
Funding pensions in a degrowing economy: an exploration with a post-Keynesian SFC model.

Antoine Monserand*¹

¹Centre d'Économie de l'Université Paris Nord – université Paris 13 – France

Résumé

Following one of the suggestions made in the call for papers, we wish to present a positive vision for the future of the economy – a utopia in a sense, though perhaps more realistic and humble than the term utopia may evoke. Because of the size of the challenge posed by climate change and other environmental damage on one hand, and of the difficulty to decouple economic production from these damage and emissions of greenhouse gases, it becomes necessary to consider a reduction of aggregate consumption and production and study how this can be done in a just and socially acceptable manner. This is part of the research agenda of "*La décroissance*", or degrowth (Kallis et al., 2012).

We focus here on a part of this agenda that has not been tackled yet with a macroeconomic approach, namely the issue of pension funding. In an economy whose size is shrinking, can pensions still be funded, under which conditions and with what implications, especially in terms of income distribution? Using the methodology developed by Wynne Godley and Marc Lavoie (2007), we build a very simple stock-flow consistent (SFC) macroeconomic model, in which households are divided between active and retired ones and pensions are funded through a pay-as-you-go scheme. The theoretical backbone of the model is post-Keynesian, since for instance money is endogenous, and both capital and labour are under-utilised even in the steady state.

First we derive the analytical solution for the steady state and find that the level of national income is given by the ratio of the total pension bill to the contribution rate applied to workers. Then, when the ecological transition starts, we consider that workers progressively reduce their autonomous consumption expenditures. This reflects two kinds of change: first, the infrastructure of the country and the design of products are modified so that people need less material possessions and that these possessions last longer and are ultimately repaired or recycled (instead of being thrown out). Second, the general mindset of people evolves towards a paradigm of "voluntary simplicity" (Alexander and Ussher, 2012). Our exploration shows that, if the government is not to increase its debt indefinitely, with a non-growing economy, it has to either reduce the pensions, or increase the contribution rate on profits or on wages.

The simulations we conducted show that, after an increase in the contribution rate of workers, the economy can converge to a new stationary state with a lower level of consumption and production, and where pensions are fully funded and government debt is stable. Though the share of national income retirees receive has increased and that of workers has decreased, the actual goods and services people are able to enjoy remains the same for both categories. This is due to the change in infrastructure and product design. Also, in the new stationary

*Intervenant

state the total amount of hours worked is lower: provided this reduction of working hours is distributed in a just manner, workers are ultimately benefiting from the reduction in production. This may be one of the keys to make the ecological transition acceptable for a majority of people.

Mots-Clés: Pensions, Income distribution, Ecological transition, Degrowth, Autonomous expenditures.