



## FORECASTING THE VOLATILITY OF EGYPTIAN INFLATION USING GARCH MODELS

Medhat M. A. AbdelAal, Hisham Abdel-Tawab Mahran Morsy and  
Muhamed Wael Farouq

Received November 28, 2010

### Abstract

The inflation rate series is the one of financial time series that exhibit certain patterns which is crucial for correct model specification, estimation and forecasting, such as Leptokurtosis and Volatility clustering. The objective of the present study is to develop a short-term forecasting model that explores the volatility feature of Egyptian inflation rate. Through sample data set covering the period from January 1996 to July 2010 which includes 175 monthly observations, the present study found that the inflation rate for August 2010 is 1.01010 with 95% confidence interval (-1.04965 to 3.06986) while for September is 1.21618 with 95% confidence interval (-.63268 to 3.06502). The variance of the errors for the same periods will decrease from 1.06 to 0.80 with 24.52% percentage change.

**Keywords and phrases:** inflation rate, volatility, GARCH model.

Pioneer Journal of  
Theoretical and Applied  
Statistics



**PSP** Pioneer Scientific  
Publisher