

Environmental regulation in the presence of unrecorded economy

Fatih Karanfil^{1,2}

Article received on 13th, December 2011 Article accepted on 18th, January 2012

ABSTRACT. Both theoretical and empirical studies which do not take into account the existence of unrecorded economy may not provide a complete insight on the effects of fiscal and environmental enforcement policies in developing countries, where unrecorded economic activities have an important weight. This study attempts to fill that void. Two different cases are considered: first, firms' production and emissions are audited with different exogenous probabilities; second, a unique probability-to-audit function is determined to audit both emission and production levels of firms, whether in recorded or unrecorded economy. The paper determines the conditions under which environmental regulations may increase the size of unrecorded economy.

IEL Classification: D43; H32; Q58.

Keywords: Environmental Taxation; Unrecorded Economy; Duopolistic Competition.

RÉSUMÉ. Les études théoriques et empiriques qui ne prennent pas en compte l'existence de l'économie non enregistrée ne peuvent pas donner un aperçu complet sur les effets des politiques fiscales et environnementales dans les pays en développement, où les activités économiques non enregistrées ont un poids important. Cette étude tente de combler ce vide. Deux cas différents sont considérés: dans le premier, la production et les émissions des firmes sont auditées avec des probabilités exogènes différentes; dans le second cas, une fonction unique de probabilité d'audit est déterminée pour auditer les niveaux de production et d'émissions des firmes, que ce soit dans l'économie enregistrée ou non enregistrée. Le papier détermine les conditions dans lesquelles la réglementation environnementale peut augmenter la taille de l'économie non enregistrée.

Classification JEL: D43; H32; Q58.

Mots-clefs : Taxation environmentale ; économie non enregistrée ;

concurrence duopolistique.

^{1.} EconomiX-CNRS, University of Paris Ouest. 200 Avenue de la République, 92001 Nanterre cedex, France. Tel.: 33 (0) 1 40 97 78 15 Fax: 33 (0) 1 40 97 41 98. E-mail: fkaranfil@u-paris10.fr.

^{2.} GIAM – Galatasaray University Economic Research Center. Ciragan Cad. No:36, 34357 Ortakoy, Istanbul, Turkey.

1. Introduction and relation to previous literature

To what extend does the economic theory of environmental regulation explain the unfolding of firms' behavior and would it be adequate to apply it on an "as-is" basis to both developed and developing countries? In order to provide a sufficiently well-developed response to this question one should take into account the weight of unrecorded activities in the overall economy, particularly in developing countries. Since in these countries the size of unrecorded economy is estimated to be very large (see Table 1) the overall impact of environmental regulation should be re-examined both theoretically and empirically. Hence, our primary interest in the problem studied here arose from the fact that the results from the existing literature may not be reliable; thus, for the case for most of the developing countries, attempts to give recommendations and policy implications following previous studies on environmental regulation may not go further than being inadequate and even misleading.

Several papers investigate only unrecorded economy, its causes and consequences: unemployment, increased regulation in the recorded economy, corruption, rise of the tax burden are the most cited causes of unrecorded economy while reduced effectiveness of macroeconomic policies, economic instability, distortions in resource allocations and underinvestment represent its main consequences (Schneider and Enste, 2000; Eilat and Zinnas, 2002).³ In these studies, special attention is given, on the one hand, to the methodological issues in the estimation of the size of unrecorded economy and on the other hand, to the overall macro- and micro-economic impacts of unrecorded activities without providing necessary and useful implications for the environmental policy more specifically for the possible relationship between environmental regulation and the size of unrecorded economy.

Table 1 - The average size of the unrecorded economy in developed and less developed countries

Countries/Continents		Size as % of GNP
Developed	OECD countries	12
Transition	Former Soviet Union	25
	Middle and Eastern Europe	20
Developing	Africa	44
	Latin America	39
	Asia	35

Source: Gerxhani (2004: 268, Table 1).

3. One of the most used definitions of unrecorded economy is from Smith (1994, p.18) who defines it as "market-based production of legal goods and services that escapes detection in the official estimates of GDP due to the efforts of some businesses and households to keep their activities undetected". To conserve space, we do not discuss in detail definition and theoretical and empirical foundations of the estimation of unrecorded economy which are well documented in the literature. For a good overview of these and other issues discussed in this paragraph see for

example Feige (1990) and also Karanfil and Ozkaya (2007).

Download English Version:

https://daneshyari.com/en/article/997451

Download Persian Version:

https://daneshyari.com/article/997451

Daneshyari.com