Monetary Policy and Inflation Expectations

Both in the theoretical and empirical literatures, inflation expectations play an important role in determining the dynamics of inflation. Several studies, such as, Ball (1995), Bombim et al. (1997), Erceg and Levin (2003), Roberts (2007) and Kiley (2007) conclude that the costs of disinflation depend heavily on how long-run inflation expectations react to movements in the monetary policy instruments. Other works suggest that the anchoring of inflation expectations make the inflation itself less sensitive to aggregated demand increases [Roberts (2006)], and to supply shocks, such as significant increases in energy price [Hooker (2002)].

The expectations channel works on price formation in several ways: (1) directly – incorporated to prices of products and services. This is the fastest and most intensive way; (2) through wages – used as a reference when wages readjustments are set; and (3) indirectly – with some delay, inflation expectations also affect prices because it changes the ex-ante real interest rate and, therefore, it influences corporate investment decision-making and individuals’ savings.

In this context, it has been widely acknowledged by central banks that inflation expectations surely impact current and future inflations. Therefore, anchoring expectations is crucial to efficiently conduct monetary policy. Anchored expectations impair the propagation and amplification of shocks reducing the impact of inflation shocks on prices, and help to make prices developments predictable. This box investigates how inflation expectations are formed, how it impacts the inflation rate and how central banks react to deviations of inflation expectations from the targeted inflation.
Central bankers, as well as academic economists, gradually became more concerned about how inflation expectations are formed, especially how monetary policy impacts and/or is impacted by inflation expectations. In a recent lecture, the president of the Federal Reserve Bank (Fed) pointed out the important advances in research about the determination of inflation expectations and about its effects on the inflation rate. The speech also highlighted the increasing literature using disaggregated data to investigate the behavior of the price setters, and the importance of the literature on learning. Evans and Honkapohja (2002) and Woodford (2003) use the learning approach to model inflation expectations into general equilibrium models, thereby, weakening the hypothesis of rational expectations. Kiley (2007) uses a diverse approach to explore the interaction between monetary policy and inflation expectation. The paper main contribution poses that restrictive monetary policy reduces long-run inflation expectations.

Regarding the formation of inflation expectation, an interesting issue has been to assess, especially in the case of inflation-target regimes, the actual role played by the monetary policy transparency. The international experience supports the assumption that having an explicit target for inflation has substantial impact on the formation of long-run inflation expectations, as well as on the inflation dynamics.

For instance, for Australia, Canada, New Zealand, Sweden and England, Levin et al. (2004) found evidence that the respective central banks have succeeded in reducing the link between inflation expectations and past inflation. Besides, in those countries, the release of explicit targets for inflation would be associated to a lesser persistence of inflation core measures.

Changes in monetary policy supporting the anchoring of inflation expectations are interpreted as important determinants of inflation dynamics even for countries which did not explicitly adopt inflation targets. In the United States, some stylized facts indicate that inflation is becoming less persistent and less sensitive to shocks. Mishkin (2007) asserts that these recent changes in the American inflation dynamics result mainly from
better anchoring of inflation expectations, which, in turn, would result from changes in the conduct of monetary policy. In Latin America, the search for better anchoring of inflation expectations is determinant in the deflation process, as well as in the maintenance of price stability. Based on post-2009 data on Brazil, Chile and Mexico, studies by Moccero (2006) suggest that monetary policy in these countries would readily respond to changes in inflation expectations, in as much as inflation expectations would react to changes in targeted inflation and in basic interest rates.

With specific regard to Brazil, some studies analyze inflation determinants, aspects of inflation expectations formation, and estimate the central bank’s reaction to deviations in inflation expectations vis-à-vis the target. Minella, Goldfajn, Springer and Muinhos (2003) indicate that the degree of inflation persistence in Brazil decreased after the implementation of the inflation targeting system. The results support that the inflation targeting regime has contributed to anchoring expectations, and that the Central Bank of Brazil has strongly reacted to deviations of inflation expectations to the target trajectory. Similarly, Bevilaqua, Mesquita and Minella (2007) point to the evidence that, on average, the Central Bank of Brazil managed very well the coordination of inflation expectations. Still on Brazil, there is evidence of a two quarters lagged response of the growth rates of inflation expectations to a change in the basic interest rate. A recent BIS study (2008) on several emerging economies shows that the expectation channel has become more important since the adoption of inflation targeting systems in the 90’s.

Analyses of the recent global inflationary outbreak show the reaction of several central banks to the surge in inflation expectations. Balston et al. (2008) conclude that in economies such as Peru, Mexico, Chile, Poland, Hungry, Israel, Egypt and India, the central banks resist to the adoption of a restrictive stance, whereas, in economies such as Brazil, Colombia, China and South Africa, central banks would have attached more importance to inflation expectations by reacting strongly and readily to inflationary pressures revealed by increases in inflation expectations.
None of the mentioned studies admit the assumption of perfect expectations anchoring. This would not be reasonable in face of imperfect credibility and all the shocks that the economies are recurrently subjected. However, it is obvious that the search for greater anchoring of inflation expectations is very important, and have pose a challenge for central banks, particularly, but not exclusively, for those that had adopted inflation targeting.

References


