## THE SHADOW ECONOMY AND ITS INFLUENCE ON AN ENVIRONMENT

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Shadow or underground economic activity is a fact of life around the world, and there are strong indications that it is increasing. Most societies attempt to control these activities through various punitive measures or through education, rather than through reforms of the tax and social security systems which could improve the dynamics of the official economy. Gathering information about shadow economic activity is difficult, because no one engaged in such activity wants to be identified. Obtaining accurate statistics about the allocation of a country's resources in the shadow economy is important for making effective economic policy decisions. It is crucial to know who is engaged in the shadow economy, and with what frequency and magnitude such activities occur. The phenomenon that goes under various names including shadow economy, black economy, underground economy and so on started attracting the attention of economists and sociologists in the second half of the 1970s.

Attempts to measure the shadow economy first face the problem of defining it. There are various definitions of the shadow economy. One commonly used working definition is: all economic activities that contribute to the officially calculated (or observed) gross national product but are currently unregistered. Shadow economy is also known as underground economy refers to a portion of the economy that goes largely undetected by taxing authorities. It includes income generated through illegal means, such as prostitution or gambling, as well as legitimate but cash-based activities such as online auctions or bartering services.

Shadow economy in Ukraine is considered to be one of largest in the world. According to various estimates, informal sector accounts for 40-60% of GDP. Ukraine's economy is a very open one – foreign trade accounts for 50-60% of GDP, but there is no (typical for other economies) feedback between export growth and development of production – this is just one of indicators confirming the existence of a considerable informal sector.

The causes that lead to the creation of a shadow economy are several but, for the most part, they can be compressed into four major categories: taxes; regulations; prohibitions; and corruption. The taxes that have been often assumed to be more connected with the shadow economy are the following: income taxes; value added taxes; excises; social security taxes; foreign trade taxes; and taxes on capital transfers. For these taxes, operating in the shadow created the possibility of evading paying them. Both the rates at which taxes are levied and the capacity of the tax administration to uncover these activities are important. Regulations are also important instruments of governmental policy. many of these regulations raise the cost of operating in some activities or even make it impossible or difficult to operate legally in them. As a consequence, many activities go into the shadow partly to avoid complying with these regulations and partly to avoid paying taxes. Prohibitions are special forms of regulations and they play or can play an important role in pushing people and resources off the official economic track. Another troublesome area is that of corruption. Corruption can be political or bureaucratic and can generate high incomes to those who engage in corrupt activities.

Nowadays firms in an imperfectly competitive formal sector produce a final good using a polluting intermediate good. A large part of the informal sector in developing countries is concentrated in manufacturing, servicing and retailing activities such as bleaching and dyeing of garments, leather tanning, brick manufacturing, automotive repair, metalworking, and hawking. Most of these activities have considerable negative environmental impacts. Effluents from bleaching, dyeing and tanning contain hazardous chemicals which, when disposed of improperly, can pollute rivers and groundwater. Brick kilns in the informal sector are often fired using cheap fuel such as used tires, plastic refuse, and used motor oil which create air pollution. Street vending in many developing countries cause littering and congestion The firms can either produce the intermediate good or purchase it from a price-taking informal sector. Although often characterized as a collection of street merchants, the shadow sector actually includes many pollution intensive activities such as leather tanning, brick and tile making and metalworking. Given the sheer number of such firms in developing countries, the aggregate environmental impacts can be very significant. But controlling pollution created by informal firms is especially difficult — even by developing country standards — for a number of reasons. By definition, informal firms have few preexisting ties to the state. In addition, they are difficult to monitor since they are small, numerous, and geographically dispersed. Finally, they sustain the poorest of the poor. As a consequence, they may appear to both regulators and the public as less appropriate targets for regulation than larger, wealthier firms.

Economists are trying to figure out the nature and characteristics of the shadow economy and develop methods of its calculating. There are a significant number of measurement methods that have been used to estimate the size of the shadow economy in various countries. In general, three approaches to measuring the shadow economy are used: micro-, macromethods, and modeling methods. Most of the methods have been criticized because of the serious flows they have. But all of this methods have disadvantages. Besides there is no method which gives an opportunity to define the influence of the shadow economy to environment. Today one of the important task of economists is to develop and improve methods of identifying and calculating the level of shadow economy for pollution control.

While de-shadowing of the economy should unquestionably be the long-term priority for Ukraine and international community, it is nonetheless important to build capacity for assessment of existing informal sector, improve methodologies for such assessments to allow for relevant adjustments to national development forecasts and thus strategies. Not only the share of shadow economy, but also its direct and indirect implications should be analyzed and used for projections of Ukraine's economic development.