THE EFFECTS OF CORRUPTION ON GROWTH PERFORMANCE OF THE MENA COUNTRIES

By Imène Guetat

Abstract

This article aims at testing the effects of institutional characteristics on growth in countries of the Middle East and North Africa (MENA) region. For this purpose, we consider conditional convergence in terms of initial conditions, macroeconomic performance, trade openness, government size, natural resource abundance and institutional and political structures for a sample of 90 countries over the period 1960-2000. We use regional indicators and MENA-specific variables in order to test for the effects of each variable on the growth performance of the MENA economies. We highlight the direct and indirect impacts of both corruption and bureaucratic quality on the MENA growth compared to the other regions of the world. (JEL K4, O1, O4)

Introduction

The recent empirical growth literature has suggested a wide range of variables as determinants of growth. The list includes, among others, initial conditions, macroeconomic performance, trade openness, government size, income distribution, financial market development, natural resource abundance, political stability and institutional quality. The effects of corruption as an institutional variable on economic growth performance have been a topic of debate over the last 40 years. On the one side, there is a view, exemplified by Myrdal (1989) and Shleifer and Vishny (1993), that corruption is detrimental for investment and economic growth. On the other hand, Lui (1985), and others have found it plausible for corruption to be beneficial for economic growth at some levels. However, the empirical evidence has supported the existence of a linear and negative correlation between the level of corruption and the average growth rate of per capita income (see Mauro, 1995; Hall and Jones, 1999). In particular, empirical studies by Tanzi and Davoodi (1997), Mauro (1998) and Gupta et al. (2001) have shown that corruption alters the composition of government expenditure towards less productive activities and, therefore, the greater the government expenses are, the greater the negative effects of corruption.

The main purpose of this paper is to investigate whether certain institutional characteristics have any effects on MENA countries' growth. More specifically, the paper aims to find out if corruption and bureaucratic quality variables have any effects on the long run growth performance of MENA countries. Our analysis considers possible direct and indirect effects of corruption on growth. To capture the effects of institutional characteristics unique to MENA countries and to
distinguish between the effects of corruption and bureaucratic quality in MENA countries and the other regions of the world, region-specific variables are introduced.

The paper is organized as follows. Section 2 discusses the determinants of growth in the MENA region. Using an empirical model based on a large cross-country data set. Section 3 analyzes the effects of specific institutional variables on growth in the MENA countries and compares the effects of different variables on growth across MENA and other regions. Section 4 explains how corruption affects growth indirectly by again using region-specific regressors. Section 5 concludes the paper.

**Determinants of Growth in the MENA Region**

We begin our study of the determinants of growth by considering the issue of global conditional convergence. A global convergence equation is estimated with various determinants of growth to study their respective impacts on growth. Determinants of growth specific to the MENA region are then identified by introducing MENA-specific variables to the global convergence regression. This approach makes it possible to compare each variable's contribution to growth in different regions of the world, including the effects of corruption.

The Relation of Global Convergence: Tests of the Conditional Convergence Hypothesis

Equation (1) shows the $\beta$-conditional convergence as suggested by Barro and Sala-i-Martin (1991) as well as Mankiw et al. (1992):

$$
\frac{\ln(q_{iT}) - \ln(q_{i0})}{T} = \beta \ln(A(0)) + \beta \ln(q_{i,0}) + \beta \ln(X_{i,i}) + u_{i,t}, \quad i = 1, ..., N
$$

(1)

where $\hat{\beta} = -\left(1 - e^{-\beta T}\right)/T$ is an estimator of the speed of $\beta$ adjustment toward the steady state and $q_i$ represents the real per capita income in country $i$. $X_{i,i} = [\ln(n + g + \delta)\ln(s_k)\ln(s_h)]$ proxies the steady state equilibrium of the economy for the period $[0,T]$, whereas $A(0)$ measures the initial level of efficiency of the factors of production. $u_{i,t}$ is the standard error term, independently and identically distributed (i.i.d) both across $i$ and $t$ with a zero mean and a finite variance, $\sigma^2$. Following Mankiw et al. (1992), conditional $\beta$-convergence is hypothesized to take place if $\hat{\beta} > 0$.

The cross section approach to convergence tests is based on the unrealistic assumption that the initial level of technology is identical across all countries, and $A(0)$ is unobservable (Mankiw et al. 1992). Naturally, this assumption becomes even less realistic when working with a sample including developed and developing countries together. The applicability of this approach is further limited by biased OLS estimates produced due to the omission of a relevant variable that is correlated with other explanatory variables.

To solve this lack of robustness in growth regressions, Islam (1995), Caselli et al. (1996) and Berthelemy et al. (1996) estimated the relation on panel data by introducing individual heterogeneity in the form of fixed effects. This process, too, has its drawbacks as highlighted by Temple (1999). Temple (1998) suggested a second method which consists of introducing regional

---

4 The assumption of identical technological level was tested and rejected for 19 industrialized countries by Helliwell (1994).

5 Taking into account the temporal dimension introduces non-desired effects because of the cyclic variations series. Moreover, the method employed to eliminate the influence of the fixed effects reduced the precision of the estimations and