Abstract

Financial unsustainability of pension systems in developed economies looms large on the horizon due to increasing life expectancy and continuous drop in fertility. In spite of a broad discussion, there has been but a little consensus on appropriate remedy. Besides, the theoretical arguments supporting funded pension systems often build upon the unrealistic assumption of stable financial markets and fair transformation of saved funds into retirement benefits. This work provides an insight into performance of various pension systems in real-world conditions using large-scale simulations of an overlapping generations model based on existing pension schemes in the Czech Republic, Sweden, and Chile. Specifically, my model assumes adverse demographics, individual uncertainty, volatile financial markets’ returns, and administrative costs to affect social security systems and estimates magnitude of the effects. According to the results, each pension system seems to be partially advantageous - in promotion of economic growth, level of retirement benefits, or protection against market risks - but no scheme is dominant or dominated overall.

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