CONTROVERSY: ON THE USE OF THE 'HIDDEN ECONOMY' ESTIMATES

Huw Dixon

The Isa Upanishad tells us that there are two aspects to reality: the manifest and the unmanifest. To know reality is to know these two together. In the same way, there are two aspects to an economy, the recorded and the 'hidden economy'.¹ In order to understand an economy, you need to know the hidden as well as the recorded. The hidden aspect of the economy consists of a mixture of non-market economics activities (such as home production), illegal market activities (such as prohibited production and distribution of proscribed substances) and legal market activities that are kept hidden for reasons such as tax-evasion.

Whilst many economists have been aware of the existence of significant 'hidden' activities in many economies, it is only since 1980 that a large number of researchers have spent time and effort to attempt measuring or estimating the 'hidden economy' of different countries. This subject is of interest to media and politicians, who often focus on the issue of crime and tax-evasion. However, in many recent contributions economists argue that the 'hidden economy' is simply an estimate for the unrecorded Gross Domestic Product (GDP). Thus EUROSTAT's recent emphasis on 'exhaustive studies on GDP measurement' closely corresponds to the economists concept of the 'hidden economy'.

Economists have tended to estimate the 'hidden economy' through indirect methods, such as money demand. Clearly, had it been possible for the national statistics offices to directly observe and measure the activities which generate the 'hidden economy' then the published GDP could have been suitably adjusted. It is very unlikely that these activities will in general be observable with any accuracy in the near future.² Hence, researchers will keep on producing the 'hidden economy' estimates either following existing methods or by inventing new methods of estimation. However, are the efforts expended on this research likely to yield any useful figures? To some authors the whole exercise is doomed to failure: if we have no direct measure then indirect measures are likely to be no better than guestimates which should be taken at best as interesting novelties. At the end of the day, 'hidden economy' estimates will need to justify themselves in being useful.

¹ Names differ: others include 'black economy', 'underground economy', 'unrecorded economy', 'shadow economy'.

² For example, estimates of the size of the illegal drug industry vary greatly in magnitude. Usually some observation (e.g. volume of drugs seized, convictions for supply/possession) is used and then scaled up to get an aggregate figure. The scaling figure is to a large extent arbitrary and causes the resultant totals to vary by corresponding orders of magnitude. The problem is that by their nature, only the tip of the iceberg of criminal activities is observed.

[JUNE

Before embarking on the discussion on empirical relevance it will be useful to look at some recent figures on the 'hidden economy' estimates published in Schneider (1997) using the standard currency-demand method. If we take them at their face value, the figures in Table 1 suggest that the 'hidden economy' as a percentage of published GNP increased between 1980 to 1990 for all countries in Western Europe and the OECD countries. Should we regard these figures as being at all reliable?

(% GNP)		
Country	1980	1990
Austria	3.1	5.1
Belgium	16.4	19.6
Canada	10.7	13.6
Denmark	8.6	11.2
Germany	10.8	12.3
France	6.9	9.4
Ireland	8.0	11.7
Italy	16.7	23.4
Netherlands	9.1	13.9
Norway	10.6	15.3
Spain	-	21.0
Sweden	12.2	16.3
Switzerland	6.5	6.9
UK ³	8.4	10.2
USA	5.0	6.9

Table 1
Size of the Shadow Economy
(% GNP)

Schneider (1977), p. 43.

Vito Tanzi was amongst the first economists to pioneer the systematic quantitative study of the hidden economy in the early 1980s. However, whilst he has no doubt that the hidden economy is an important and very real phenomenon, he has become largely sceptical about the methods of estimation used. Partly this is due to the vast differences in quantitative magnitudes obtained by different methodologies. However, Tanzi also emphasises the key role that the design and implementation of the tax system has in determining the incentives for hiding economic activity and undermining the stable relationships needed for reliable estimation of hidden activities.

Dilip Bhattacharyya has developed the method of estimating the size of the hidden economy using the money-demand methodology, particularly for UK data. This paper also contains independent empirical support for the 'hidden economy' estimates by estimating a 'government expenditure function' and 'durable goods demand function' using the UK estimates. He also discusses how the existence of the 'hidden economy' distorts the empirical results of the literature on the convergence of growth rates. Another use of the 'hidden economy' estimates he discusses is the analysis of corruption in India.

 $^{^3}$ Figures for the UK according to Bhattacharyya (1998) are somewhat larger: (1980)-13.4% and (1990)-11.2%.

Jonathan Feinstein discusses the detection-controlled methodology and how that is applied to tax non-compliance using U.S. data. This is a direct method of measuring the degree of tax evasion based on a more or less random sample undertaken by the US Internal Revenue Service's 'Tax Compliance Measurement Programme' or TCMP for short. This data marks an important attempt at direct observation, made possible by an official government programme in the United States. Feinstein discusses the issues involved in using this dataset to estimate the degree of tax evasion in the general population.

David Giles argues strongly for using indirect estimation methods. In particular, he advocates the use of the latent-variable/MIMIC (Multiple indicators, multiple causes), which he applies to the New Zealand data.

Lastly, a very sceptical viewpoint is provided by Jim Thomas. He argues that all of the existing methods are guilty of being measurement without theory. Heroic assumptions are made to obtain the estimates that render them unreliable. Whilst he has some sympathy with econometric work, he argues that the econometric methodology is often flawed. He argues that many claims about the hidden economy are largely based on anecdotal evidence and without a clear foundation the search for a magic number giving the size of the hidden economy is likely to be at best fruitless and at worst misleading.

University of York

References

Bhattachayya D. E. (1988). 'The hidden economy estimates and implications for government expenditure. UK 1960–90'. Informal Economics Research Centre, Working Paper No 1.

Schneider, F. (1997). 'The shadow economies of western Europe', *Economic Affairs*, September, pp. 42-48.

F337