Inflation measurement for policy : analytical issues and application to India

Abstract

This study analyses inflation measurement, with a view to choosing the most suitable metric of inflation for use in monetary policy. For a chosen price index, different metrics corresponds to different periods over which the inflation rate is computed. The first chapter discusses the evolution of monetary policy strategies in developed economies leading up to direct inflation targeting (DIT). Chapter 2 examines Canadian data, chosen for its good inflation performance under DIT. It finds that the intra-year range (high versus low) is a better measure of the operational variability relevant for economic policy than the standard deviation, the almost universally chosen measure of variability. Next it explains how measurement errors get compounded with the use of seasonally adjusted, intra year data, which are increasingly preferred in Indian policy circles. It accordingly goes on to argue that inflation should be measured the traditional way (non-seasonally adjusted, year over year) to avoid the compounding of measurement errors. This study continues by exploring and analysing the connections between measured headline inflation, core inflation and what are generally considered to be supply shocks. Chapter 3 develops a model using a nominal income based budget constraint to elucidate the analytical flaws of supply shock views of inflation. It then uses simulations from this model to explain why transactions weighted price indices (such as the GDP deflator and the WPI) should be eschewed in favour of a relatively population weighted indices, such as the CPI. Finally, chapter 4 first exposes the pitfalls in the RBI's recent preferred measure of core inflation. Building on the above, it then makes the case for combining a three year moving average of CPI headline inflation within what can be called a flexible frequency Taylor rule that simultaneously targets output using a relatively short-term metric of GDP growth and/or industrial production.