Inflation, Inflation Uncertainty and Output in Tunisia

Reply to Referee Report 2

Thank you very much for useful comments and suggestions. Now, we briefly answer to the various items :

1. Why is important to analyse the case of Tunisia? Is it an interesting case for a broad audience?
What makes interesting the conduct of monetary policy in Tunisia? It seems to me that the authors just replicate the paper by Fountas (2010) to the case of Tunisia. Thus, what is the exact contribution of the paper to the empirical literature?.

Reply : We think that the Tunisian case is also interesting for a broad audience. Tunisia has made important progress over the last decade toward establishing a sound bank intermediation, deepening its financial market, mobilizing domestic financing, and using indirect market-based monetary policy instruments. Monetary policy is useful to obtain a stable macroeconomic environment in favor of a steady growth.

The lack of causal consensus between inflation uncertainty, inflation and output in literature enhanced by the instability of the inflation rate in Tunisia for the past decades drive us to an empirical approach for the Tunisian case. To our knowledge, our paper is the first paper that tries to answer to this question for the Tunisian case by investigating the relationship between inflation, inflation uncertainty and output in Tunisia using real and nominal data.

We have mentioned in the last second page of our paper that we find a great interest to follow Fountas (2010) who modified the model to include the lagged inflation rate in the conditional variance. Our contribution in this paper is original because Fountas (2010) did not treat the Tunisian case and did not use real and nominal data. The results suggest that inflation uncertainty has a positive and significant effect on the level of inflation in real terms. In this case, it is convenient to identify how the conduct of the Tunisian monetary policy can find its positive impacts improving a more stable macroeconomic environment.

2. Regarding the data section, I think is not correct to say that GDP is measured using the IPI. Rather, you measure output using IPI. Is there any reason that explains why you measure output using IPI rather than GDP?

Reply :

The nominal gross domestic product is measured by industrial production index (2005=100) because we use quarterly frequencies. The GDP is available only with annual frequencies for the Tunisian case.

3. Why are you using the sample period 1998:Q3 to 2001:Q4? Is it just a problem of data availability?

Reply : We would like to draw your attention that data comprises quarterly observations from 1988 Q3 to 2011 Q4. We invite you to read carefully page 3 of our paper.

4. I am a bit confused by the real inflation rate concept. How do you define it? What is the difference between nominal and real inflation rate? How do you estimate something as the real inflation rate?

Reply :

The real inflation rate is defined with LOG (nominal inflation rate +1)

5. I have my concerns about the choice of the unit root test made by the authors. However, I am still more worried about the results. According to them, the inflation rate is a unit root process, and only the rate of acceleration of inflation is stationary. Can then we safely estimate equation (1) ? Also, what is the specification of deterministic components in the ADF test?

Reply :

Yes. Both constant and trend.

6. The authors discuss that importance of the in-mean effects on the GARCH estimation. However, their estimation seems to reject the existence of such effect. What is the implication of such rejection?

Reply :

For the real term model, γ is statistical significant at 10 % level of significance which implies that the existence impact of inflation uncertainty on inflation.

7. Regarding the conclusions, the authors claim that “the recession in economy is essentially due to high inflation uncertainty…”. Don’t you think this is going too far? Also, the authors conclude that “This strategy should find convenient financial reforms as a support […] to cover the best conduct of monetary policy eligible to handle the inflation uncertainty level”. Can you be a bit clearer on what kind of financial reforms you have in mind?

Reply :

Tunisian monetary authorities should make decisions in practice:

1- They should support exporting sectors in a context characterized by external demand drop in traditional markets.

2- They need to intensify efforts at all levels to contain inflationary pressure which takes on an overall and structural feature threatening the economy’s competitiveness and the gradual comeback of its regular pace.

3- They should increase much more the key interest rate of the Central Bank to alleviate the high level of inflation uncertainty.

4- They may promote savings and further boost money market activity.

5- We need to observe an increase of savings remuneration minimum rate to encourage banks to lend loans eligible for investment.

The last recommendation, but certainly not least financial reform for the Tunisian economy is to resort to a rehabilitation of the private sector.