Demographic Changes and Inflation Dynamics

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Summary

This study investigates the impact of demographic changes on inflation in Hong Kong, Singapore and Mainland China using structural VAR methodology. It shows that, an increase in the youth population is inflationary, while an increase in aging population is disinflationary. By affecting inflation expectations, demography impacts inflation directly, or through the interest rate channel indirectly, whereas its impact through the output gap or the wage channel is ignorable. On the other hand, the magnitude of the impact of demographic changes is small, with the variance decomposition revealing demographic shocks contribute to no more than 1% of annual inflation fluctuations in 10-year horizon. Among the three economies, Hong Kong and Mainland China are more sensitive to demographic changes than Singapore. Although disinflation as the consequence of population aging may not be the primary concern in the short run, the cumulative effect of aging on disinflation should not be ignored when aging process persists or even accelerates. For instance, the dependency ratio changes in 2015 are projected to lower inflation rate by more than 1 percentage point up to 2030 in Mainland China, and by around half a percentage point in Hong Kong.

Fiscal policy or measures to increase labour supply should be taken when necessary to mitigate aging impact on inflation in the short-to-mid run. Monetary policy is also useful in offset disinflation pressure incurred by population aging, though it might be less effective due to flattened Phillips curve.