



भारतीय रिज़र्व बैंक
RESERVE BANK OF INDIA

वेबसाइट : www.rbi.org.in/hindi

Website : www.rbi.org.in

ई-मेल email: helpdoc@rbi.org.in

संचार विभाग, केंद्रीय कार्यालय, एस.बी.एस.मार्ग, मुंबई 400001

DEPARTMENT OF COMMUNICATION, Central Office, S.B.S. Marg, Mumbai 400001

फोन/Phone: 91 22 2266 0502 फैक्स/Fax: 91 22 2270 3279

September 2, 2010

RBI Staff Study - 5/2010
Measurement of Inflation in India:
Issues and Associated Challenges for the Conduct of Monetary Policy

The Reserve Bank of India today released a Staff Study titled '[Measurement of Inflation in India, Issues and Associated Challenges for the Conduct of Monetary Policy](#)'. The Staff Study is by G V Nadhanael and Sitikantha Pattanaik, staff in the Department of Economic Analysis and Policy. The views expressed in the article is those of the authors and do not reflect the views of the Reserve Bank of India.

This study presents key issues relating to India's inflation data in the current context; while also explaining how analyses relevant for the conduct of monetary policy could remain ambiguous if inflation data used in such analyses have serious limitations.

In India, the statistical limitations of prices data have been receiving increasing attention in the policy debates. This is because of the large divergence between CPI and WPI inflation trends in the past, wide dispersion in inflation across commodity groups within WPI, weak representative nature of the price indices in relation to the size and structure of the economy and significant volatility in headline WPI inflation due to supply shocks.

The study documents measurement issues in inflation and highlights the deficiencies in inflation data in both, advanced and developing countries. It also outlines the major initiatives being taken in India to address some of the deficiencies. The study analyses the impact of non-updation of the base year on inflation measurement, comparative movement of different inflation indicators and GDP deflator as well as the dispersion of inflation within the commodity basket. The suitability of other inflation indicators in relation to headline inflation (*i.e.*, month-over-month seasonally adjusted inflation and core inflation) for conduct of monetary policy has also been examined.

Major observations and conclusions of the study are:

- Addressing measurement issues in inflation is extremely critical for the effective conduct of monetary policy, as limitations in prices data entail the risk of adding noise to economic analysis and econometric estimates. This could complicate policy making.
- Limitations of the data on prices could yield misleading empirical estimates generated from analyses of money demand, monetary policy transmission, policy reaction function, pass-through effects and the real effective

exchange rate. All these are important for the conduct of monetary and macro-economic policies.

- Recent initiatives on improving price statistics in India, especially in terms of generating data on CPI-Urban and CPI-Rural, and a representative CPI for the country as a whole over time, would address a major data gap in India.
- As the shares of significantly volatile items like fuel and metals in total transactions have increased over time, updation of the base year of WPI to a more recent period could result in a larger volatility in inflation during 2008-10.
- Since the distribution of inflation across different commodities within WPI exhibits large changes during periods of supply shocks, understanding the variability within the commodity basket is critical for analysing the underlying price pressures and respond with appropriate policy action.
- In the Indian context, the alternative measures of inflation, such as, month-over-month seasonally adjusted inflation and core inflation, do not exhibit the desirable properties for becoming the key reference indicators in monetary policy, as they are significantly volatile like the headline inflation.

Press Release : 2010-2011/330

Alpana Killawala
Chief General Manager