## Abstract

The effect of accepting more immigrants on welfare in the presence of a pay-asyou-go social security system is analyzed theoretically and quantitatively in this study. First, it is shown that if intergenerational government transfers initially exist from the young to the old, the government can lead an economy to the (modified) golden rule level within a finite time in a Pareto-improving way by increasing the percentage of immigrants to natives (PITN). Second, by using the computational overlapping generation model, I calculate both the welfare gain of increasing the PITN from 15.5 percent to 25.5 percent in 80 years and the years needed to reach the (modified) golden rule level in a Pareto-improving way in a model economy. The simulation results show that the present discounted value of the Pareto-improving welfare gain of increasing the PITN is 23 percent of initial GDP. It takes 112 years for the model economy to reach the golden rule level in a Pareto-improving way.