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Central Bank independence and inflation: Evidence from emerging countries

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Abstract

This paper is mainly devoted to an empirical study of the legal and real independence of the Tunisian Central Bank as well as to estimating the correlation between the inflationary bias and the real independence of the emerging countries while applying new data sources. Our contribution consists, particularly, in measuring the indicators of legal and real Central Bank independence through applying, respectively, the Jacome (2001) and Cukierman's (1992) methods. In a second part, we are carrying out a descriptive and comparative analysis of inflation relative to the Maghreb countries designed to check the inflationary bias reduction. However, the third part is consecrated to the study of correlation between the real independence and the inflationary bias, performed over a sample of emerging countries with a panel estimation ranging over the period 1971–2004. Our results conform those achieved by Cukierman (1992), showing an acceptable proxy of the real and legal independence as well as the beneficial effects stemming from inflation. These findings conform those of De Haan (2007) and confirm a positive and non-significant correlation between real independence and inflation.
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Keywords: Central Bank independence; Inflationary bias; Legal independence indicator; Turnover; Panel

Abbreviations: TCB, Tunisian Central Bank; CWN, Cukierman, Webb and Neyapti; LS, Loungani and Sheets; CGM, Cottarelli, Griffiths and Moghadam; CM, Campillo and Miron; TOR, real independence index; LVAW, legal independence index.

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1. Introduction

Within the frame of establishing the Euro-Mediterranean zone, the North African countries of the MENA zone have adopted a set of reforms during the recent years. Among these reconstructions, we mention the revision of the Central Bank status, for the purpose of ensuring a much larger autonomy and curbing inflation as a major objective of their monetary policy. The Central Bank independence is nowadays a key concept in the theory and practice of the monetary policy. The credibility contribution, necessary to solve the inflationary bias problem, may be achieved in different ways: the monetary rule (reduction of the discretionary character of the monetary policy), reputation (taking into account the negative effects of the inflationary bias in the monetary decision making), conservatism (reorienting the monetary objective towards the struggle against inflation), and contract (a stimulus system). These solutions ensure the repudiation absence, from which disappear the temporal incoherence and the inflationary bias.

The original theoretical literature analyses concerning the independence and credibility as appear in the studies of Kydland and Prescott (1977), lies in the problem of temporal incoherence and the goodwill to solve it, in particular, that relative to the monetary policy. If such a solution, which consists in adopting a rule-based policy, is relevant under very restrictive hypotheses, it quickly shows its limits especially when the economy is subject to the offer shocks. Some alternatives have been then suggested.

The institutional change is based on the idea that the monetary policy independence from the government can jeopardize the pursuit of the price stability objective. The theories which founded and supported the independence of the Central Bank, mainly those of Barro and Gordon (1993), have noticed that this independence strengthens the credibility of the anti-inflation policy, when it is attached to the political power. The general interest is above any suspicion.

Several similar empirical studies dealing with the same issue have also been carried out, among which are those of Cukierman, Webb, and Neyapti (1992) as well as, Lougani and Sheets (1995) who have built up indicators by which they assess the impact of the Central Bank independence from inflation. Their work shows that more independence coincides with weak inflation. In particular, Cukierman et al. (1992) have found that their legal indicator is significant for the industrialised countries and non-significant for the developing ones, while the rotation rate of the Central Bank governors is significant for the latter countries as well and for all the sample of their study.

Campillo and Miron (1997) and Cottarelli, Griffiths, and Moghadam (1998), have introduced other explanatory variables in their inflation equation in addition to the independence indicator. However, they have ended up with reverse results: for the former authors, the idea of taking into account other relevant explanatory factors other than the Cukierman legal indicator, leads to the rejection of the idea that having an autonomous Central Bank may reduce the inflation level. Cottarelli et al. (1998), however, find that the independence indicator is significant.

Other empirical studies such as those of Fischer and Zurlinden (1997), Walsh (1998), Gärtner (1997), Jordan (1997), and Posen (1998), identify a positive relationship between the independence and the sacrifice ratio, an indicator which establishes a correlation between the variation growth and inflation reduction. The sacrifice ratio estimates the deflation cost in economic growth terms. This cost would be higher in the case of independence. This conclusion is, however, contested by Fischer and Zurlinden (1997) who think that the relationship depends largely on the sample of chosen countries.