The Impact of Social Safety Nets on Saving Rates

Charles Yuji Horioka
(Institute of Social and Economic Research, Osaka University, and National Bureau of Economic Research)

Prepared for presentation at "PECC at 30: New Vision for APEC and Toward Further Regional Economic Cooperation"
October 20-22, 2010
Tokyo, Japan

This presentation summarizes the findings of the Macro Analysis Team of the PECC International Project on Social Resilience that was conducted during the past year.

This project was composed of four teams:

(1)The Pension System Team, headed by Professor Noriyuki Takayama of Hitotsubashi University

(2)The Medical Insurance System Team, headed by Professor Masako Ii of Hitotsubashi University

(3)The Unemployment Insurance System Team, headed by Professor Naoki Mitani of Kobe University

(4)The Macro Analysis Team, headed by Professor Charles Yuji Horioka of Osaka University

The Composition of the Macro Analysis Team

1. Charles Yuji Horioka (Institute of Social and Economic Research, Osaka University, and National Bureau of Economic Research)
2. Wataru Suzuki (Gakushuin University)
3. Yanfei Zhou (Japan Institute for Labor Policy and Training)

The Objective of the Macro Analysis Team

(1) Horioka used cross-economy panel data to analyze the impact of social safety nets on the aggregate saving rate.
(2) Suzuki and Zhou used micro data from a Japanese household survey to analyze the impact of pension expectations on the precautionary saving of households.

More Details about the Cross-economy Analysis

(1) Horioka and Ting Yin (Osaka University) used cross-economy panel data on 23 OECD member countries to analyze the determinants of the household saving rate.

(2) Horioka and Akiko Terada-Hagiwara (Asian Development Bank) used cross-economy panel data on 12 economies in emerging Asia (which together account for 95% of the GDP of non-Japan Asia) to analyze the determinants of the domestic saving rate.

The 23 Countries Included in the Analysis of OECD Countries

Austria, Belgium, Canada, the Czech Republic, Denmark, Finland, France, Germany, Hungary, Ireland, Italy, Japan, the Republic of Korea, the Netherlands, Norway, Poland, Portugal, the Slovak Republic, Spain, Sweden, Switzerland, the United Kingdom, and the United States

The 12 Economies Included in the Analysis of Emerging Asia

People's Republic of China; Hong Kong; India; Indonesia; Republic of Korea; Malaysia; Pakistan; Philippines; Singapore; Chinese Taipei; Thailand, and Viet Nam

The Determinants of the Household Saving Rate in the OECD Countries

(1) The aged dependency ratio (the ratio of the aged population to the working-age population) has a negative impact on the household saving rate.

(2) Credit availability has a negative impact on the household saving rate.

(3) The negative impact of credit availability on the household saving rate is smaller when the social benefit ratio is higher, which suggests that there is substitutability between credit availability and the social benefit ratio.

The Determinants of the Household Saving Rate in the OECD Countries

(1) The aged dependency ratio (the ratio of the aged population to the working-age population) has a negative impact on the household saving rate.

(2) Credit availability has a negative impact on the household saving rate.

(3) The negative impact of credit availability on the household saving rate is smaller when the social benefit ratio (the ratio of social benefits to household disposable income) is higher, which suggests that there is substitutability between credit availability and the social benefit ratio.

The Determinants of the Domestic Saving Rate in Emerging Asia

(1) The aged dependency ratio (the ratio of the aged population to the working-age population) has a negative impact on the household saving rate.

(2) Income levels have a positive but nonlinear (convex) impact on the household saving rate.

(3) Credit availability has a negative but nonlinear (concave) impact on the household saving rate.

(4) The social benefit has a negative impact on the household saving rate in some cases.

More Details about the Micro Analysis

Suzuki and Zhou investigate the impact of public pension expectations on wealth accumulation by close-to-retirement Japanese households using micro data from the 2008 JILPT Survey on the Employment and Work Conditions of Elderly People (SEWCEP) and find that households’ financial wealth holdings are positively and significantly related to public pension expectations.

Overall Conclusion

Thus, we found that the age structure of the population, income levels, and credit availability are the most important determinants of the saving rate in both developed and emerging economies but that social safety nets also have some impact on the saving rate.

Future Projections

We projected future trends in saving rates on the basis of our estimation results and found that saving rates in the developed countries and the most rapidly aging emerging economies of Asia (e.g., Hong Kong, Korea, Singapore, and Chinese Taipei) will decline in the next two decades, that saving rates in the least rapidly aging emerging economies of Asia (e.g., China, Indonesia, India, Malaysia, Pakistan, the Philippines) will increase in the coming years, and that saving rates in Thailand and Vietnam will increase for about ten years before starting to decline.

Policy Implications (1)

(1) Saving rates will decline in some economies and increase in other economies, meaning that the world as a whole (or Asia as a whole) will not experience saving shortages for some time to come.

(2) Financial sector development (increasing credit availability) and improving social safety nets are substitutes for one another, with both having the effect of reducing saving, increasing consumption, and improving household welfare by shielding them from risk.

Policy Implications (2)

(3) Thus, financial sector development (increasing credit availability) and improving social safety nets will both kill two birds with one stone, stimulating the economy and, at the same time, improving household welfare by shielding them from risk.

(4) The world economy is slowly recovering and thus now is a golden opportunity to implement financial sector development and improve social safety nets.

Thank you very much for your kind attention.

Please send any questions or comments to horioka@iser.osaka-u.ac.jp