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Proposal

We develop in this paper an empirical framework that assesses Algeria's central bank behavior between 2000 and 2011, and describes how the policy was established to respond to the ultimate announced objective of prices' stabilization. We propose here to use Taylor rule as to test the relationship between some used instruments of the monetary policy (central bank rate, the interbank market rate and liquidity recovery rate) and the goals of the stated monetary policy goals (controlling inflation and stimulating output growth). Taking into account the high degree of dollarization and the weakness of financial markets, we developed an empirical methodology that address the exchange rate movements' issue. The unobserved variables such as expected inflation and output gap are estimated within the rule using a structural linear Kalman filter algorithm. Our methodology find his origins in the literature dealing with the estimation of real time forward-looking Taylor rule specification.

Following Berger and Weber (2012) development, we use money gap variable as instrument to measure the natural interest rate effect. This approach allows us to track the central bank behavior in this process of stabilizing inflation. Our empirical findings are based on quarterly data covering the period from 2000 to 2011. It is worthy to recall the highly oil dependent and a fairly dollarized nature of the small open Algerian economy. We document that the central bank instruments have weak effects on inflation and output gap.

Key words: Kalman filter algorithm, monetary policy, Taylor rule, reaction function, interest rate, output.

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