The Impact of Central Bank Transparency on Inflation Persistence

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Abstract

In this paper we investigate the effects of Central Banks' Transparency into inflation persistence, using data from 16 countries. Historically, inflation persistence measurements and concerns exist in literature of monetary policy for more than 30 years. In this paper, we will focus on the role of monetary policy in the persistence of inflation. The measurements helped explain many functions of economy, like Ball (1995) explaining inflation fluctuations regarding tougher or looser monetary policy, where the first is more likely to produce more persistent inflation. Other authors tried to measure inflation persistence when Central Banks perform an inflation targeting policy . Alogoskoufis (2017) considered that monetary policy rules targeting unanticipated changes in unemployment rates could improve results in terms of inflation persistence. Diana and Sidiropoulos (2004), focusing on the characteristics of central banks, have shown that sacrifice ratios are lower when central bank independence is higher. In the same spirit, Papadamou, Spyromitros and Tsintzos (2017) suggest that an independent central bank could better manage inflation expectations and therefore inflation persistence despite the occurrence of persistent public investment shocks. In our paper we use data, collected from World Bank's database, regarding 16 countries, where measurements are the Bank's published prices and transparency levels are taken from Dincer and Eichengreen (2014) and Oikonomou and Spyromitros (2017). In order to evaluate, as better as possible, the effects on inflation persistence we use the following variables of interest: Transparency (TRNS), GDP growth (GDPg), Unit Labour Cost (ULC), interest rates (IR) (in case of EU countries we use the EURIBOR and for UK LIBOR) and openness (OPN) (Dincer Eichengreen 2007). To calculate inflation persistence (INFp) we use the formula: $INFp = \rho = (Cov(\pi\_t.\pi\_{(t-1)}))/(Var(\pi\_t))$, where ρ is the correlation coefficient between π_t and $\pi\_{(t-1)}$ and π_t is the annual inflation rate at year t. We apply a rolling window approach, where for each year we consider the previous ten-year inflation rates. Then we apply a panel data analysis estimating from 1998 to 2016, to investigate the link between inflation persistence and central bank transparency. Our findings, after testing for unit root, cross-sectional dependence, heteroskedasticity and autocorrelation suggest that there is a strong and statistically significant reverse effect of transparency on inflation persistence. We use both FE/RE regression model testing with Hausman and F-GLS regression, since T(=19)>N(=16) as well as Prais-Winsten PCSE regression.

Keywords: Inflation Persistence, Central Bank Transparency

JEL Codes : E31, E52

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