

Pension Reform: How Macroeconomics May Help Microeconomics – The Czech Case

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NONTECHNICAL SUMMARY

The final paper “Pension Reform: How Macroeconomics May Help Microeconomics – The Czech Case” combines macro and microeconomic approaches to a pension reform. First, a modified over-lapping generations (OLG) model is formulated and macroeconomic effects of a pension system switch from a pure pay-as-you-go (PAYG) to a mixed system where a substantial part of pensions is financed from private savings are estimated. The results show that the gradual shift from the PAYG to a mixed system facilitates higher capital accumulation that in turn spurs economic growth and raises wages. We demonstrate that young generations may gain as much as 20%, measured by their utility, in the mixed system.

These macroeconomic results are then employed in microeconomic simulations in which individual welfare gains for various income groups in each cohort affected by the pension reform are estimated. The model is build around an unorthodox sequencing of the pension reform in which the pre-retirement generations would enter the reformed system first. This sequencing has several benefits.

- First, it brings first “combined” pensions that are paid both from the PAYG and the funded pillar forward. First such pensions will be paid after a year of the reform. The combined pensions are higher than without a reform, thus illustrating benefits of the reform.
- Second, the proposed reform alleviates fiscal problems of the reform. Only older workers leave the PAYG and the young keep paying their contributions in full.
- Third, and perhaps most important, the proposed reform gives to the government control of the whole process. The government can manipulate the “entry age” in which participants can enter the multipillar system. If the government places more emphasis on the low fiscal costs of the reform, it may keep high “entry age” and thus keep young “captive contributors” in the PAYG system. If the main objective is a fast reform (and the fiscal woes are taken care of by another means), the government may lower the “entry age” and thus bringing more workers into the multipillar scheme.

The paper shows that all cohorts may gain if the proposed pension reform is pursued, the gain being pronounced among higher income groups that do particularly badly in the existing program. The model, however, shows that even low-income groups gain and gradually more so, as the reform becomes more entrenched and longer lasting.

In the last part of the paper, the financial costs of a reform are estimated. The reverse sequencing approach allows authorities to sequence costs according to their fiscal preferences. Two reform scenarios (cautious and expansionary) are modeled and their costs estimated. The results confirm that the more ambitious reform increases utility of workers more rapidly, but accumulates higher debt.