Inflation, Inflation Uncertainty and Output in Tunisia

Reply to Referee Report

We would like to thank the referee for useful comments and suggestions. Now, we briefly answer to the various items :

1) The English is not fluent and it should be considerably improved.

Reply:

Unfortunately, we do not agree with this first comment. This is not the first time when we write and publish a paper in English.

2) I do not understand what is the "apperceive" hypothesis of Milton Friedman.

Reply:

Friedman's hypothesis (1977) first shows that rising inflation creates a strong pressure to anticipate it, and that the perception of such pressure subsequently increases private agent uncertainty about the level of future inflation rate. Second, the apperceive hypothesis contends that as a result of this increase in inflation uncertainty market prices become a less efficient system for coordinating economic activity, thus causing a decline in output growth. Because Friedman's hypothesis reveals a positive relation between inflation uncertainty and positive inflation surprises together with a negative relation between output growth and inflation uncertainty, policy makers have embraced it as a reinforceable argument for their continued adherence to policies of price stability. To conclude, Friedman believes, instead, that monetary policy is the appropriate tool to fight recessions with and that short term lower rates lead to an increase in short-term output at the cost of long-term inflation.

3) The authors should better explain how empirical works have studied the relationship between price volatility and economic growth.

Reply:

It is clear.

4) The authors should better explain the relationship between expansionary monetary policy and inflation uncertainty. Moreover, to provide a clearer picture of inflation dynamics in Tunisia, the authors should add a plot of the inflation time series.

Reply:

The plot of inflation time series is in Figure 1.

5) When presenting Granger tests, the author should warn about the limits of such an analysis.

Reply:

Granger causality test is sensitive to model specification and number of lags.

6) In the last paragraph of section 2, there is a symbol which I do not understand.

Reply:

It is $\sum \lambda_j < 0$

7) The authors do not explain what is the real inflation rate. Why is it always negative? Without having a definition of the real interest rate, it is very difficult to understand the meaning of the empirical exercises performed by the authors.

Reply:

It is clear.

8) As Dickey-Fuller tests suggest that all the variables are I(1), do the authors estimate the GARCH model on first-differenced series?

Reply:

No.

9) From the estimation of the GARCH model, only inflation uncertainty affects real inflation at the 10% significant level. The authors should try with different specifications of the econometric model to find more robust and convincing results. For instance, if inflation at time t-1 never significantly affects inflation uncertainty, the authors should try with inflation at time t-2.

Reply:

No.

10) Given that the Q-statistics report that the residual of the GARCH model are serially correlated, why the authors do not try to find a different specification of the model which solve the problem?

Reply:

As mentioned on page 4, we re-run the model without the in-mean term. This resolves the serial correlation problem.

11) The evidence supporting the rejection of null hypotheses that inflation uncertainty does not Granger-cause either inflation or economic growth is not very robust. This should be mentioned by the author in the paper. In order to provide a more detailed picture, the authors should also test whether inflation or economic growth Granger-cause inflation uncertainty.

Reply:

No. This is not the objective of this paper.

12) In the Concluding Remarks section, the authors claim that "our findings conclude that recession in economy is essentially due to high inflation uncertainty enhanced by lowering the level of the interest rate of the Central Bank of Tunisia". I do not understand how the empirical results of the authors support this statement.

Reply:

We have mentioned in page 4 that similar results are also found in Katsimbris (1985), Thornton (1988), Jansen (1989), Levine and Renelt (1992), Levine and Zervos (1993), Bohara and Sauer (1994) and Clark (1997). We deduce that inflation uncertainty affects inflation and output with a time lag. Similar results are also found in Cukierman and Meltzer (1986).

Our empirical results support the statement because we simply treat inflation, inflation uncertainty and output in Tunisia.