

The demographic transition and monetary policy in a small open economy

by Marcin Bielecki Michal Brzoza-Brzezina, and Marcin Kolasa

Discussion

Daniel Kaufmann

University of Neuchâtel and KOF Swiss Economic Institute

18 December 2019

- ▶ New Keynesian open-economy monetary model with overlapping generations and demographic change
- ▶ New people are born (and die) in an exogenous fashion that fit reasonable scenarios for Poland and the EU
- ▶ Various frictions (Calvo price-setting, investment adjustment cost)
- ▶ If demography is tilted towards older generations, there is a “demographic savings glut”; in addition, older people are less productive than young people
- ▶ Equilibrium real interest rate will fall by 2pp under demographic scenarios for Poland
- ▶ Central bank undershoots inflation target because more likely to hit the ELB; especially if the central bank slowly learns decline equilibrium rate

- ▶ Demographic change may be partly responsible for the very low real interest rates we observe
- ▶ According to this paper, the worst may yet come
- ▶ Paper stresses policy makers should rapidly take into account these changes
- ▶ Useful and timely input in the discussion on the monetary policy strategy by the Fed, ECB, and of course NBP

I am not a theory guy...



I am not a theory guy...

4



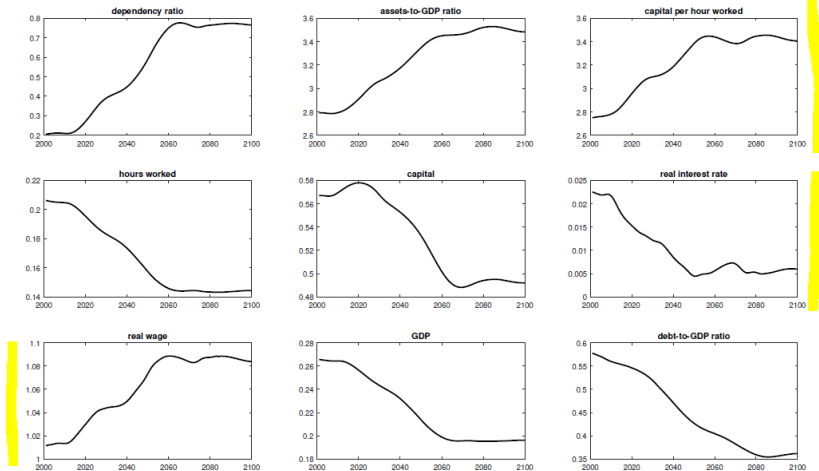
Migration flows

Monetary policy strategy

Monetary policy regime

- ▶ Capital can flow freely, but labor cannot
- ▶ New arrivals of “young” people exogenous (could scenario take into account immigration/emigration?)
- ▶ Fertility and mortality largely exogenous; but migration flows may be endogenous
- ▶ Real wage increase because of demographics, should trigger immigration
- ▶ Immigration would affect demographics and potentially push the equilibrium interest rate back up

Figure 7: Impact of demographic transition on Poland





- ▶ Taylor rule robust in many situations, but not when equilibrium interest rate declines
- ▶ Exchange rate target may help when ELB is binding (see CNB, SNB, and Bäumle and Kaufmann, 2018)
- ▶ Increasing inflation target may help when central bank knows when demographic change occurs
- ▶ Nominal GDP growth target may help when central bank does not know when demographic change occurs (implies a higher inflation rate when productivity growth declines)
- ▶ Optimal policy?

- ▶ Evidence on desirability of a peg/currency union when a small open economy faces the ELB (Cook and Devereux, 2016, Bäumle and Kaufmann, 2018)
- ▶ Poland is member of the EU but not (yet?) member of the ERM / euro area
- ▶ Would effect be larger or smaller when adopting the euro (or peg the exchange rate?)
- ▶ Would have important implications also for the desirability of adopting the euro

- ▶ Why deviation of output *growth* from potential?
- ▶ We know a lot about demographics (except migration). Does central bank really learn gradually?
- ▶ Exchange rate/current account acts as adjustment mechanism. Why does equilibrium real rate still differ across markets?

Great paper on an important topic!
Thank you very much for your attention

daniel.kaufmann@unine.ch
www.dankaufmann.com
@KaufmannDani

- BÄURLE, G. AND D. KAUFMANN (2018): “Measuring exchange rate, price, and output dynamics at the effective lower bound,” *Oxford Bulletin of Economics and Statistics*, 80, 1243–1266.
- COOK, D. AND M. B. DEVEREUX (2016): “Exchange rate flexibility under the zero lower bound,” *Journal of International Economics*, 101, 52–69.