



A cross-section approach to measuring the shadow economy

Marta Orviská^a, Anetta Čaplánová^b, Jozef Medved^a, John Hudson^{c,*}

^a Faculty of Economics, Matej Bel University, Tajovského 10, 974 01 Banská Bystrica, Slovak Republic

^b Faculty of National Economy, University of Economics, Dolnozemska Cesta 1, 852 19 Bratislava, Slovak Republic

^c Department of Economics, University of Bath, Bath BA2 7AY, United Kingdom

Received 1 November 2005; received in revised form 1 March 2006; accepted 1 April 2006

Abstract

The size of the shadow economy has been investigated by a number of different methodologies. A common approach is the use of macroeconomic data to investigate, for example, the relationship between the money supply and GDP and associate the error term with the shadow economy. We extend this approach to the use of cross-section survey data based on individual responses to estimate the relative size of shadow economy household income as a proportion of declared income in 2002. The analysis suggests that the relative figures for Slovakia and the Czech Republic are 23.2% and 21.8% respectively. The analysis is based on the assumption, which we provide empirical confirmation for, that law-abiding citizens are less likely to participate in the shadow economy. There are various policies open to governments and tax authorities as they attempt to deal with the shadow economy. Increased frequency of tax audits and greater fines are two obvious measures which in many, perhaps most, countries would be justified. Targeting audits at the likely participant in the shadow economy is another. One obvious example would be to target dishonest citizens, i.e. those who have been found to have broken the law within some other context. Publishing the identity of those found to have participated in the shadow economy, hence adding social penalties to legal ones may also be an effective strategy. Finally, publicity campaigns aimed at raising awareness of the damage to a country inflicted by the shadow economy may also be effective in increasing social disapproval, thus increasing the ‘social penalty’.

© 2006 Society for Policy Modeling. Published by Elsevier Inc. All rights reserved.

JEL classification: O17; H26

Keywords: Shadow economy; Transition countries

* Corresponding author. Tel.: +44 1225 385287.

E-mail addresses: marta.orviska@umb.sk (M. Orviská), caplan@dec.euba.sk (A. Čaplánová), jozef.medved@bivs.sk (J. Medved), j.r.hudson@bath.ac.uk (J. Hudson).

1. Introduction

There are various definitions of the hidden or shadow economy. On occasion it is used to refer to all transactions not included in the official statistics, thus including e.g. production within households (Carter, 1984; Feige, 1979). Our concern in this paper is with a narrower definition relating to activities, which should be recorded, and hence taxed, but are not either because they are not reported in full or because they are not reported at all (Macafee, 1980; Tanzi, 1980). The shadow economy as we are interpreting it is therefore the source of a potentially serious loss of revenue to governments, resulting in the possible under funding of public service and an ‘unfair’ burden on honest citizens. It represents the part of economic activity, which goes unrecorded primarily for reasons related to criminal activity. The most frequent example is people simply trying to evade the payment of taxes.

Estimates of the size of the hidden economy vary both between countries over time and also for different countries at the same time. According to Dixon (1999) the size of the hidden economy in 1990 varied from 5.1% of GNP for Austria to 23.4% for Italy, whilst in 1980 the respective figures were 3.1% and 16.7%. There is a general consensus that the hidden economy has been growing in recent years and that it is highest in countries with a large tax burden. But simply because the hidden economy is hidden, its measurement is difficult. Techniques, frequently sophisticated, have been devised to allow such measurement, some of which are discussed below. But different techniques often differ substantially in their estimates of the size of the hidden economy. Inevitably all such methods make assumptions and it is in these assumptions where their weakness lies. This also will be discussed below.

The area is of considerable importance for several reasons. Firstly, with significant errors in the data, testing economic relationships such as the consumption function and building macro-economic models based on these estimated relationships, is a hazardous business. More pertinently from a country’s point of view, governments are being deprived of revenue, with the probable result that the size of the public sector and public transfers falls below its ‘optimal’ level and also the burden of financing the public sector falls unfairly on the ‘honest’ part of society. Moreover illegal activity in one area, such as avoiding taxes, may have knock on effects in other areas, such as the taking of illegal drugs, breaking speed limits and so on. With the process of European integration the policy implications of tax evasion are also important. It has impacts on the process of tax harmonization, but it is also central to competitive policy. There is little point in achieving harmonization of nominal taxes if effective taxes vary widely between the member countries. Other things being equal there will be the tendency for both firms and workers to move from low tax evasion to high tax evasion countries. This may prove a particular problem in border areas. The other problem to mention in this respect is that both the contributions of member countries and their share of the EU budget along several dimensions depend upon their measured GDP. Understating GDP can lead to smaller contributions and greater benefits for the country, which may undermine support for the EU amongst those countries with a relatively small hidden economy.

The subject is closely related to tax evasion. Andreoni, Erard and Feinstein (1998) estimate that in the US over 25% of all taxpayers underpaid their taxes by \$1500 or more in 1988. In developed countries tax evasion is frequently estimated to be at about 20% level of tax revenue. In the USA in 1992 lost revenue through underpaid federal income taxes was estimated at \$95.3 billion. In developing countries the problem appears worse. Krugman, Alm, Collins and Remolina (1992), for example, estimate tax evasion to be 50% for income tax in the Philippines. The literature has revolved around several different focal points. Virtually all theoretical models of tax evasion

متن کامل مقاله

دریافت فوری ←

ISIArticles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات