

Commentary

**“By How Much and Why do Inflation Targeter Miss Their Targets?”
by Elias Albagli & Klaus Schmidt-Hebbel**

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The views expressed here are those of the author, not the Bank of Canada.

General Impression

1. The paper uses a rich data set to conduct a series of insightful empirical exercises on the accuracy of inflation-targeting central banks
2. The comparison group consists of the population of 19 inflation-targeting central banks from both industrialized and emergent market economies over the 1990s and early 2000s
3. The paper, however, needs a theoretical framework to improve the interpretation of their empirical findings.
4. The empirical work, though careful, does not fully control for the heterogeneity across central banks and economic circumstances.

Motivation

- To measure the efficacy of inflation targeting by developing measures of deviations of actual inflation from targeted inflation
- To understand why some central banks are more accurate inflation targeters than others
- **Main contribution:** To identify the factors that make central banks more successful at targeting the inflation rate

Summary: Part I - Measurement

- Three measures of the inflation target (the midpoint) are used:
 1. Annual official target
 2. Straight line monthly interpolation
 3. Smoothed monthly interpolation using HP filter
- Three measures of average deviation of actual from target: mean absolute deviation, normalized mean absolute deviation, and statistical half-life.
- Two definitions of large deviations as well as measures of their frequency, average duration, & maximum duration
- **Key findings:** Deviations of greater than 1% are common & persistent. Apart from Chile, DCs perform better than EMEs

Summary: Part II - Explanation

- Two basic sets of regressions:
 1. Cross section – country averages
 2. Panel – unbalanced (pooled & fixed effects)
- Dependent variable: mean absolute deviation - MAD
- Explanatory variables:
 1. RISK – Institutional Investor's rating (0-100) [-]
 2. CBI – Central bank independence (0-1) [-]
 3. TARGET [-] & RANGE [-]
 4. Lagged dependent variable
- Control variables: Deviations in price of oil and exchange rate
- **Key findings:** RISK normally significant; CBI sometimes

Major Comment #1: Absence of Theoretical Framework

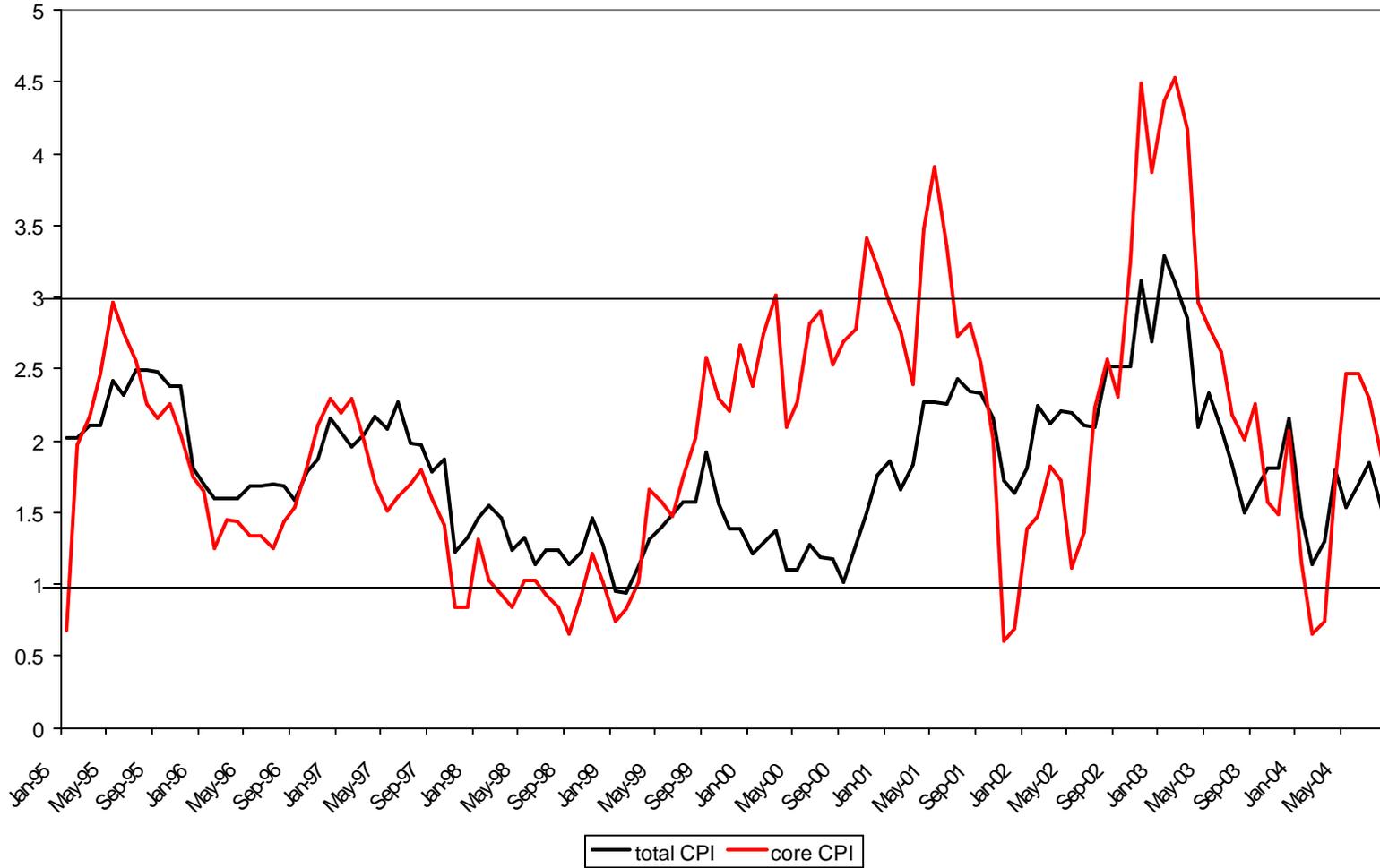
- The paper lacks a theoretical framework; it makes no reference to recent important developments in optimal monetary policy and central bank behavior under inflation targeting (e.g. work by Woodford, Svensson et al)
- There are two important consequences:
 1. The paper contains almost 20 different measures of deviations of actual inflation from target. Theory would provide some guidance as to which measures are the most relevant.
 2. Most models of optimal monetary policy imply a trade-off between the volatility of output and the volatility of prices and inflation. Most of the measures of central bank performance used in this paper ignore the volatility of output.

Major Comment #2: Controlling for Heterogeneity

1. Core versus headline inflation

- In the study, most central banks are said to target headline inflation (3 exceptions), but, in practice, many central banks, including the Bank of Canada, focuses on core inflation
- Authors should consult the inflation or monetary policy reports to determine which inflation rate is, in fact, used for operational purposes
- Because headline inflation is almost always more variable than core inflation, it is important to use a consistent measure across countries

Core and Total CPI



Major Comment #2: Controlling for Heterogeneity (cont.)

2. Emerging market versus Industrialized economies

- The econometric analysis pools these countries when in fact they are fundamentally different.
- The results indicate that (ex. Chile), the EME central banks are almost always less accurate inflation targeters

3. Periods of Disinflation versus Periods of Stable Targets

- The study mixes periods of declining inflation targets (disinflation) with periods of stable inflation targets
- In EMEs, successful disinflations almost always depend on fiscal reforms; no controls are included for fiscal policy
- In periods of stable targets, fiscal reforms are less important

Other Comments

- The cross-section regressions use data averaged over time by country; since the sample lengths are different this would induce heteroskedasticity and bias the standard errors.
- The cross section regressions omit the control variables (e.g. US GDP) because they are common across countries, but trade weights could be used to make the controls country specific
- The central bank independence variable is only significant in 6 of the 18 reported regressions; the implication may be that CBI without consistent fiscal policy may not increase credibility
- The RISK variable is the only institutional variable that is more consistently significant, but it is endogenous; thus, the correlation could be spurious

Other Comments (cont.)

- The discussion of the IV estimation was not clear; the same is true for the potential bias due to lagged independent variables
- The nominal exchange variable is assumed to have the same impact on inflation deviations across countries, but these countries have different degrees of openness
- A data appendix is needed to keep track of all the variable definitions and their sources

Concluding Remarks

- The authors should be congratulated for assembling a very detailed database on inflation-targeting central banks
- The paper is well motivated and interesting, but further work needs to be done
- A simple theoretical framework should be included to guide the empirical methodology and the interpretation of the results
- The implications of the high degree of heterogeneity in the sample for the empirical results need to be better understood and controlled for in the empirical analysis