Summary of Comments on "World growth and international capital flows in the 21st century" Tsutomu Watanabe

My first comment (it's more like a question) is about the projected path of the Japanese population. Given that current and near-future level of the birth rate is well below 2.0, the Japanese population will continue to decline, and approaches zero in the remote future. However, according to the paper's projection, the population converges to a steady state level (not zero) in 2100. Probably the paper's projection is based on the assumption that the birth rate will rise sometime before 2100. I'm wondering what is the driving force behind the recovery of the birth rate, and why it will work in the remote future, but not now. I also would like to know how the outcome would change if the birth rate stays at a low level even in the remote future.

My second comment is related to welfare implications of the paper's exercise. It seems that equilibrium obtained in this paper is very close to the first-best outcome. In this paper, given the evolution of technology and population, households and firms make an inter-temporal decision, so that there is no reason for sub-optimality. Given this understanding, an important question to be addressed by the paper would be how and to what extent the equilibrium characterized in the paper could differ from the one in an actual shrinking economy. I would like to point out two things with respect to this. First, it might be difficult for the government to become smaller in accordance with the size of the economy for some reasons: political process; bureaucracy; large fixed costs to produce public goods. Second, labor becomes scarce in a shrinking economy, so that capital labor ratio increases, and the real rate of return will be lower. This implies that the so-called Wicksellian natural rate of interest is more likely to fall below zero, and consequently the probability of falling into the liquidity trap will become higher. I would like to ask how the paper's conclusion would change if these two aspects are taken into consideration.