

**EXECUTIVE
BOARD
MEETING**

SM/15/26
Correction 1

February 11, 2015

To: Members of the Executive Board

From: The Secretary

Subject: **India—Selected Issues**

Board Action:

The attached corrections to SM/15/26 (1/30/15) have been provided by the staff:

Evident Ambiguity

Page 24

**Factual Errors Not
Affecting the
Presentation of Staff's
Analysis or Views**

Pages 12, 29, 30

Questions:

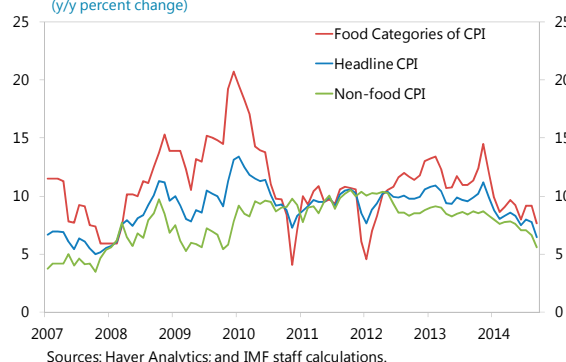
Mr. Cashin, APD (ext. 36104)
Ms. Jain-Chandra, APD (ext. 35881)
Ms. Tulin, APD (ext. 34938)

INDIA'S FOOD INFLATION: CAUSES AND CONSEQUENCES¹

Food inflation has often been singled out as a key driver of India's high and persistent inflation. India's food inflation developments over the past decade appear to have reflected demand pressures (driven by strong private consumption growth), which have often outpaced supply of key food commodities. Therefore, despite recent moderation, India's food inflation pressures are likely to re-emerge as economic growth picks up. Supply side measures that will contain food inflation pressures on a durable basis remain critical to provide a robust foundation for adopting a low-inflation objective.

1. Inflation is a key macroeconomic challenge facing India. Elevated inflation coinciding with the recent growth slowdown has distinguished India from other major emerging market economies. A number of factors have caused high Indian inflation: food inflation feeding quickly into wages and core inflation; entrenched inflation expectations; cost-push shocks from binding sector-specific supply constraints (particularly in agriculture, energy and transportation); and pass-through from rupee depreciation.

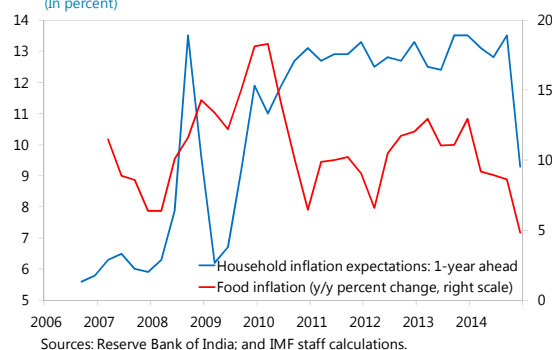
India: Headline and Food Inflation
(y/y percent change)



2. Food inflation has often been singled out as a key driver of India's high and persistent inflation. High food inflation and its prominence in shaping wage setting and in forming inflation expectations are key features of Indian inflation. Food inflation, therefore, has had a non-trivial impact on aggregate retail inflation (headline consumer price inflation) in India, presenting a challenge for monetary policy management. The importance of food inflation in shaping inflation dynamics in India is due to the following factors (see also Anand and others, 2014):

- High share of food expenditure in total household expenditure and the correspondingly high weight of food in the consumer price index (CPI) basket (49.747.6 percent);
- Inflation expectations are largely anchored by food inflation; and
- Wage indexation to consumer price inflation and thereby indirectly to food inflation.

India: Food Inflation and Inflation Expectations
(In percent)



¹ Prepared by Volodymyr Tulin.

Step 1 – Pass-through to WACMR (target rate) from monetary policy

$$(LR) \text{ WACMR}_t = \beta_0 + \beta_1 \text{RepoRate}_t + \varepsilon_t$$

$$(SR) \Delta \text{WACMR}_t = \alpha \text{ECT}_t + \sum_{k=1}^K \delta_{2k} \Delta \text{WACMR}_{t-k} + \delta_{3k} \Delta (\text{LAFnetinj} / \text{NTDL})_{t-k} + v_t$$

where the error correction term:

$$\text{ECT}_t = \text{WACMR}_{t-1} - \hat{\beta}_0 - \hat{\beta}_1 \text{RepoRate}_{t-1}$$

is the residual from the *LR* equation, which measures period *t-1* deviations from the long-run stationary relationship.

- The average elasticity of WACMR with respect to the repo rate is $\eta = \beta_1 \frac{\text{mean}(\text{RepoRate})}{\text{mean}(\text{WACMR})}$.
- α gives the share of the deviation from the long-run equilibrium that is closed each time period, thus representing the speed of adjustment.

Step 2 – Pass-through to bank interest rates from WACMR

$$(LR1) \text{ LendingRate}_t = \theta_{10} + \theta_{11} \text{WACMR}_t + \varepsilon_{1t}$$

$$(LR2) \text{ DepositRate}_t = \theta_{20} + \theta_{21} \text{WACMR}_t + \varepsilon_{2t}$$

$$(SR1) \Delta \text{LendingRate}_{it} = \alpha_1 \text{ECT1}_t + \alpha_2 \text{ECT2}_t + \sum_{k=1}^K (\delta_{3k} \Delta \text{LendingRate}_{it-k} + \delta_{4k} \Delta \text{WACMR}_{t-k} + \delta_{5k} \Delta \text{Loans} / \text{Assets}_{t-k}) + v_{it}^l$$

$$(SR2) \Delta \text{DepositRate}_{it} = \alpha_1 \text{ECT1}_t + \alpha_2 \text{ECT2}_t + \sum_{k=1}^K (\delta_{3k} \Delta \text{DepositRate}_{it-k} + \delta_{4k} \Delta \text{WACMR}_{t-k} + \delta_{5k} \Delta \text{Loans} / \text{Assets}_{t-k}) + v_{it}^d$$

where $\text{ECT1}_t = \hat{\varepsilon}_{1t}$ and $\text{ECT2}_t = \hat{\varepsilon}_{2t}$

6. The analysis find significant pass-through from policy rate changes to bank interest rates.

The average elasticity of the WACMR with respect to the repo rate is 1.43. Over the two-steps of the analysis, the cumulative long-run elasticity of the deposit rate with respect to the repo rate is 1.58. This indicates that a 1 percentage point decrease in the repo rate leads to a 1.58 percentage point decrease in the deposit rate over time. Pass-through to the lending rate is partial—the cumulative long-run elasticity of the lending rate with respect to the repo rate is 0.43.

7. Pass-through to deposit and lending rates is relatively slow and the deposit rate adjusts more quickly to monetary policy changes than does the lending rate. In the first step of transmission, it takes 13 months for 80 percent of the pass-through from a change in the repo rate to the WACMR. Eighty percent of a change in the WACMR passes-through to the deposit rate in 9.5 months, and to the lending rate in 18.8 months (Table 2).

7. Fiscal rules have evolved over time to encompass multiple desirable objectives. IMF studies also find that the “next-generation” fiscal rules have become increasingly complex as they combine the objectives of fiscal sustainability with the need for flexibility in policy response to economic shocks. These multiple objectives thereby create new challenges for implementation, communication, and monitoring (Schaechter et al. 2012). As a result, these rules are often accompanied by institutional arrangements such as fiscal councils.

Assessment of the Indian Experience

8. India adopted the FRBMA in 2003 in response to high and increasing public debt and persistently-large deficits. The Act required the government to commit to multi-year fiscal targets, as well as report and publish deficit outcomes (which has been done). The government is required to make public a Medium-Term Fiscal Policy Statement, a Fiscal Policy Strategy Statement, and a Macroeconomic Framework Statement. These documents are meant to improve transparency and ensure the consistency of current and capital budget allocations by publishing rolling 3-year plans, though their effectiveness has been questioned (IMF 2014).

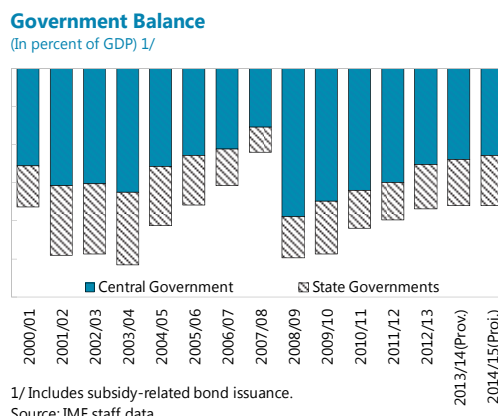
9. The FRBMA specified targets for various formulations of the budget deficit and implementation were initiated in the 2004/05 Budget. Numerical rules were as follows:

- A medium-term “revenue” deficit target of zero, to be achieved by March ~~2008~~ 2009 at the central government level.³
- The fiscal deficit in 2008/09 was to be below 3 percent of GDP.
- Rules under the 2003 FRBM Act additionally required that the revenue deficit must come down by 0.5 percentage points of GDP every year, and the fiscal deficit must come down by 0.3 percentage points of GDP every year.
- Limit of 0.5 percent of GDP on the incremental amount of guarantees provided by the central government.
- Annual initial limit of debt accumulations of 9 percent of GDP to be reduced by one percentage point a year.
- Within any given year, the Finance Minister was required to take corrective actions (notifying parliament of same) in the event of revenue shortfalls, or if 45 percent of the estimated full-year budget deficit was exceeded during the first half.

³ Indian fiscal definitions differ from international standards, though mapping from one to the other is possible. The “revenue” deficit concept essentially refers to recurrent revenue minus recurrent spending.

10. Implementation of the FRBMA was followed by a sustained decline in the fiscal deficit.

The central government fiscal deficit declined to 3.1 percent of GDP in 2007/08 from 5.13.9 percent of GDP in 2004/05. About two thirds of the improvement in the central government deficit position stemmed from stronger revenues driven by rapid economic growth as well as better tax administration. The remainder of the fiscal adjustment came from declining interest payments as government debt levels began to fall (Simone and Topalova 2009).



11. However, the FRBMA was put in abeyance at the onset of the 2008 global financial crisis as it did not provide room for countercyclical fiscal policy. The FRBMA allowed breaches of the targets on exceptional grounds as specified by the central government, but it did not have built-in flexibility. Nor was the approach to corrective actions carefully spelled out. In the event, the deficit widened from 3.1 percent in 2007/08 to 7.8 percent of GDP in 2008/09 due to discretionary stimulus as well as a sharp deceleration of tax revenues in the aftermath of the crisis.

12. Since then, fiscal space has not been rebuilt fully as the 2009 stimulus has been only partially unwound. Also, costly welfare schemes, in particular the expansion of the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) and the introduction of food subsidies (associated with the Food Security Act of 2013) has meant that fiscal consolidation has been slow. The fiscal impulse has been only slightly negative in the years following the 2008 crisis.

13. In 2012/13 the authorities re-established a fiscal adjustment path under amendments to the implementation rules for FRBM. The amended rules reset the deadline for reaching a 3 percent of GDP central government deficit at end-2016/17, and called for a more rapid reduction in the deficit than was required by the original FRBMA.⁴ Upon taking office in June 2014, the newly-elected government reaffirmed this adjustment path by specifying deficit targets of 4.1 percent for 2014/15, 3.6 percent for 2015/16, and 3.0 percent for 2016/17.

Proposal for a Successor Fiscal Rule

14. As fiscal consolidation remains an important priority, potential further policy changes can strengthen the fiscal framework. These include the adoption of a more flexible fiscal rule that can anchor macroeconomic policies, and comprehensive tax reform (including the early

⁴ FRBM (Amendment) Rules (2013).