

Food Inflation Dynamics and Its Persistence: Empirical evidence from Sri Lanka

Sivarajasingham S.¹ and Mustafa A. M. M.²

Abstract

The core inflation systematically underestimates headlines inflation when food inflation is persistent. This study examines the statistical properties of dynamic behaviour of food inflation, non-food inflation and headline inflation. The data used in this study consist, monthly price indices for all variables from 2003 to 2010. They were collected from Central Bank, Sri Lanka. The empirical analyses are done using descriptive statistics, Confidence ellipse, autocorrelation function, Kernel density function, Box-plot, GARCH model, Granger causality test, co-integration test. The empirical results showed that food, nonfood, overall CPI price series in Sri Lankan are nonlinear, non-stationary series with stochastic trend, I(1). Standard deviation of each inflation rate distribution dominates the mean value. Nonfood inflation has fatter tails, has very high kurtosis ($k=11.44$). Food prices are relatively persistent than non food prices. Food price inflation is not only more volatile ($SD=1.63>0.81$) but also on average higher ($0.99>0.66$) than non-food inflation. The overall shape of the confidence ellipse indicates they are highly and positively correlated. The co-integration analysis shows that food and nonfood inflation series have long run relationship (co-integrated -EG test). Granger causality test shows that food inflation granger cause non-food inflation ($P=0.0031$). In Sri Lanka, food inflation runs higher than nonfood inflation. The difference between food and nonfood inflation is statistically significant ($P=0.04$). The empirical results of this study have important implications for policy makers. A policy focus on measures of core Inflation that exclude food prices can mispecify inflation, leading to higher inflationary expectations, downward bias to forecasts of future inflation and lags in policy responses

Key words: *Food inflation, Core inflation.*

¹ Senior Lecturer, Department of Economics, University of Peradeniya

² Senior Lecturer, Department of Management, South Eastern University of Sri Lanka