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#### CHAPTER 4

### How large (or small) should the underground economy be?

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The existence and growth of the unobserved economy entail both advantages and disadvantages. One of the major benefits is often considered to be the fact that it is one of the most productive and enterprising sectors of the economy, without which the population would be materially much worse off. An Italian author (Martino 1980, p. 2) states, for instance: "The so-called underground economy in Italy[is] a masterpiece of my countrymen's ingenuity, a second Italian miracle which has saved the country from bankruptcy." According to this view, the problem is not that people are active in the unobserved sector (they are simply responding rationally to the heavy burdens imposed upon them in the official economy) but rather the fact that the official economy is badly managed.

The major disadvantage is then thought to be that (a large part of) the unobserved economy is illegal and that its toleration would erode tax morality, leading to a general breakdown of law and order. Also, the falling revenue due to tax evasion is taken to create serious problems for the financing of those goods and services the population desires to have publicly provided. To compare the private as well as the social benefits and costs and to derive therefrom "social optimal" conditions has always been one of the main contributions of economics. Indeed, the theory of quantitative economic policy as developed in particular by Tinbergen (1952) and Theil (1968) provides a well-developed formal apparatus to deal with such comparisons at a macroeconomic level. An aggregate welfare function specifies the value "society" attributes to alternative states of the world, thus enabling a comparison between benefits and costs. This social welfare function is maximized subject to the restrictions imposed by economic scarcity and more specifically by the model of the economy within which the optimal state is sought. The result indicates how the available instruments should be set to secure optimal success. This aggregate maximizing approach can also be used to determine the socially optimal size of the unobserved economy.

In the first section a model is sketched in which the socially optimal use of the marginal tax rate in the official economy, the penalties and

the probability of detection in the unobserved economy, and therewith the socially optimal size of the unobserved economy are determined by using a special variant of the theory of quantitative economic policy, namely, that of optimal taxation. The following section shows that this social-welfare-maximizing approach is open to criticism and that an alternative approach is required. The theory of democratic economic policy is then presented as an alternative framework that is applied to the problem of the unobserved economy.

### The socially optimal size of the unobserved economy

#### *The theoretical background*

Two branches of economic theory are relevant for determining how large or how small the unobserved economy should be from the point of view of society as a whole.

The first branch is the theory of optimal taxation. It is used to determine that tax rate (usually within a given tax structure such as linear taxation) that maximizes economic well-being as described by a social welfare function, taking into account the effect taxes have on the supply of labor and on the production of goods as well as on the distribution of income. This approach was first developed by Ramsay (1927) and has recently received a great deal of attention in the area of neoclassical public finance, particularly in the *Journal of Public Economics*.<sup>1</sup>

The second branch is the economics of crime as championed by Becker (1976), who studies the possibilities for controlling illegitimate activities, looking both at the supply of and the demand for (i.e., the partial neglect of protecting oneself against) offenses.<sup>2</sup>

These two branches of modern economic theory have been brought together only very recently. The first theoretical studies on tax evasion (such as Allingham and Sandmo 1972, Srinivasan 1973, or Singh 1973) are almost exclusively devoted to how individuals react to given tax rates, and choose to declare some part of it, depending on the subjectively expected probability of being caught and fined. Kolm (1973) rightly observes that such studies are primarily concerned with the behavior of the individual. The broader social aspect is only introduced when the public policy issue of how the tax rates should be optimally set is addressed, remembering that the individuals have an incentive to evade taxes and to become active in the unobserved economy.

<sup>1</sup> For surveys see, e.g., Sandmo (1976) or Bradford and Rosen (1976).

<sup>2</sup> This aspect has been particularly explored by Ehrlich (1973) using econometric analyses.

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#### *Application to the unobserved economy*

In an important article, Sandmo (1981) develops a model in which the socially optimal use of the policy instruments and therewith the socially optimal size of the unobserved economy are derived for individuals who have the choice of working either in the official (taxed) or in the unobserved (untaxed) sectors of the economy. The model aptly conveys the basic philosophy of the social-welfare-maximizing approach as applied to the unobserved economy, and it is therefore worthwhile to present its basic features and main result. In order to make his model tractable, Sandmo confines himself to the labor market and to the taxation of personal income. Moreover, the demand side of the labor market receives a very stylized treatment by assuming constant marginal productivities. The incidence of tax evasion on the relative prices of consumer goods is completely disregarded.<sup>3</sup>

The analysis proceeds in two steps. First, the behavior of the non-evaders and evaders is considered. The labor supply of non-evaders proceeds along standard lines: An individual utility function  $U^n = U(C^n, L^n)$  is maximized subject to the budget constraint  $C^n = w^n L^n(1 - t) + a$ , where  $U$  is utility,  $C$  is consumption,  $L$  is labor supply in the official (taxed) sector,  $w$  is the wage rate,  $t$  is the tax rate, and  $a$  is lump-sum income transfer. The superscript  $n$  indicates that the variables refer to the (identical) non-evaders.

The evaders maximize expected utility because they have to reckon with their illegal activity being discovered and punished. They have to consider two types of predicament. They may not be caught, in which case their consumption will be

$$C_1^e = w^e L^e(1 - t) + a + w^e E$$

where  $E$  is the labor supplied in the unobserved economy and the superscript  $e$  indicate that the variables refer to the evaders. Conversely, they are caught, in which case their consumption is

$$C_2^e = w^e L^e(1 - t) + a - b + w^e E(1 - \theta)$$

where  $\theta$  is the penalty rate and  $b$  is a lump-sum fine imposed when evasion has been detected. These two equations constitute the budget constraints belonging to the expected utility

<sup>3</sup> Other simplifying assumptions are that the relative shares of the non-evaders and evaders are fixed and that the individuals within a group are identical. Across groups the utility function is the same.

$$U^e = (1 - p)U(C_1^e, L^e + E) + pU(C_2^e, L^e + E)$$

where  $p$  is the subjectively estimated probability of detection. Solving this constrained maximization problem yields the following qualitative results. The compensated substitution effects  $\partial L^e/\partial t$  and  $\partial E/\partial \theta$  are negative as expected; but without additional assumptions, it is not possible to derive the direction of the effect of increasing the probability of detection and of increasing the tax rate on the supply of labor in the unobserved economy ( $\partial E/\partial p, \partial E/\partial t \geq 0$ ). As usual, the assumptions on the utility functions do not allow to sign the income effects, but for convenience Sandmo assumes that an increase in lump-sum income reduces labor input ( $\partial L^e/\partial a, \partial E/\partial a < 0$ ).

Having analyzed the behavior of the two groups of individuals with respect to given instruments ( $t, \theta, a, b, p$ ), the second step consists of deriving the socially optimal policy. Sandmo takes it as a matter of course that such a policy is undertaken by the government, thus assuming that the society's and the government's optimization problems are identical. Before embarking on the formal social welfare maximization task, it must first be decided whether the preferences for illegal activities should be allowed to count in the social welfare function. Sandmo follows the utilitarian route, assuming that the positive association between the utility of the individual and of society (Pareto principle) is extended to individuals who violate the law. Counting, therefore, the utility of the evaders along with that of the non-evaders, the social welfare function is

$$W = N^n \gamma^n U^n + N^e \gamma^e [(1 - p)U(C_1^e, L^e + E) + pU(C_2^e, L^e + E)]$$

where  $\gamma^n$  and  $\gamma^e$  are the weights accorded to the utilities of the two groups. The government chooses tax rates  $t$ , penalties ( $\theta, -b$ ), and the probability of detection to maximize this utilitarian social welfare function on the condition that an exogenous revenue requirement  $R^*$  is met. Moreover, tax receipts must cover the cost of detecting invaders  $C$ , which is taken to be an increasing function of the probability of detection and of the number of evaders:  $C = f(p, N^e)$ . The government's budget constraint is thus  $R(t, \theta, a, b, p) = R^* + f(p, N^e)$ , indicating that tax revenue depends on the use of the policy instruments  $t, \theta, a, b, p$ .

As Sandmo himself stresses,<sup>4</sup> it is difficult to obtain definite results

<sup>4</sup> "It should be stressed at the outset... that the problems raised are not of the kind which can be resolved unambiguously: the contribution that formal theory can make is primarily to create a framework within which the policy issues can be discussed in a logically consistent manner" (p. 267). and "models of optimum income taxation typically yield few results of general validity" (p. 279).

within the theory of optimal taxation, and even less so when tax evasion and the unobserved economy are added. Nevertheless, he is able to establish the following results for the use of policy instruments:

- 1 The marginal tax rate should have positive marginal tax revenue ( $\partial R/\partial t > 0$ ) because otherwise revenue could be increased by lowering the tax, and a distortion could be reduced without cost. That it is not optimal to be on the downward sloping part of a Laffer curve is a rather obvious result.
- 2 There should (also) be a positive marginal revenue from raising either the penalty rate, the fine  $-b$ , and the probability of detection ( $\partial R/\partial \theta, \partial R/\partial(-b), \partial R/\partial p > 0$ ). In the extreme case in which the welfare of the evaders does not count in the social welfare function ( $\gamma^e = 0$ ), the three policy instruments used to control evasion should be set so as to generate maximum tax revenue (the preceding inequalities then become equalities). This result follows as collecting money from the evaders can be used to alleviate the tax burden of the non-evaders, thereby increasing social welfare.

The results of this rather complicated constrained social welfare maximization are rather obvious as Sandmo himself admits (p. 278). Nevertheless, the socially optimal size of the evaders and therewith of (this part of) the unobserved economy is determined implicitly only through the social-welfare-maximizing values of the instruments, in particular the tax rate, penalties, and probability of detection when active in the unobserved economy. In order to highlight in which way the existence of an unobserved sector affects the results, Sandmo compares them to a situation where tax evasion is ignored, as in Dixit and Sandmo (1977). In this case, a paradoxical result follows: When tax evasion is present, the marginal tax rate should, contrary to the commonly held view, not necessarily be lowered. The reason is that the unobserved sector is also distorted by the penalties imposed, which lead to a suboptimal supply of labor to this sector. Thus, if an increase in the tax rate in the official economy induces people to offer more labor in the unobserved economy, this, *ceteris paribus*, suggests that taxation should be higher (Sandmo 1981, p. 281).

#### Critique of the welfare-maximizing approach

Sandmo himself is not all too confident about the specific results he produced or even about the general approach he adopts. He makes three reservations (pp. 284-7).

The first is that the determination of taxes and public expenditures are completely divorced from each other, a shortcoming that has already been criticized by Buchanan (1976) for the case of the general theory of optimal taxation. Recently, Lindbeck (1980) has convincingly shown that the effects of public expenditures on the incentives to supply labor are of crucial importance. Failing to consider one side of the fiscal account strongly distorts the picture, which puts the results reached by Sandmo (and others) into serious doubt.

Sandmo's second reservation rests on the fact that the utilitarian approach used (in accordance with traditional economic welfare theory) is strictly consequentialist; that is, the policies are to be judged exclusively in terms of the consequences of allocation achievements that follow.<sup>5</sup> It may well be, however, that the judgment is also based on the rules under which the economic system operates.

Third, Sandmo is uneasy about the implicit assumption that the individuals adjust passively to the tax rates and other instruments imposed by the government. An approach that models the interaction between the taxpayers and the authorities would be more realistic because the taxpayers (in a democracy at least) are able to influence tax rates by voting and other means. Sandmo admits, "This might yield an interesting new perspective on the descriptive theory of tax evasion although a normative theory would also be needed to tackle the question of optimal policy choice" (p. 286).

As I will point out in the following section, the three reservations made by Sandmo only scratch the surface, whereas the social-welfare-maximizing approach deserves to be criticized much more severely. Even the reservations made by Sandmo himself are of much greater consequence than he seems to admit. If these reservations and criticisms are taken at all seriously, the whole social-welfare-maximizing approach must be discarded and a new approach to the policy problem chosen.

The main criticism<sup>6</sup> of the social-welfare-maximizing approach for determining the size of the unobserved economy centers on three issues, and these will be discussed next.

<sup>5</sup> For this term and its interpretation see Sen and Williams (1982).

<sup>6</sup> Further criticisms against the standard approach (as exemplified by Sandmo) could be raised. Thus, the model of expected utility maximization used to describe the behavior of the evaders must seriously be questioned. There is a mass of real-life and experimental evidence that expected utility is not acceptable as a positive model of human behavior under uncertainty. A well-balanced survey is given in Schoemaker (1982). No discussion of this aspect is, however, intended in this chapter.

### *The aggregation problem*

Since Arrow's (1951) pioneer study,<sup>7</sup> it is common knowledge that it is in general not possible to construct a social welfare function that meets a set of reasonable criteria on the properties of (1) the individuals' welfare functions and (2) the process of aggregation.<sup>8</sup> This impossibility theorem has been the subject of intensive research, but the basic result has remained the same: The social welfare function cannot in general be constructed on the basis of individual utilities except when extremely restrictive assumptions are made such as near identity of individuals (in which case the aggregation problem is, of course, trivial). A logically consistent preference aggregation becomes practically impossible as soon as multidimensional issues and conflicts between individuals or groups are considered, an aspect of life especially prominent where the conflicting interests of those employed in the official economy as compared to those who are in the unobserved economy are concerned.

### *The problem of empirical operationalization*

Even if it were logically possible to establish a consistent social welfare function, the concept is far from being operational. It seems to be quite impossible, and has indeed rarely been attempted, to attach empirical values to the parameters of a social welfare function. In order to use the results of the social-welfare-maximizing approach to determine the optimal size of the unobserved sector for policy purposes, a rather precise knowledge of the parameter values is required. To circumvent the difficulty of empirically determining the parameters of the social welfare function, the adherents of this approach have sometimes resorted to simulations, inserting numbers they personally think appropriate. Although such a procedure may be useful to test the robustness of the model, it is of course not a satisfactory substitute for determining the parameters empirically.

<sup>7</sup> There are forerunners in the eighteenth and nineteenth centuries who have, in particular, shown that aggregation by simple majority voting may lead to logical inconsistencies, the best known being the Marquis de Condorcet and Charles Dodgson (under the pseudonym Lewis Carroll, the author of *Alice in Wonderland*). For an account see Black (1958).

<sup>8</sup> See the excellent survey book by Sen (1970) and in particular the studies by Plott (1976) and Kramer (1973).

*The presumed existence of a benevolent dictator*

The most important reason why the social-welfare-maximizing approach must be rejected is that it assumes the existence of a benevolent dictator turning the instrument variables as their socially optimal values. The crucial importance of this assumption has been stressed by Buchanan (1975, 1977) and long before him by Wickseil (1896). It can also be seen as a consequence of the utilitarian welfare approach, which "assumes a public agent, some supreme body which chooses general states of affairs for the society as a whole" (Sen and Williams 1982, p. 2). In reality, actors have neither the incentive nor the possibility to maximize the (unknown) social good or joint social welfare function. They simply pursue their own utility. The course of the economy and society should thus be interpreted to be the result of the interaction of decision makers who pursue their own ends. Sandmo (1981, p. 286) devotes three sentences to gaming interdependence of actors but does not draw the necessary conclusion that this prohibits the use of a social welfare function to be maximized.

As has also been pointed out, the theory of optimal taxation applied to determining the size of the unobserved economy assumes as a matter of course that the government is interested in and capable of maximizing the social welfare function. In Sandmo's words, "Given taxpayer behavior the government chooses tax rates, penalties and the probability of detection to maximize a utilitarian social welfare function" (1981, p. 265). There is no reason at all to assume that the politicians in power even try to behave in this way, even if they had the appropriate information. It is much more sensible to assume that politicians behave like everybody else in pursuing their own utility<sup>9</sup>. Indeed, within political-economic modeling there is ample econometric evidence that government behavior can well be explained by self-interest. In the case of politicians, this comprises the desire to achieve ideological ends and to stay in power.<sup>10</sup>

The main conclusion of our critical discussion of the social-welfare-maximizing approach is that government is not an exogenous actor in the political-economic system free to pursue the social good but is dependent on other decision makers, particularly on the support of voters and interest groups. Government sets the instruments at its disposal so as to reach its own goals as well as possible, taking into account

<sup>9</sup> This is, of course, the view propounded by public choice. For surveys see, e.g., Mueller (1979) and Frey (1978).

<sup>10</sup> Examples are Frey and Schneider (1978a,b) for the United Kingdom and the United States.

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the reaction of the other actors, especially with respect to its re-election chance. Both sides of the fiscal account, that is, taxes and public expenditures, are used for this purpose. The procedure of the theory of optimal taxation that takes the tax revenue to be exogenously determined is therefore quite inappropriate.

The basic critical observations raised against the social-welfare-maximizing approach are accepted by a considerable number of economists, even by some leading specialists in the field of optimal taxation. The standard reaction, however, is that although the constrained maximization of a collective welfare function is deficient, it is the only approach available at present.<sup>11</sup> In the next section I shall argue that a viable alternative does exist that may act as a more satisfactory alternative to economic policymaking. This approach may be called the theory of democratic economic policy.<sup>12</sup> It is only in its formative stage and has never been applied to problems of the unobserved economy.

**The unobserved economy and democratic economic policy***Process and outcome*

In a system of decision makers each of which pursues his own utility, the size of the official as well as that of the unobserved economy is the unintended outcome of their actions. The government, in combination with an elected parliament, sets the policy instruments, in particular the tax rate, the penalties, and the probability of detecting tax evasion, taking its goals (e.g., its ideology) into account and the financial and re-election constraints it is subject to as well as the rules and institutions existing at a particular time and in a particular society. The individuals (and firms) react by choosing on the market that combination of work in the official and unobserved economies they find most advantageous for themselves. They also react, however, as citizens. At election time they tend to support the party that, *ceteris paribus*, is likely to put into effect the policy, with respect to the unobserved economy, that they prefer. The citizens' reactions again take place within the rules and institutions existing in the particular society. The political-economic system is thus closed in the sense that the government's actions influence the (potential and actual) taxpayers and voters, and their action in turn influences the government's behavior. It follows immediately that the process is the decisive factor; the size of the unobserved sector is only a consequence. The economic advisers who endeavor to influence the outcome of this

<sup>11</sup> Joseph Stiglitz, private communication, Zurich, March 1982.

<sup>12</sup> See Buchanan (1977), Brennan and Buchanan (1980), and Frey (1983).

political-economic interaction are therefore forced to analyze the political-economic process that brings about the outcome, in this case the size of the unobserved sector. In a liberal and democratic society, the criterion with which to evaluate how well the process functions is how far it satisfies individual preferences. This means that the economic policy analysis moves from an outcome-oriented to a process-oriented view.<sup>13</sup>

The economic policy advisers may in general influence the political-economic process in two different ways. First, they can analyze whether the existing rules (and institutions) that regulate the workings of the political-economic system (government and public bureaucracy) are forced to comply with the individual's preferences. The economic advisers can suggest how the existing rules may be improved upon and how new rules could be devised and introduced.

Second, given the rules, the economic advisers can analyze how far the current political-economic process is able to cater for the individual's preferences and how far there are systematic and significant distortions. On the basis of such an analysis, suggestions can be made of how to overcome the distortions.

The two points of approach are now discussed with an eye to the problem at hand, namely the existence and growth of the unobserved economy.

### *Influencing the rules*

When the rules and institutional arrangements within which the current political-economic process takes place are changed, a different outcome may be expected. There are two main areas in which it is possible to change the existing rules, or to devise new rules in order to bring about a combination of the official and unofficial economy that corresponds more closely to the preferences of the individuals then present.

The first possibility is to put more effective restrictions on the political suppliers, that is, on government and public bureaucracy. Since there is considerable evidence that taxpayers feel overburdened by taxes and government regulations, the most important restriction would be to ity (taxpayer revolution).

<sup>13</sup> As has been mentioned in the preceding, this is closely connected to moving away from an exclusively consequentialist, utilitarian, economic welfare theory point of view. Simon (1978) argues that process orientation is indicated whenever the interaction is complex; this is surely the case for the political-economic system as a whole.

<sup>14</sup> See e.g., Lowery and Caplan (1981).

impose limits on the extent to which the political suppliers may impose taxes and regulations. This would restrict the amount of taxation and regulation the individuals have to bear above the level they would voluntarily consent to in exchange for the publicly provided goods and services. This particular type of excess burden on the individuals lies in the interest of government and bureaucracy, thereby increasing their material well-being and power.<sup>15</sup> Imposing a limit on amount of taxes and on the number and intensity of regulations would reduce the individual's incentives to become active in the unobserved economy, as has been shown by both theoretical and empirical research.<sup>16</sup>

The tax burden can be directly restricted by fixing the maximum share of taxes in national income or by assigning a limited tax base to the public sector. This will ensure that political suppliers do not increase tax revenue beyond a given sum.<sup>17</sup>

It is more difficult to devise rules that put a limit to the regulations imposed on firms and individuals operating in the official economy. There are four different ways in which the burden of regulations can in principle be controlled.<sup>18</sup> The most effective way is to limit the effects of those regulations issued to benefit the administration but damage individuals and firms in the official economy. Whereas this type of control would be ideal, it is difficult or even practically impossible to monitor. Second, the number of regulations issued is restricted. Whereas this type of control is more practical, it could be easily circumvented by issuing fewer, though more comprehensive, regulations. Third, the administrative process, that is, the way the regulatory decisions are taken, is monitored. If the administrative production function were known exactly, this would be equally effective by controlling the administration's output. However, it is one of the public administration's intrinsic characteristics that this production function is not well known. Nevertheless, in most cases, fixing the rules to be observed in administrative decision making is the only control practically possible and is indeed widely used despite its shortcomings. Finally, the inputs going into the administrative process can be controlled, for example, by limit-

<sup>15</sup> The drive of governments to expend more than the citizens desire has been one of the major themes of the economic theory of government (see footnote 9). It is the central point of the paper by Brennan and Buchanan (1980). So far, no well-developed macrotheory of bureaucracy exists within public choice, though Niskanen's (1971) hypothesis of budget maximization could well be generalized from a particular bureau to the bureaucracy as a whole.

<sup>16</sup> See Feige (1982a), Tanzi (1980), or Weck and Frey (1982).

<sup>17</sup> See Brennan and Buchanan (1980).

<sup>18</sup> See also Majone (1981/82), who distinguishes between output, process, and input control.

ing the number of public administrators and/or the financial budget allocated to them. Despite the obvious shortcomings of this control technique, rules restricting the input side of the regulatory process are again in wide use because such rules are relatively easy to design and to monitor.

The second possibility to bring about a more desirable combination of the official and unobserved economy is to force political suppliers to take the individuals' preferences more fully into consideration. If the appropriate rules can be set, an important motive for moving into the unobserved economy is discarded. Research by experimental psychologists suggests<sup>19</sup> that individuals are more inclined to pay the taxes and to observe the public regulations and thus to stay in the official economy if they are more satisfied with the level and structure of public expenditures. One possibility is to shift additional decision-making power to local communities to which the individuals are more closely attached.<sup>20</sup> Such a lively federalism need not stop at the level of communes but can extend down to city precincts or even blocks. Another possibility to make public expenditures and activities more accordant with the population's desires is to create or to extend the institution of popular referenda and initiatives. Thus, economic advisers have many possibilities to suggest rules for creating a balance between the official and unobserved economy, which is better attuned to the individuals' preferences.

#### Influencing the current political-economic process

Given the rules and institutions, all decision makers pursue their own utility in the day-to-day political-economic process. They will only undertake those actions they think will be to their benefit. For this reason, the advisers have little possibility of influencing the economic policy process. However, the decision makers are incompletely informed and are therefore ready to accept advice that helps them reach their own goals. Such informational advice can be addressed to two different kinds of decision makers, the political demanders (the individuals) and the political suppliers (government and public administration).

The information available to political demanders (individuals) about the benefits and costs of the unobserved economy will be systematically and significantly biased for various reasons. The main reason is that the individuals (and firms) who (which) are active in the unobserved economy are not well organized. The advantages of having an unobserved

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sector will therefore not be publicized to any great extent. The demands of the official economy, on the other hand, are better organized and therefore have a better chance of being heard and followed in the political-economic process. In particular, the interests of those working in the unobserved sector are not represented by any trade union. Most individuals work only part time in the unobserved sector and not in their own profession, for which reasons they have little incentive to join the respective trade unions. The existing workers' organizations rightly fear that they lose members when the unobserved sector grows. They have good reason to fight against the existence and further growth of the unobserved economy and to stress its disadvantages and dangers. For similar reasons, the interests of the producers in the unobserved sector will be represented much worse than in the taxed economy. The official producers' organizations actively oppose economic activity moving into the unobserved sector; the firms in the official economy (which finance these organizations) fear cost disadvantages and a reduction in sales due to the competition from the untaxed sector. It may thus be said quite generally that the organizations working in and being financed by the official economy strongly fight the unobserved economy because they lose influence and income by its existence.

On the other hand, the interests of those active in the unobserved economy are badly represented in the political-economic process. On the demand side there is thus a systematic distortion of the political-economic process in favor of the official economy and to the disadvantage of the unobserved economy. Taking this bias into account, the economic policy advisers may try to establish a counteracting influence by (1) informing the population on the advantages of an unobserved economy; (2) improving the possibilities of having the interests of the unobserved economy heard and observed in the political process; and (3) pointing out to political parties that they can win new members and additional votes by people active in the unobserved economy if they care for their interests. Such possibilities exist not only for parties outside the established spectrum such as the "Alternatives" or the "Greens" but also for parties fighting against state intervention. The economic policy advisers therewith have various possibilities at hand to work against the systematic distortion of information and the tendency to neglect the interests of those engaged in the unobserved economy.

The economic advisers may also affect the combination of the official and unobserved economies within the current political-economic process by providing information to political suppliers. Government is not necessarily opposed to the unobserved economy for ideological reasons. Every government has, however, a strong incentive to fight the unob-

<sup>19</sup> See, e.g., Scott and Grasmick (1981) or Spicer and Lundstedt (1976).

<sup>20</sup> See Buchanan (1977) and Frey (1983).

served economy for financial reasons. The larger the untaxed sector, the larger will be the loss of tax revenue. These financial repercussions are so important that they are most likely not compensated by any possible gain in support from the votes of those active in the unobserved sector. The government has a strong interest in using the instruments available to reduce the untaxed economy. The economic advisers have to accept this clearly defined interest; they know that the government will simply disregard any advice pointing in a different direction.

The public administration is even more strongly motivated to oppose the unobserved economy: It loses power and influence when a sector expands in which the workers and firms do not pay taxes and in which its regulations are disregarded.

The analysis makes clear that the economy policy advisers have little possibility of influencing the government's and the public administration's position with respect to the unobserved economy. They are only able to influence the way the policy instruments are applied. The political suppliers will listen to the economic advice given when it helps them to fight the unobserved economy most effectively. At this point the economic advisers have a chance of making their expertise felt so that the policy decisions taken conform as much as possible to the preferences of the individuals.

The government and public administration fight the unobserved economy in three different ways.

The first measure is to increase punishment for activities in the (untaxed) unobserved economy. This policy approach is rather obvious, so it is to be expected that the political suppliers will rely most heavily on it. The economic advisers can inform the government, politicians, and public administrators on the problems connected with using that instrument. They can in particular point out that providing severe punishment of activities in the unobserved economy makes the application of the laws difficult, since both the accused and the courts find such punishment to be illegitimate. An all too high degree of punishment would also reduce or eliminate marginal deterrence: If people are heavily punished already for a small amount of black work, they have little reason not to increase their engagement in the unobserved economy, as the punishment will not be (much) higher. Severely punishing activities in the unobserved sector does not only harm the individuals affected but also hinders the achievement of the goals the political suppliers wish to achieve.

The second policy measure is to reduce the level of tax rates and the number and intensity of public regulations, diminishing the incentive to switch to the unobserved sector. The policy advisers can ensure that

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tax rates are not at such a high level that the maximum tax revenue is surpassed. Setting high tax rates is disadvantageous for both political suppliers and demanders because the tax receipts are smaller and the individuals are unnecessarily burdened.<sup>21</sup> Similarly, economic advice is possible with respect to regulations. In order to find the maximum level of regulations, it is necessary to distinguish between the intensity of regulations and the size of the domain regulated. The political suppliers (especially the public administration) benefit from an increase in both, but if the intensity of regulation is raised, the size of the domain regulated is diminished because the individuals and firms are induced to move to the unobserved sector. The economic advisers can therefore warn the political suppliers not to go too far with the intensity of the regulations because otherwise they would damage themselves by shrinking the domain of regulation.

The third policy measure the political suppliers use to fight the unobserved economy is to make public appeals and to apply moral persuasion in an attempt to increase the sense of guilt for working in the (illegal) unobserved economy. This amounts to an effort to improve tax morality (in the widest sense). So far, little is known about the way in which the preferences of individuals can be influenced. Economists in general are rather skeptical about this approach. Psychological experiments<sup>22</sup> suggest that there may even be a counterproductive effect. The fact that an appeal is made to act morally, that is, not to cheat on taxes, may be taken by individuals as a sign that tax morality is no longer the rule. This may even induce honest taxpayers to join the ranks of the others and to cheat on taxes too. The economic policy advisers can point out the possibility of such counterproductive effects to the government and public administration and can suggest that they therefore should use this policy instrument with care if they want to reach their goals. Tax morality will only improve consistently if the (potential) taxpayers can be convinced that the public expenditures financed by their taxes do in fact yield higher utility to them.

The discussion shows that the economic policy advisers have only a limited set of possibilities to influence the current political-economic

<sup>21</sup> To determine the maximum-yield tax rates beyond which it is harmful for all to go, the theoretical model by Sandmo (1981) discussed previously (as far as it relates to the behavior of non-evaders and evaders) is clearly relevant, as are the empirical estimates of the Laffer curve, such as by Stuart (1981) and Feige and McGee (1983) for Sweden or Feige and McGee (1982) for the United Kingdom. Buchanan and Lee (1982) have shown that it is important to distinguish between a short-run and a long-run view of the Laffer curve. Government acting within a legislative period tends to adopt a shorter run view than public bureaucracy, which is not subject to the re-election constraint.

<sup>22</sup> See Tittle and Rowe (1973).



process and, in particular, the combination between the official and unobserved economy because, on the political level, the actors have well-defined, personal interests they pursue. Nevertheless, the advisers can offer useful information with respect to the use of economic policy instruments. This advice raises the individuals' utility when it is possible to make suggestions that are in the interest of both political suppliers and political demanders.

#### Concluding remarks

The approach to the policy problem of the unobserved economy that presupposes a benevolent dictator able to determine what society's interests are and who would also act accordingly has up to now been the standard one. Evidence of this are the theories of quantitative economic policy and optimal taxation. The basic weaknesses of this kind of view have been discussed, and the alternative view of a democratic economic policy has been sketched and applied to the problem of the unobserved economy. The idea of an exogenous superplanner is given up in favor of a view of the political-economic system in which the decision makers, in particular the government, are endogenous. Within this framework, nobody can a priori say which size of the unobserved economy is socially optimal. Rather, the size of the official and unobserved economies are the outcome of the interactions of self-interested decision makers. This outcome may be influenced and may be made to correspond better to the preferences of the individuals by economic advisers, who can help the decision makers find a consensus on the most appropriate rules for governing the interactions as well as offer advice to the individual decision makers in the current political-economic process.

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## PART II

### The underground economy in Western developed nations: measurement in different laboratories