## Project GDN\_RRCIII\_100 Tax Evasion, Underground Economy and Fiscal Policies in Candidate Countries

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## NON-TECHNICAL SUMMARY

Progresses in prevention and fighting against tax evasion and avoidance, together with fulfilment of the convergence criteria regarding a sustainable economic growth are fundamental conditions for preparing Romania for its accession to EU. In order to manage in the years to come such sustainable economic growth, a more accurate estimate of the actual size of underground economy is needed – this is what the current project attempted, by making new insights into the mechanisms of forming the taxpayers' behaviour. The general approach of the current research also makes an interesting and original use of household survey data, and a positive fact is that it could conclude with an estimate of the total size of the shadow economy for the whole of Romania over a short and recent time series.

Two Romanian household **surveys** were used for the analysis of the individual household data in order to provide more significant information for the policy-making, because the micro-data, unlike the aggregate ones, can highlight the main participants in the informal economy and the effects on welfare/behaviour of the households. The surveys used were the following:

- The so-called Integrated Household Survey (IHS) provides the main source of information for the study of the households' behaviour by allowing the collection of information on households' composition, income, expenditure and consumption, as well as other aspects of the population living standard. It is carried out on the basis of a rotational sample in monthly equal waves, covering in one year the households of about 36000 dwellings in about 500 urban and rural research areas. A Supplementary Survey on Household Informal Economy (SSHIE) was added to the rotational sample in September 1996, and this, using the same September sample of around 2600 households, was focused on informal economy activities carried out by households. It was divided into 21 sub-sections comprising detailed questions - but indirectly formulated by answering means - about informal economy. Essential for the project's work was to correlate the two data sources for the 1996 survey (IHS and SSHIE, respectively).

- A similar survey was organized in July 2003, with the supporting funds from the GDN project, but the investigation was restricted only to a sample of around 300 households, due to objective reasons. Other impediment of the 2003 survey was concerned the impossibility to compare for the same household in the sample at least two distinct sources of data about its actual income, as it was the case in the 1996 sample surveys (IHS and SSHIE, respectively).

Several areas of research were pursued:

Identification of the regimes related to the households' demand for informal income: considering only two sources of the official registered income of households, they were grouped in: 1) households reporting secondary income and 2) households reporting no secondary income. Then, hyperbolic-type functions were used in order to estimate the share of the secondary income in the total reported formal income and the share of the desired informal income in the total desired income, respectively (using the standard Ordinary Least Squares method). After all the computations, structural prototypes in the case of the two surveys could be outlined. The secondary income share in the total desired income of household was different from its share in the formal actual income. Thus, it was asymptotically increasing as the income provided by the work in the main activity of household increased, tending at limit to constant values: 18.3% in September 1996 and 15.4% in July 2003, respectively. Certain behavioural regimes could be outlined:

- in the case of households having low incomes from their main activity people had a huge availability to work in the informal sector;

- for the rich people, having considerable incomes from their work in the formal sector, their availability for informal jobs became smaller; however still remained certain temptations for the richest people to accept informal jobs in order to supplement their incomes and, perhaps, to avoid taxation.

- despite a general decreasing trend of the desired informal income share in line with the growth of the basic formal income of household, the desired informal income had an ascending trend in absolute terms.

Identification of regimes related to the households' effective informal income: a new grouping of the households in the sample used in the model by the criterion of effective participation in informal sector was performed, and a new structure obtained: households effectively obtaining informal income and households not effectively obtaining informal income, respectively. Also, the regression equations related to the household's effective participation in the informal sector were computed. However, taking into account that other accurate sources of more analytical information related to the proportion of households involved in informal activities are not available at this moment, the regression output from the sample used was expanded to the national level by using only the available distribution of households' population by deciles as it is yearly published by the Romanian National Institute of Statistics. As the empirical available data in the case of the two surveys suggested, the best general fitting function to estimate the household's behaviour seemed to be one expressing a complex inverse relation between the average level of income provided by the work in the formal sector (main activity and secondary activities) and the participation rate in the informal sector (computed as the share of informal income in the total effective income in the case of the sample used in the model). Also, it showed up that the households tend to involve more and more (as proportion) in informal sector as their formal income is lower.

Expanding the estimation of informal income to the national level: the regression output was used to obtain an estimate for the size of informal economy in Romania taking into account the entire population of households and its structure by deciles according to the Romanian National Institute of Statistics published data for the interval 1995-2002. Very synthetically, the conclusion was that over the above-mentioned period the informal income share increased in Romania from around 18% in the total real income of households in 1995 to near 21% in 2002, with a maximum level of around 22% in 1999 and 2000. Under the very improbable hypothesis of a generalised participation in informal activities, the computed share value grew from 29% in 1995 to near 32% in 2002 (with a minimum value of 28% in 1996 and a maximum value of 33.7% in 2000). Deeper interesting conclusions could be extracted in the case of analysing by deciles the dynamic process of involvement in the informal sector.

## Main findings:

Broadly speaking, it was found that the main participants in the informal economy were the poor people: the survival motive was and is dominant in the Romanian informal economy. It was estimated that both in September 1996 and in July 2003 the income from the informal economy amounted to about 1/4 of the total household income (23.6% in 1996 and 22.7% in 2003, respectively). The extension of the analysis to the entire year using the household population structure by deciles suggests that the informal economy has increased, on average, by about 2-2.5% over the period 1995-2002. However, beside the actual level of income, the households' involvement in informal activities was probably influenced by other factors, such as occupation, region, age, education, number of children and many others. Nevertheless, certain **general conclusions** could be outlined:

• People perceive taxation as the main cause of the underground economy.

• Separating the main motivations of operating in the informal sector in two groups, "subsistence" and "enterprise" respectively, the surveys suggest that the subsistence represented a relevant reason for the households' decision to operate in the informal economy, including its underground segment.

• Informal activities supplied a "safety valve" within the surviving strategies adopted by the poorest households.

• Participation in informal economy seems to be not simply correlated with poverty: in the informal economy are involved poor people (having probably a low educational level), as well as rich persons, but their motivations are quite different. The former are practically "forced" to operate in the informal economy (the "subsistence" criterion), but the latter are "invited" to participate in it (the "enterprise" criterion). In both cases, at least during the first stages of transition to a free market system in Romania, the environment was propitious due to legislative incoherence, feeble penalty system in the cases of fraudulent activities, and existence of some accompanying elements of proper informal activity, such as corruption, bureaucracy, etc. However, the household's behaviour related to the participation in informal economy is sometimes fundamentally different between the two extreme groups of population.

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