

## Conceptual Aspects of Shadow Economy

IRINA GABRIELA RĂDULESCU\*, CĂTĂLIN POPESCU\*\*, MIRELA MATEI\*\*\*

\* Economy and administration of businesses Department, Petroleum-Gas University of Ploiesti

\*\* Management-Marketing Department, Petroleum-Gas University of Ploiești

\*\*\* Finances, accountancy and economic analysis Department, Petroleum-Gas University of Ploiești  
39 București Bvd., Ploiești, 100680

ROMANIA

[iradulescu@upg-ploiesti.ro](mailto:iradulescu@upg-ploiesti.ro), [catalin\\_nicolae@yahoo.com](mailto:catalin_nicolae@yahoo.com), [mirematei@yahoo.com](mailto:mirematei@yahoo.com)

*Abstract:* The paper tries to analyse the interaction between shadow and official economy. Because there is a real interest in defining shadow economies in economic literature the paper tries to present different point of views regarding the shadow economy definitions. Also, there are presented in details the illegal activities by emphasize the existent controversies about their inclusion in national account or not. The author also presents the causes and effects of the illegal side of global economy.

*Key words:* shadow economy, official economy, hidden activity, tax evasion, black market, dualism

### 1. Introduction

Trying to measure the dimension of underground economy is very difficult since the activities that are covered by such a concept are carried out so that they are not recorded and they cannot be detected. Moreover, if one asks a member of the academy, a specialist in the public sector, an economic analyst or a politician about the meaning of underground economy, one may get various answers to this subject. Yet, there is growing worry about this phenomenon and it is linked to a series of factors that should be taken into account when talking about underground economy.

Among the most important factors, we can mention the following:

- increase of fiscal burden together with an “institutional sclerosis” [1] may lead to an increase of the underground economy and implicitly to the erosion of the basis for taxes and social security. The result may be a vicious circle with a rise of budgetary deficit or taxes, and this further leads to a supplementary increase of the underground economy and, eventually, may lead to a weakening of the economic and social basis of collective commitments;

- in the case of an increased underground economy, the economic policy is based on fake “official” indicators (such as unemployment, official labour force, income, consumption) or on indicators with bad magnitude. Because of such uncertain indicators, the measures that are taken to stop underground economy are questionable;

- one should take into account the effects of the rising underground economy over the official economy.

Firstly, an increased underground economy may give powerful incentives to attract local and foreign

workers outside the official economy and may cause higher competition for such companies. On the other hand, at least two thirds of the income from the underground economy is spent immediately in the official sector and has a positive effect on the official economy [2]. Since underground economy is a contemporary reality all over the world, many societies are trying to control this activity by a series of measures such as punishment, monitoring, economic increase and education. Statistics referring to the number of people who are involved in underground economy, or to the frequency of such activities and their magnitude are crucial to the effectiveness and efficiency of the decisions that are made about the funding resources that are used to stop this activity. Unfortunately, it is quite difficult to get the exact or the correct information referring to the underground activities, be them from the market for goods or labour force market, because, as mentioned earlier, the individuals who are involved in such activities do not want to be identified. Yet, an estimate of underground economy may be considered a scientific hobby to understand the unknown.

### 2. The concept of shadow economy

Although there are books and articles on underground economy, the topic is still controversial since there are disagreements about the definition of underground economy, about the estimate procedures and about using these estimates in economic analysis. It was noticed that there are elements that indicate an increase of global underground economy, but little is known about the dimension of this economy both in the developed and in the developing countries.

One of the most frequently-used definitions presents underground economy as “*the totality of economic activities that are not recorded as such and contribute to the gross national product (GDP) that is calculated officially*” [3]. Roger S. Smith (1994) defines underground economy as production of goods and services, legal or illegal, which escape control in official estimates for the gross domestic product (GDP).

A Romanian dictionary of economic terms, published in 1999, defines underground economy as “*the totality of economic activities that are not declared to the institutions that calculate taxes and social securities and that escape statistical recording and national accountancy*” [4].

It is a well-known fact that there are a lot of underground activities that are included in planned economy as well as in market economy, no matter if they are developed or developing. The agents, who are involved in underground activities escape, avoid or are excluded from the institutional system of rules, rights, regulations that officially govern those economic actors that are involved in production and exchange [5]. The different types of underground activities may be distinguished by means of specific institutional rules that are broken.

According to this criterion, Edgar Feige identified four specific types of underground economic activities: illegal, unreported, unrecorded and informal [6] (see figure 1):

- Illegal economy refers to the “totality of the revenues that are generated by those economic activities that violate the legal status of legitimate forms of trade”. This category includes activities such as production and distribution of drugs, black market of currency exchange, prostitution and pornography.

- Unreported economy refers to the “totality of economic activities that escape or avoid fiscal rules as they are defined in fiscal codes”. This includes both legal sources and illegal sources of the unreported revenue.

- Unrecorded economy refers to “those activities that avoid institutional conventions that define the necessary requirements for the report to the governmental agencies for statistics”.

- Informal economy includes the “economic activities that avoid costs and are excluded from the rights and benefits that come along with leasing, work contracts, loans and social securities”. It includes that revenue that is generated by economic agents that operate informally.

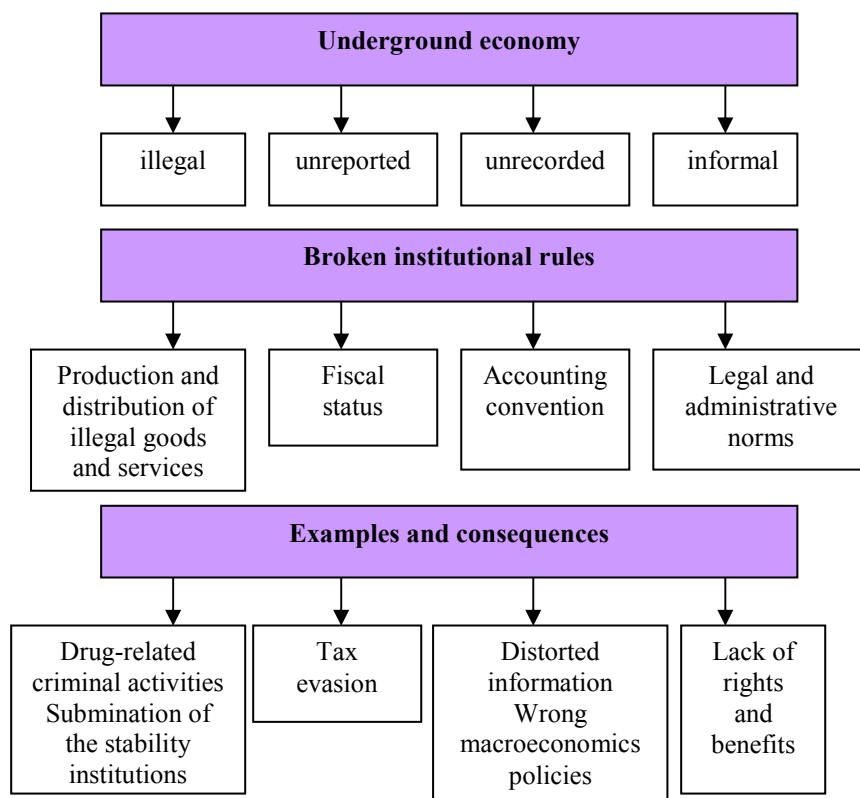


Fig. 1 Classification of underground economy

Source: Edgar L. Feige, *Revised Estimates of the Underground Economy: Implications of US Currency Held Abroad*, in „The Underground Economy: Global Evidence of its Size and Impact”, Owen Lippert, Michael Walker, The Fraser Institute, Vancouver, British Columbia, Canada, 1997

Underground economy may also be divided into the following categories, according to the definition accepted by the United Nations (UN), the Organization for Economic Cooperation and Development (OECD) and by the European Union (EU):

- *Undeclared legal productive activities*, including activities that are not recorded at state level by means of national accountancy and those activities that are not declared at financial administrations;

- *Illicit productive activities* such as drug production and trade, weapons trade etc.

As far as the *illegal* activities are concerned, there have been a lot of controversies about their inclusion in the national accounts or not.

The main arguments in favour of their inclusion are the following [7]:

- *the new version of the National Accountancy System*, signed at the International Convention in 1993, mentions that both illegal and legal activities should be recorded;

- *distortion of aggregates in national accountancy* appears the moment when illegal operations are not recorded in accounts and the result is that the given economic indicators will be false if these accounts are taken into account. For example, if the sums that refer to illegal goods and services are not recorded in accounts, the sum for consumption expenses will be underestimated, while the sum for savings will be overestimated.

- *internal coherence of national accounts* – national accounts are an integrated, complete system. The information referring to a column cannot be modified or excluded unless this action has repercussions on the information referring to important indicators in other columns or accounts.

- *comparability* – the information in national accountancy is used to analyse the evolution of a certain economy in time and to compare it with other economies. The range and importance of illegality in economic activity vary from one country to another. Carrying a thorough comparison of the economic activity in different countries presupposes inclusion of all legal production in the national accounts. The status of numerous goods when compared to the law has changed in time. A valid comparison of the level of economic activity in time is achieved by including the totality of production in accounts. If this is not done, discontinuity appears if the status of a product is altered when the economic situation is not changed (the effective level of production and occupation). The economic information referring to the countries where a high proportion of the active population is involved in illegal activities will be slightly falsified by excluding them.

- *coherence of definitions* – it always starts from the hypothesis that the undeclared legal activity, a component of underground economy, must be integrated in national accountancy. A large part of the underground activities is illegal; thus, not declaring revenue out of fiscal reasons is illegal. One may operate a distinction between the revenue from an illegal operation (such as selling heroin) and the revenue from a legal operation which further leads to a crime (for example, not declaring revenue).

The main arguments in favour of their exclusion are the following:

- *The representatives of several countries agreed that such activities are “bad activities” for the entire economy, in other words, such activities do not have a contribution to the well-being of the society, while the national accounts have as main objective measuring the well-being.* But national accounts do not measure the well-being of a society, but the economic activity. The value of a good is given by its market price or, if own production is involved, by the best approximation of the price. Accounting for an operation does not necessarily mean that it should be tolerated.

- *Some specialists consider that illegal activities should not be taken into account due to the lack of accurate data.* Thus, the implicit hypothesis is that the level of illegal activities is zero, which is obviously a false observation.

The scheme in figure 2 below represents a bird's eye view on the economic activity. Within productive activities, underground economy includes, on the one hand, the so-called “black economy”, made from unrecorded companies and companies that carry dissimulated activities, and on the other hand, includes the illegal activities, such as drug trade, weapons trade, human trafficking. Unproductive activities include both illegal activities (theft, hostage taking, blackmail etc.) and legal activities (working in private households, charity, and barter) [8].

Consequently, a precise definition is difficult to be formulated, if not quite impossible, and this is mainly due to the complexity of the phenomenon and to the fact that underground economy is “running water”: it easily adapts to the changes within an economic, fiscal, judicial, moral system [9].

As mentioned before, the concept of underground economy covers diverse activities: illegal (trafficking, corruption and others) and legal, that are not recorded at the level of national accountancy (working home, volunteering) or that are not declared at social and fiscal administration (fiscal fraud, working on the black market). Moreover, the forms of underground economy vary in accordance with the economic systems and other local specificities.

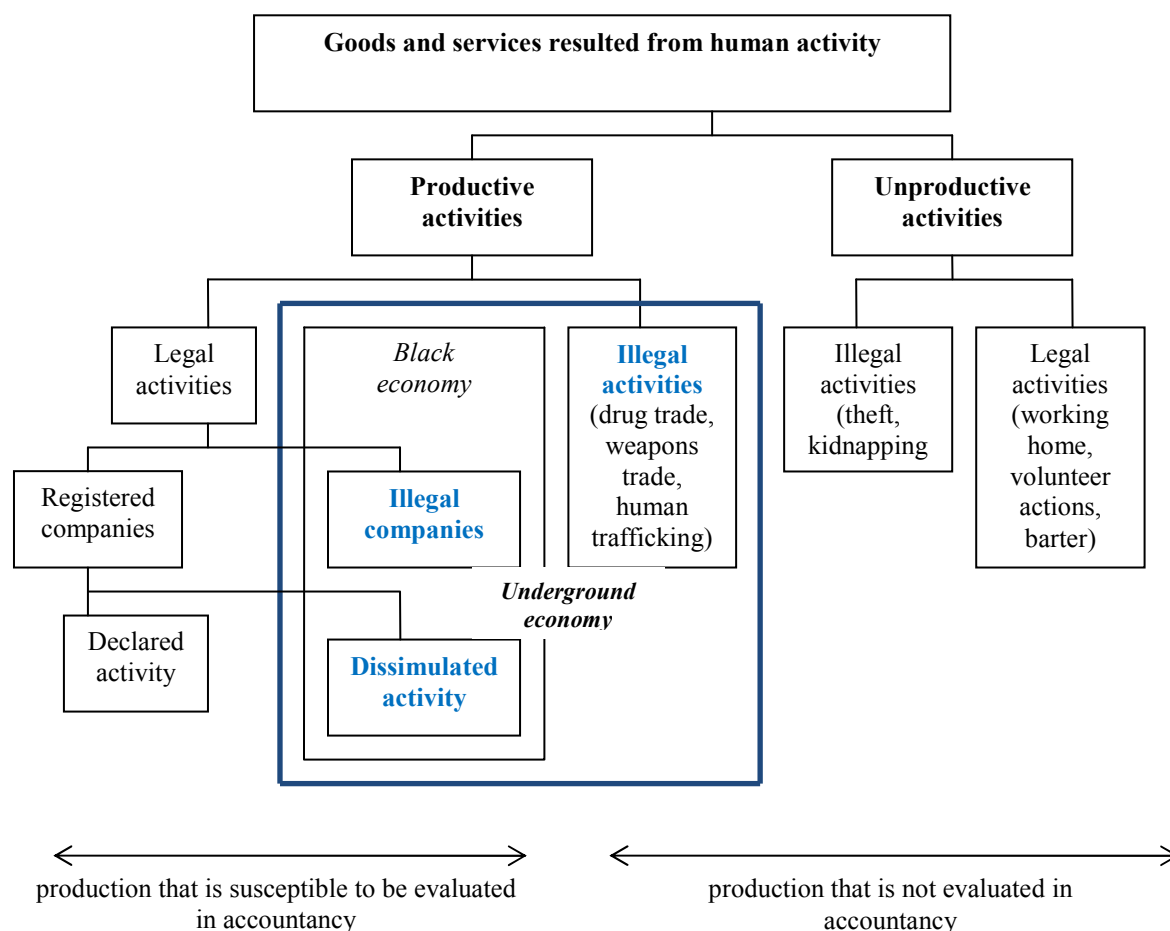


Fig. 2 The place of underground economy  
Source: INSEE – Economie et Statistique nr. 226

Pierre Pestiau, a specialist in this field, considers that underground economy includes the “totality of economic activities that are carried out at the border of criminal law, social and fiscal laws, or that escape the reviews of national accountancy”[10]; in other words, underground economy puts together illegal hidden activities and private activities.

Pierre Rosanvallon suggests another distinction between “occult economy” and “autonomous economy”. The concept of underground economy exceeds the area of domestic activities. It includes the totality of the underground activities that are not dealt on the market, and they are considered “occult”. These phrases suggest that there is a “good” underground economy. One could notice that some goods and services may be obtained more economically from a social point of view if they are produced in a limited area: individual actions, family, volunteering (see figure 3).

The importance and the profile of underground economy differ from one country to another. Yet, one may notice there are some similarities; for example, in the member countries of OECD as far as “black

practices” are concerned ad their motivations (avoidance of direct and indirect taxes and social securities).

Before making the reforms towards a market economy, Eastern countries used to have their own private sector: underground economy. Until the fall of the communist regime and planned economy, these countries witnessed a parallel economy, totally illegal, which Grossman called “*secondary economy*”. The movements from the end of the ‘80s could not threaten this type of economy. The importance of the Eastern secondary economy cannot be easily measured due to a relative trust of the official statistics on the underground economy, of economic alterations and law uncertainty. Before 1989, state omnipresence and rarity of goods led to a private underground economy that prospered under the shadow of planned economy and was often tolerated. The degree of repression depends on the public power and particularly on the economic situation as long as underground practices have a regulating role of poverty.

Repression also depends on the degree of corruption of local representatives and on the visibility of underground economy.

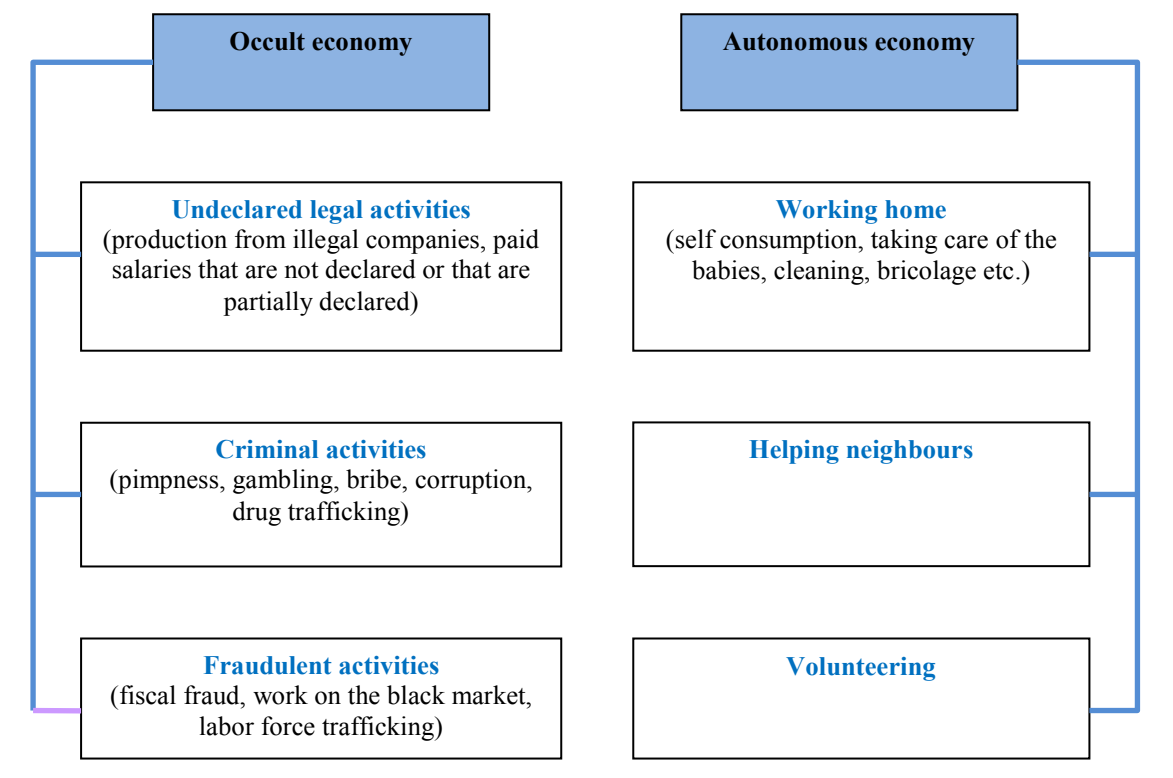


Fig. 3 Comparison between occult economy and autonomous economy

Source: Marc Debare, *Les milliards de l'ombre de l'économie souterraine*, Hatier, Paris, 1992

Secondary economy is based on the transfer of production from the planned sector to the unofficial sector. Underground economy is thus developed by means of turning into a parasite of the official economy. This type of economy answers the deficiencies and the rigidity of planned economy and answers particularly to poverty, standardization and poor quality of products.

If secondary economy is meant for the production of goods that will be consumed or exchanged on the parallel markets, the underground activities in planned economies have the same varied forms as the ones in the *industrialized countries*.

Transition towards political plurality and market economy in Central and Eastern Europe favoured the temporary development of new illegal activities. Economic alterations limited some forms of parallel activities that are specific to planned economy. Yet, former socialist countries face the development of mafia-like activities. Companies from these countries could build low-cost quality improvement model in order to sustain their performance, so a global growth businesses is achieved [11].

The general economic situation of *developing countries* is heterogeneous. In these countries, unofficial economy is the dominant way of production and determines the level of development. It is often said that under-developed economies are thought of as being

“dual”. In these countries, one may distinguish between two fundamental forms of unstructured economy:

- *A primitive form that includes agricultural self production and everything it involves.* It includes activities that come directly after the domestic activities and it often happens that a border between the two is difficult to be established.

- The other form includes *handicraft, trade or small scale activities*. Their multiplication rate is related to rural exodus and demographic boom which further leads to urban increase. Proliferation of these activities is carried out within the framework of the law and escape state control. Local public authorities tolerate these activities because they absorb the labour force and reduce poverty.

### 3. Causes and effects of shadow economy

Numerous studies prove that *the fiscal pressure and the increase of contributions for social securities* are major factors for the development of hidden economic activities (see figure 4). They increase the opportunity cost of legal economic activities and finally reduce work profitability in the official sector. The higher is the difference between the total work cost in the official sector and the after tax income, the higher is the desire to avoid this difference and work “on the black market” [13].

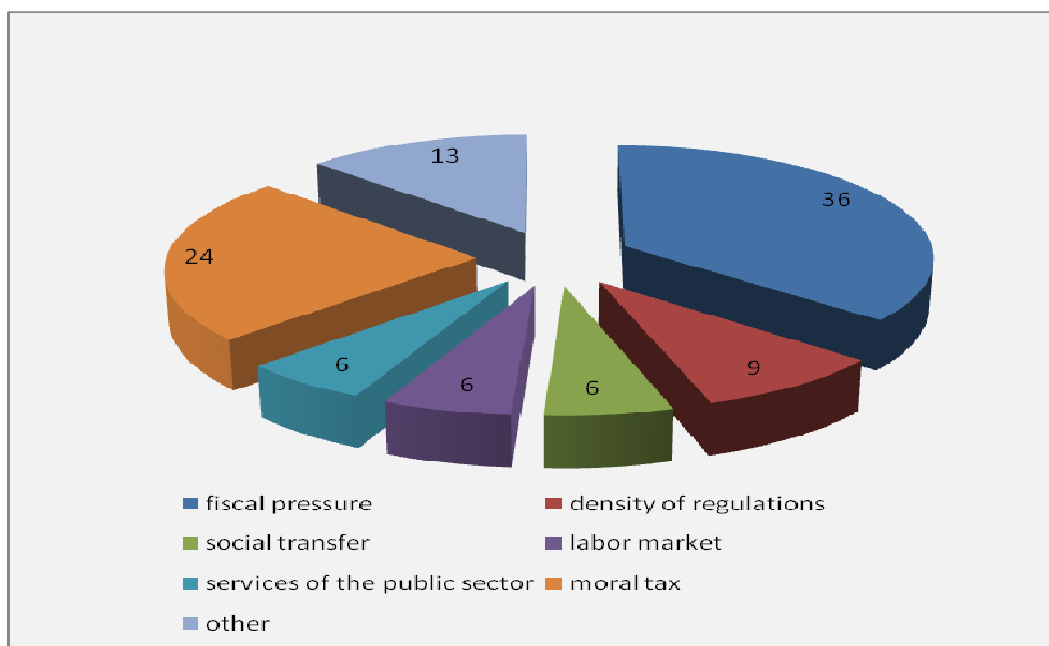


Fig. 4 Causes of shadow economy

Source: Schneider, F., Shadow economies and corruption of 145 countries all over the world: What do we really know?, *Discussion Paper, Institut für Volkswirtschaftslehre, Johannes Kepler Universität Linz, 2006*

The high number of *laws, rules and regulations* is another cause of the rise of underground economy. Although the regulations on the labour market that protect the workers have positive effects in the long run, they are perceived as a limitation of personal freedom. Moreover, following the law equals with supplemental costs and may have a negative influence on the production possibilities and on companies' profitability. The increase of the regulations often leads to higher bureaucratic expenses both for individuals and for public authorities. These supplemental costs are an incentive for working in the informal sector [12].

*Changes in the labour market* may be another cause of the rise of underground economy. Thus, reduction of working time or reduction of retirement age increased the time that may be used for hidden economic activities. The rise of the salary in the informal sector will eventually lead to an increase of profitability of illegal work. In a similar way, reduction of salary in the official economy will lead to a rise of underground economic activities [14].

It should be taken into account the impact of the profound transformations undergone by all the sectors of modern society and the fundamental role played by human capital in the development of society [15].

In all civilized societies, politicians interfere with economic life and their purpose is to draw a line between legal and illegal activities, and to regulate the economic mechanism. Yet, these interventions do not always correspond to the idea of morality or justice.

This means that people do not think "bad" of "normal" hidden economic activities.

It often happens that people find it very easy to justify their hidden behaviour because their family and friends do the same. The changes that take place at the level of individual values refer to all the alterations that appear in the moral values of a group or of an entire population in a country regarding the desire to accept or to decline state regulations. People may change their attitude to the ability of public authority, moral tax or to the hidden economic activities. Generally speaking, if there is high trust in public authority and if individuals have a positive attitude towards fiscal regulations, then the result will be a decrease of the hidden economy. On the other hand, events such as tax increase, which further leads to a rise of social costs for the state, may lead to a decrease of trust in public authorities and to the desire to be involved in hidden economic activities (this is partly due to the need of individuals to balance the loss of their well-being) [16].

*Public services.* A rise of the underground economy may lead to a reduction of state revenue that will diminish the quality and the quantity of public goods and services. It will eventually lead to an increase of taxes on companies and individuals that work in the official sector and will stimulate participation in hidden economic activities. Economically developed countries have less rules and regulations and they have a smaller underground economy, with a balance between low taxes, control over corruption and low level of underground economy. Transition countries, on the contrary, have a lot of laws and regulations that lead to a high level of bribe, taxes and consequently to a high level of underground economy [17].

The analysis of the effects of underground economy focuses on the influence it has on resources and income loss by the state. The impact on official institutions is also important, as it is on norms and rules. Underground economy may be an indicator of legitimacy deficit of the current social order and of the rules that govern the official economic activities.

There are numerous studies referring to the effects of the hidden economy on resource allocation. Markus C. Adam and Victor Ginsburgh have analyzed the implications of the hidden economy on the official development. They have come up with a positive relation between the rise of the hidden economy and that of the official economy, which is demonstrated by the fact that an expanding fiscal policy has positive effects both on formal and informal economy [18].

Underground economy affects the production factors and may have positive and negative consequences (see figure 5).

The hidden economic activity is always associated with a great loss of resources. On the one hand, dissimulation of work on the black market is costly; on the other hand, the state increases expenses on control methods and monitoring of the phenomenon.

An intense hidden economy may lead to a negative economic increase in the official sector due to the impossibility of achieving the necessary volume of public investment associated with a lack of adequate financing.

The official economic sector may move from the competition that is characterized by flexible prices and efficiency of productivity.

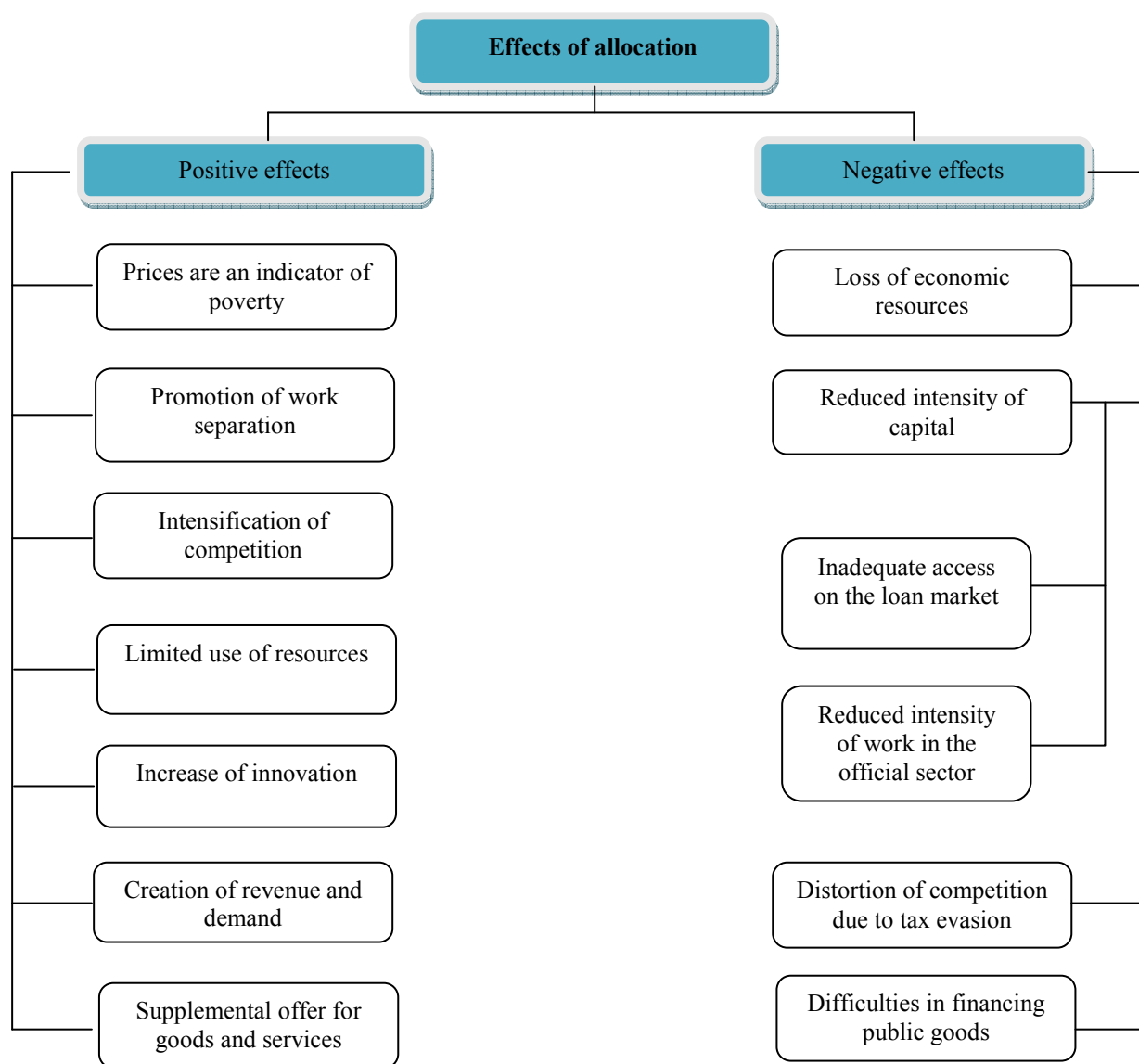


Fig. 5 Systematization of the effects of resources allocation

Source: Schneider, F., Enste, D.H., *The Shadow Economy. An International Survey*, Cambridge: Cambridge University Press, 2002

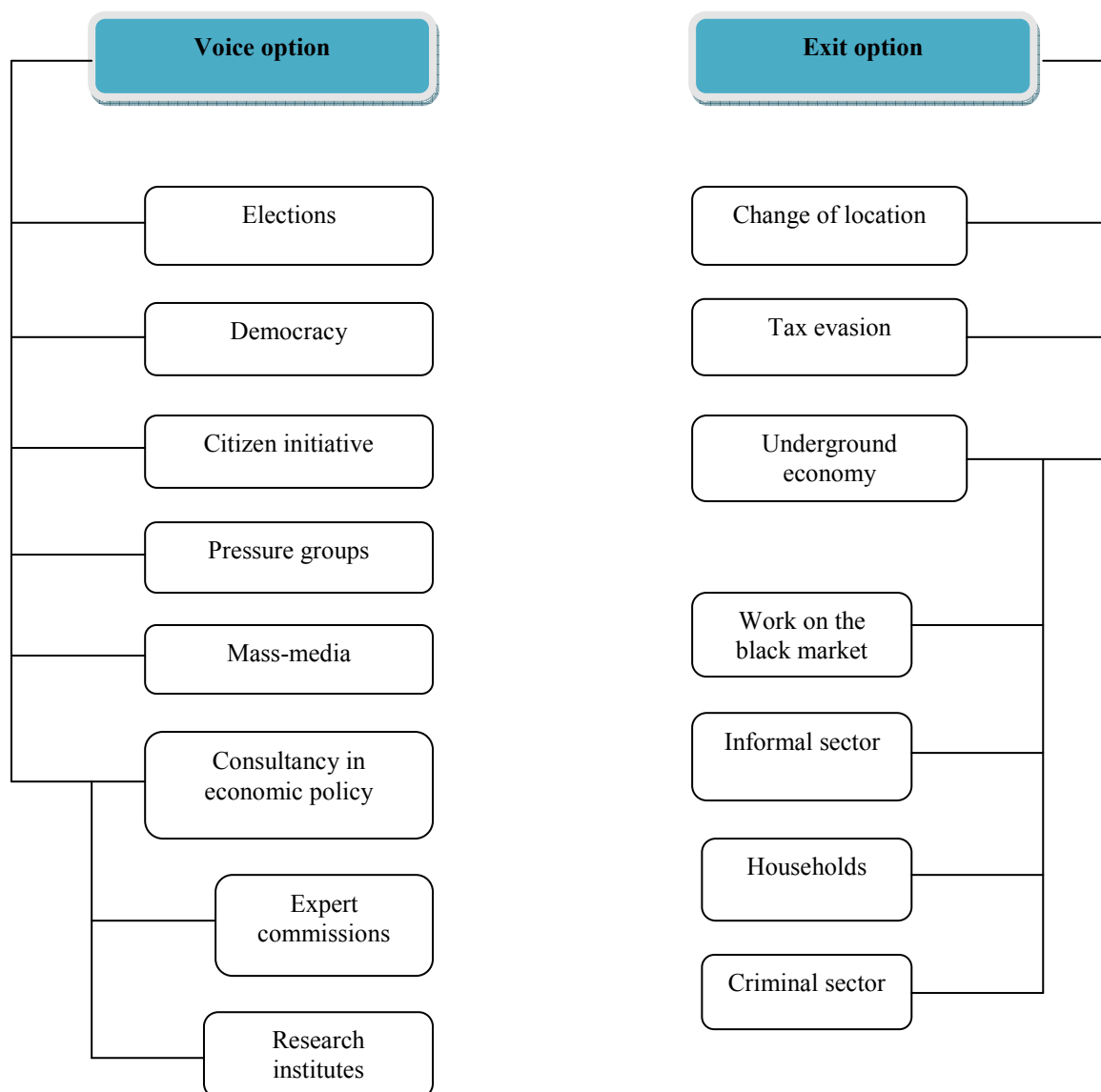


Fig. 6 Behavioral options for companies and individuals

Source: Schneider, F., Enste, D.H., *The Shadow Economy. An International Survey*, Cambridge: Cambridge University Press, 2002

In the underground economy there are no state interventions and this gives freedom to the consumer and to flexible prices. Consequently, one may say that underground economy has the “ideal” conditions for an optimum allocation of resources, being the cheapest alternative for small companies in developing and transition countries. Underground economic activities allow the increase of work separation. Thus, many of the services that are too expensive and non-existent in the official economy may be satisfied by the informal sector. The main argument is the fact that, at this level, the official legal framework is avoided since the revenue is hidden from the public authorities.

One may wonder of underground economy intensifies or distorts competition. On the one hand, the offer from the underground economy stimulates competition, an efficient production, economic

flexibility and promotion of technological progress. On the other hand, there may be distortions because the companies that work in the hidden sector may offer their goods for a lower price due to tax evasion. Consequently, motivation for work on the black market increases, but in the long run it leads to pressures on public finance.

A positive effect of the underground economy is the fact that it offers an extraordinary potential for innovation especially in transition and developing countries. There are a lot of individuals who have initiative and take risks to find some niche for their products.

Working on the black market is linked to a certain degree of enthusiasm and there are people who are open to the structural changes on the black market, where technical innovations can be easily achieved.



The *stability effects* must be evaluated at the level of the changes in prices, unemployment and economic growth. Stability policies aim at reducing cyclic fluctuations and structural changes by the implementation of some fiscal or monetary instruments. A successful fiscal policy must be based on correct macroeconomic information. Development of the underground economy distorts the economic indicators in the official statistics and may lead to wrong political decisions. The possible distortions may appear in an incorrect dimension of the GNP, with a wrong calculation of the rate of economic growth if the hidden economy has a higher/slower increase rhythm as compared to the rhythm of the official economy, with high rates of inflation, if prices in the underground economy increase slower than in the official economy, and with a wrong rate of unemployment, which may be higher if the people working in the informal sector are registered as unemployed.

In the underground economy, the distribution effects cannot be easily estimated. Income effects vary considerably, partly because there are geographical and staff differences according to a region, industry, size of household and moral values. There are a lot of possibilities to avoid payment of taxes both by companies and by people with high income. This asymmetrical distribution of chances makes the people from the “middle” class go towards the illegal activities that are the only possibility of avoiding taxation.

In the past years, there have been talks about a strategy to fight against underground economy and it was called “the two-pillar strategy”, functioning as a recommendation for rational economic policy [13]. The two aspects of the strategy refer to the policies and measures that have the role of diminishing the interest of companies towards hidden activities (*exit options*) and to the possibility of the citizens to be involved in finding a solution to global problems (*voice option*) [19]. The exit option component gives companies the possibility of changing location in order to avoid a taxation system and to the individuals it gives the freedom to decide to emigrate. An alternative could be getting hired in hidden economic activities. The voice option component gives the citizens the possibility to influence the public opinion by different democratic means (see figure 6).

#### 4. Conclusions

Shadow economies are a complex phenomenon which is present to an important extent in developing, transition and developed countries. People are engaged in shadow economy for several reasons. The analysis of causes of the shadow economy shows that an increasing burden of taxation and social security payments are the major driving forces for its growth.

Nevertheless, around the world, there are strong indications for an overall increase of shadow economy. The size and causes are different for all kind of countries, but there are some comparisons that can be made and that might be useful for social scientist and politicians who need to deal with this process.

#### References:

- [1] Olson, M., *The Rise and Decline of Nations. Economic Growth, Stagflation, and Social Rigidities*, Yale University Press, New Haven, 1982.
- [2] Schneider, F., Further Empirical Results of the Size of the Shadow economy of 17 OECD-Countries Over Time, *Congress of the IIPF Cordoba and Discussion Paper*, 1998.
- [3] Feige, E., The underground economy and the currency enigma, *Supplement to Public Finance/ Finances Publiques*, nr. 49/1994.
- [4] Dobrotă, N. (coordinator), *Dictionar de economie*, Editura Economică, București, 1999.
- [5] Rădulescu, I. G., Theoretical Aspects of Shadow Economy, *Bulletin of the Transilvania University of Brasov*, vol. 14 (49), 2007.
- [6] Feige, E., Revised Estimates of the Underground Economy: Implications of US Currency Held Abroad, in *The Underground Economy: Global Evidence of its Size and Impact*, Owen Lippert, Michael Walker, The Fraser Institute, Vancouver, British Columbia, Canada, 1997.
- [7] Rădulescu, I. G. - *Duality of World Economy*, Collection Duality of World Economy, Editura Universității Petrol-Gaze din Ploiești, 2007.
- [8] Cazenave, J., Economie en sous-sol, *INSEE Antiane*, No.23 Décembre 93, pag.29-32.
- [9] Mogensen, G.V., Kvist, H.K., Kormendi, E. and Pedersen, S., *The shadow economy in Denmark. Measurement and results*, Rockwool Foundation Research Unit, Copenhagen, 1995
- [10] Pestiau, P., *L'Economie souterraine*, Editions Pluriel, Hachette, 1989.
- [11] Kureshi, N., Qureshi, F., Sajid, A., An Empirical Study of Supplier Development Practices in a Developing Economy – SMEs Perspective, *WSEAS TRANSACTIONS on BUSINESS and ECONOMICS*, issue 6, vol. 6, June 2009, pp. 255-268
- [12] Schneider, F., Shadow economies and corruption of 145 countries all over the world: What do we really know?, *Discussion Paper, Institut für Volkswirtschaftslehre*, Johannes Kepler Universität Linz, 2006
- [13] Schneider, F., Shadow economies around the world: What do we really know?, *European Journal of Political Economy*, vol. 21, issue 3, 2005

- [14] Schneider, F., Enste, D.H., *The Shadow Economy. An International Survey*, Cambridge: Cambridge University Press, 2002
- [15] Zira, D., The impact of the economic crises on Romanian labour market, *WSEAS TRANSACTIONS on BUSINESS and ECONOMICS*, issue 7, vol. 6, July 2009, pp. 362-373
- [16] Schneider, F., The Shadow Economies in Middle and South America and their Influence on the Official Economy: What do we know?, *Discussion Paper, Institut für Volkswirtschaftslehre*, Johannes Kepler Universität Linz, 2007
- [17] Johnson, S., Kaufmann, D., Zoido-Lobaton, P., Regulatory discretion and the unofficial economy, *The American Economic Review*, 88/2, 1998
- [18] Adam, M.C., Ginsburgh, V., The Effects of Irregular Markets on Macroeconomic Policy: Some Estimates for Belgium, *European Economic Review*, 29:1, 1985
- [19] Cosea, M., *Romania subterana*, Editura Tribuna Economica, Bucuresti, 2004