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correlations: The role of the components of demographic change. *Demography* 32 (4): 543–55.

Comment Jong-Wha Lee

The Mason, Lee, and Lee chapter summarizes the main features of demographic transition in Asia since 1960—characterized by fertility decline, population aging, and decrease in working-age population. The chapter highlights three important channels by which demographic transition influences economic growth in Asia. They include (a) the change in working-age population (first demographic dividend), (b) the change in savings rate and capital accumulation (second demographic dividend), and (c) human capital investment.

This chapter addresses an important issue: fertility decline and population aging are becoming increasingly important in the region, especially in Northeast Asia. This chapter addresses the economic and social implications of demographic transition and discusses the role of an intergenerational transfer system for supporting the growing number of elderly population. While I agree on most of the chapter's findings, I have a few questions.

The first concerns the second demographic dividend in Asia. The estimation of the first dividend is straightforward. The estimates show that the first dividend has become negative in several Asian economies with rapidly expanding elderly populations. The critical question concerns the size of the second dividend, which is important for the aggregate growth effect of demographic dividends. The chapter claims that longer life leads to higher savings, which raises the capital-labor ratio and thus labor productivity. Hence, if the second dividend is large, an aging population could lead to higher—not lower—per capita income. However, it is not clear how strong leaving bequest or any other motives are to support increased elderly savings. Uncertainty surrounding the timing of retirement and death may have a strong influence on the pace of dissaving among the elderly and retirees. But it is not clear to what extent a motive of building inheritance can dampen the decline in savings during retirement. The chapter needs to discuss more empirical evidence of elderly savings in Asia.

Second, the chapter emphasizes the role of intergenerational transfers from the young to the old on net savings and financial asset accumulation. The impact of demographic change on capital accumulation and economic growth hinges on the extent to which the population accumulates pension-transfer wealth versus physical capital accumulation over the lifetime.

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Higher reliance on intergenerational (IG) pension transfer wealth would lead to significantly lower levels of lifetime savings. The simulation results for selected Asian economies support the contention that the effect of aging on savings critically depends on the assumption of the relative share of assets and pension-transfer wealth. However, it is not clear how accurate the estimates are. For example, the figures in table 1.8 show that in 1995 net savings for the Republic of Korea (Korea) was estimated to be 52.9 percent of national income with the low IG transfer share assumed, and 7.9 percent with the high IG transfer share. It seems the range of estimates is too wide. The details of the simulation model are not presented, so it is difficult to know the assumptions on critical parameters. The chapter can explain first how the model can simulate the behavior of savings rates in an economy like Korea or in ASEAN, and then show how the predicted savings rates can change depending on the value of the IG transfer share.

In addition, in a small open economy with perfect capital mobility, a change in savings rate does not necessarily lead to a change in investment rate, as the savings-investment imbalance is adjusted by external transactions. Demographic change is expected to negatively influence investment demand as slower labor force growth and lower expected output growth reduce the rates-of-return on investment. If an aging population causes national savings to rise and domestic investment to fall, it will lead to an improvement in the current account, but not necessarily to an increase in capital accumulation and output growth rate.

Finally, while the title of the chapter emphasizes the impact of population change in economic growth, the authors do not address other important channels by which demographic change influences economic growth. For example, population aging can influence education and training, and technological progress. Also, new technology and better health care can alter the effects of population aging—by leading to extension of retirement age, for example. Human capital investment will also induce new technological development in the economy.