# Population dynamics, migration, and the secular stagnation hypothesis 

Alex Crescentini ${ }^{1}$<br>Department of Economics and Social Sciences, Università Politecnica delle Marche Piazzale Martelli 8, Ancona, Italy.


#### Abstract

This paper quantifies the effect of the migrant population on the Italian macroeconomy, which is assumed to be affected by the Secular Stagnation Hypothesis (SSH). Under this assumption, a country shows an advanced level of aging as well as diminishing technological progress, as observed for the Italian economy. The first is a demand-side factor that puts pressure on public finances, increases aggregate savings, and decreases interest rates. The second is a supply-side factor that directly operates through the production function, decreasing the rate of economic growth. We use a 56 -period OLG model to differentiate the behaviors and characteristics of the migrant population with respect to the native population and to study their effect over the Italian life cycle. We mainly focus on demand-side factors, and we simply feed the model with an exogenous path of the observed TFP growth rate for the supply side. Simulating the model from the 1990s to today and projecting it till 2100, we conclude that migration is a quantitatively relevant dampening channel in a country with advanced aging and a decreasing technological rate, such as Italy. From the model simulation, in 2065 we arrive at a real interest rate higher than $2.5 \%$ compared to the case without the presence of migrants. Policy implications are important; the more favorable a policy for the integration of the migrant population, the higher the stimulus for the Italian economy and the lesser the risk of stagnant dynamics.


Keywords: Migration, Secular Stagnation, Italy, Fertility, Population Aging, OLG, Dynare

JEL codes: E0, E43, C62

[^0]
[^0]:    ${ }^{1}$ E-mail: crescentini.alex@gmail.com

