Tax Evasion and the Shadow Economy

As long as taxes exist, some people will choose to hide their actions and refuse to pay their taxes. Addressing this issue demands a profound knowledge of the size of the shadow economy, the extent of tax evasion and the reasons why some people choose illegal unofficial work over a standard job. Allignham and Sandmo (1972) have shown that tax non-compliance is basically a cost benefit decision, where the benefits are defined by the taxes that can be avoided and the costs are represented by governmental deterrence measures and the probability of being detected.

Schneider and Buehn (2012a) argue that even although the size of the shadow economy and tax evasion are not congruent, activities in the shadow economy often imply the evasion of direct or indirect taxes, so that the factors affecting tax evasion will most certainly also affect the shadow economy. Based on this reasoning, they elaborate a model with the following seven causal variables to explain the shadow economy: tax and social security contribution burdens, quality of institutions, regulations, public sector services, tax morale and deterrence.[1] The authors perform an empirical analysis of the shadow economies of 38 developed OECD countries over the period from 1999 to 2010

[1] For a more detailed explanation of the variables, see Schneider and Buehn (2012a), Table 1.

using a Multiple Indicators Multiple Causes (MIMIC) approach. This approach allows them to employ a number of potential measures of shadow economic activities simultaneously. Suitable indicators of shadow economic activities are official working time or labour force participation, official GDP and currency demand.[2] The approach assumes that cash is used for transactions in the shadow economy in order to estimate a currency demand function. The corresponding hypothetical money demand necessary to generate official GDP is compared to actual money demand, and the difference - multiplied by the velocity of money in the official economy – allows the calculation of an estimate of the size of the shadow economy.

Based on this methodology, Table 1 shows the estimated average impact of different variables from 1999 to 2010 in selected countries. It indicates that, on average, the level of indirect taxes is the major reason for entering the shadow economy. The authors estimate that 29.4 percent of the shadow economy's size can be explained by indirect taxes, such as a sales tax or value added tax (VAT), and 13 percent by personal income tax alone.

Based on the above findings, Schneider and Buehn (2012b) generate tax evasion estimates for 38 countries from 1999 to 2010. These estimates are based on a survey by Feld and Schneider (2010) of the German shadow economy, and on the assumption that the share of the

[2] The 38 OECD countries are: Australia, Austria, Belgium, Bulgaria, Canada, Chile, Cyprus, Czech Rep., Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Korea, Rep., Latvia, Lithuania, Luxembourg, Malta, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Romania, Slovak Rep., Slovenia, Spain, Sweden, Switzerland, Turkey, UK and the United States.

Table 1

Average impact on the shadow economy (1999–2010)							
Country	Personal income tax	Indirect taxes	Tax morale	Un-employment	Self-employment	GDP growth	Business freedom	Average size of the shadow economy
Austria	18.5	27.4	11.6	12.1	20.5	0.8	9.1	9.8
France	12.8	24.3	15.5	23.2	15.1	0.4	8.6	14.8
Germany	16.6	24.2	8.3	24.3	16.9	0.6	9.1	15.7
Greece	5.8	21.8	10.4	18.0	37.6	0.7	5.7	27.0
Switzerland	17.7	30.7	9.0	9.6	23.8	0.5	8.7	8.3
United Kingdom	18.2	30.8	8.1	14.3	18.0	0.6	9.9	12.5
Poland	6.1	27.8	7.8	26.1	25.7	1.3	5.3	26.4
Portugal	8.1	29.9	8.7	14.6	31.1	0.4	7.2	22.7
Average	13.1	29.4	9.5	16.9	22.2	0.9	8.1	20.3
Note: For data on more countries see Table 10 in the data source.							

Source: Schneider and Buehn (2012a).

Figure 1

Estimated tax evasion as a percentage of GDP

Source: Schneider and Buehn (2012b).
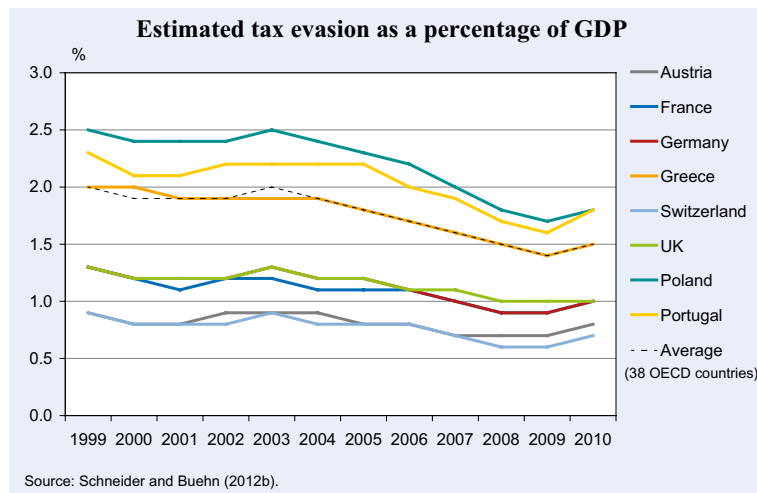
shadow economy due to tax evasion (and not illegal activities) can be explained by the relationship of the indirect tax burden and self-employment.

Figure 1 shows the results of Schneider and Buehn (2012b) indicating tax evasion as percentages of official GDP. The estimated average tax evasion for the observed 38 OECD countries decreases from 1999 to 2010 by 0.5 percentage points from two percent to 1.5 percent. There is a downward trend across countries from 1999–2008. This trend, however, turns into an upward trend for the years after the financial crisis. This might be due to the impact of increased unemployment, which was one of the variables used to estimate the shadow economy, but it is also plausible that the financial crisis itself changed the incentives for tax non-compliance.

With an average tax burden of 39.1 percent of GDP in the EU28 and an estimated tax evasion of 1.5 percent of GDP, the amount of tax money withheld in relation to total tax revenues accounts amounts to four percent. This corresponds to roughly 211 billion euros of tax that is not being paid. Moreover, the estimates of tax evasion deliver only bottom line estimates, as not all channels of the shadow economy are covered.

Oliver Reimers

References

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