–30.
- Kotlikoff, Laurence, Jagdeesh Gokhale, and John Sabelhaus. 1996. *Understanding the postwar decline in U.S. saving: A cohort analysis*. NBER Working Paper no. 5571. Cambridge, MA: National Bureau of Economic Research.
- Ministry of Labor, Republic of Korea. 2001. *Survey report on wage structure*. Seoul: Ministry of Labor.
- United Nations. 1998. *World population projections*. New York: United Nations.
- United Nations. n.d. *The sex and age distribution of world population*. New York: United Nations.

Comment Laurence J. Kotlikoff

This chapter by Young Jun Chun is a very impressive study. It shows that one can readily apply the life-cycle theory of saving to make aggregate saving forecasts for countries, to understand the saving impacts of alternative fiscal policy changes, and to consider the saving effects of factors such as the degree of annuitization and the extent of altruism. The paper projects

Laurence J. Kotlikoff is a professor of economics at Boston University and a research associate of the National Bureau of Economic Research.

Korea's saving by properly treating the country as a small open economy. It considers each cohort's remaining lifetime resources in each future year and multiplies those resources by the cohort's propensity to consume. Since older cohorts have higher consumption propensities, a shift toward an older population leads to more aggregate consumption and lower national saving, other things equal. Korea is slated to age very dramatically. Indeed, by the end of this century, Korea could be the oldest country in the world. The authors suggest a very dramatic decline, indeed a true collapse, in the country's national saving rate, albeit one that can be mitigated to some degree with more generationally responsible fiscal policy. This is a very carefully done study and should serve as a model for future analyses of national saving.

Comment Shigeki Kunieda

The Chun chapter analyzes the effects of aging and fiscal policy on the national savings in Korea using a life-cycle model. Despite the seemingly sound current Korean fiscal situation, this chapter and another paper by the author and Auerbach (Auerbach and Chun 2006) show that rapid aging will have significant effects on national savings and intergenerational equity in Korea in the near future. Especially, the maturation of PAYGO public pension system and the expansion of medical expense will reduce the national savings significantly. In addition, the chapter points out possible negative effects of annuitization of wealth. I would like to raise three issues that might be relevant for the future analysis and the Korean fiscal policy reform.

Desirability of Dynamic General Equilibrium Analysis

As Chun admits in the chapter, the analysis in it is partial equilibrium analysis, since wage rate and discount rate are exogenously determined. In order to include possible effects of factor price changes, dynamic general equilibrium analysis such as Auerbach-Kotlikoff's model is desirable for further research.

Bequest Motives and the Effects of Annuitization

Chun argues that the annuitization of wealth will reduce national savings further in Korea. However, the claim that annuitization of wealth, especially introduction of reverse mortgage, will reduce savings crucially de-