

# Factors for the formation of inefficient states when using tax incentive regimes

Sokolovskyi, Dmytro

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# Factors for the formation of inefficient states when using tax incentive regimes

#### **Abstract**

The article investigates the problem of adopting the tax incentives regime in certain industries. The general problem of tax benefits is their ineffectiveness, which often leads to results contrary to expected and also to losses in economy. So this paper aimed to define the reasons, factors and loss prevention of failures related to implementing the tax incentives regime.

In order to analyze the subject area, we use the object and process modeling of it. Particularly, we use the optimization models and game-theory tools.

We classified the types of tax incentives regimes in order to distinguish two targets for implementation of tax benefits: increase the government revenue and diversification the product line; and also three strategies of granting tax exemptions: overall, targeted, and individual tax incentives. We found that the strategy of granting overall tax exemptions potentially can lead to "free-rider problem", and strategy of granting the targeted and individual ones can create conditions for arising of adverse selection mechanism. We defined the conditions leading to increase the tax revenues in process of adopting the tax incentives regime. Also the analysis of "principal-agent" model as Nash equilibrium allowed finding the conditions of arising the ineffective norm of interaction between government and investor, when the first satisfies the investor's unjustified claim related to obtaining tax incentives.

Obtained patterns, despite of their non-numerical character, can be useful in business decision-making, because the revealed ineffective norms and states define concrete threats, which should be considered by policymakers in the process of adopting the tax incentives regime.

The future research can be related to extension of formalization of mechanisms of granting tax exemptions and of arising the inefficient states and norms of agents' behavior; to development of mechanisms of prevention of inefficient states in the

process of implementation of tax incentives regimes; to investigate their concrete evidence in the process of adopting the tax incentives regime in actual practice.

**Key words**: tax incentive regimes, tax behavior of government, economic behavior of investors, free rider problem, adverse selection, "principal – agent" model

### Introduction

The purposed article studies the problem of applying incentive tax regimes to several branches, sectors, areas or other groups of economic agents.

The tax regulation is one way of the regulation by government of behavior of subjects of the national economy. It follows from the regulatory function of taxes.

Even liberal economic concepts assume government economic regulation. However, in this case, it is in generally limited to prevention to market failures and incompleteness of supply (and sometimes also demand) on it.

Therefore, government regulation is naturally directed at balancing the information on market, the coordination of contractors' actions, and stimulating a sufficient supply. In particular, tax regulation is most closely related to the last task: to stimulate the increase (or decrease) in output (export or import) of the goods, the lack (excessiveness) of which the market feels, but cannot optimally optimize it on its own.

Tax regulation may realize both for the whole economy and for its several economic sectors: economic fields, economic activities, territories, etc. in this case is talked about the implementation (or nullification) of the incentive tax regime.

# Literature review

The issue of incentive regimes (in particular, the benefits implementation, the further action of firms under the incentive regime and putting out of its action) considered by such economists as Bird (2008), Bondolino, Greenbaum (Bondolino, 2007), Easson, Zolt (Easson, 2002), Hines jr. (1999), James (2009), Klemm (2009), Morriset, Pirnia (Morriset, 1999), Zee, Stotsky, Ley (Zee, 2002).

Subjects of financial, in particular, tax behavior were raised Weber, Fooken, Herrmann (Weber, 2014), Krishna, Slemrod (Krishna, 2003), Laffer, Winegarden, Childs (Laffer, 2011). They researched, among other issues, the problem of tax regulation in order to optimize the agents' economic activity.

Abel (1986), Eckstein, Eichenbaum, Peled (Eckstein, 1985), Pech (2004) studied situations when the implementation of the mechanism of tax incentive leads to the emergence of "adverse selection".

However, a definition of the impact of tax incentives is not an easy task, even for markets in developed countries, more so for less perfect markets in developing countries (Lipsey, 1956-1957).

At the same time, despite numerous works on issues of unsuccessful implementation and operation of regimes of incentive taxation, in our opinion, lack of attention was gave to analyzing the problems of incentive tax regimes from the point of view of an inefficiency of the economic behaviour and the interaction of investors and government, e.g. the emergence of market failure and government failure as well as other inefficient stable economic states, due to government tax behaviour.

The analysis of motives decision making and behavioral factors of the government shows every regulating contains a number of dangers of failing to achieve those goals that are considered the reason of its implementation, and can lead to neither market failure nor government failure (see, e.g. (Stiglitz, 2000)). That is, there is a danger that behavior aimed at preventing a market failure, won't lead to the needed result, but conversely cause the formation of another inefficient stable state in the economy.

On this basis, the purpose of the proposed study is to establish the causes and factors of the economic behavior of the interacting parties, namely investors and government; to outline situations, first of all, economically ineffective, to which may lead the above behavior of agents, as well as the conditions for the formation of such situations; to find, where possible, ways to solve them.

At first hand we consider the behavior logic of interacted contractors, which are the government, that decides whether to implement an incentive tax regime and under what conditions, and also when and in what way to terminate its, and current and potential investors acting in the investigated economic segment.

Formally, tax incentive regimes are divisible into overall, targeted and individual, namely:

- ✓ overall tax incentive regime, if incentives preferences are got by all entities of a particular sector of the economy without exception;
- ✓ targeted tax incentive regime, if the incentive regime applies to subjects that correspond to certain properties, and
- ✓ individual tax incentive regime, if the benefits are granted to winners of the tender of investors' applications in a condition of resource-limited.

Obviously if the study object is not the mutual position of the branches or regions of the national economy (meso-level), the overall regime of incentive taxation fundamentally resembles the procedure for reducing tax burden for a whole economy. Far more differences are observed between him and two other regimes: targeted and individual, since, as against the overall incentive regime or tax regulation for the whole economy, the application of targeted and individual tax incentive regimes has such feature that they are applied selectively - to a set of economic subjects defined by a certain criterion. The above means, in particular, the need to identify the set of potential beneficiaries, that is, the implementation of a criterion for belonging to this set.

There are two main reasons for the implementation of benefits.

First reason is aim to increase budget revenues by the expansion the tax base through decrease tax burden. I.e. it is assumed the decrease of normalized tax burden will further to attract new investors (or what is the same, outflow of acting investors) to the certain field, what will increase the total budget receipts. In this case there is applied either the general economic tax regulation or the overall incentive regime – for the whole economic field (sector).

The second reason is establishment of the presence of one of the types of market failure – incompleteness of the market, i.e. in the shortage of assortment of a certain good of sufficient quality. In the case, benefits is provided targeted or individually,

i.e. for the investors' fulfillment of certain conditions, namely, produce and realize of a certain goods that correspond to specified characteristics.

The government implementing the preferential tax regime may face a number of problems. Providing benefits to increase budget revenues may

- ✓ not lead to an increase in tax revenues:
- ✓ additionally lead to a deterioration of the economic efficiency of the privileged sector, because it will include relatively inefficient investors who would be unprofitable under non preferential regime.

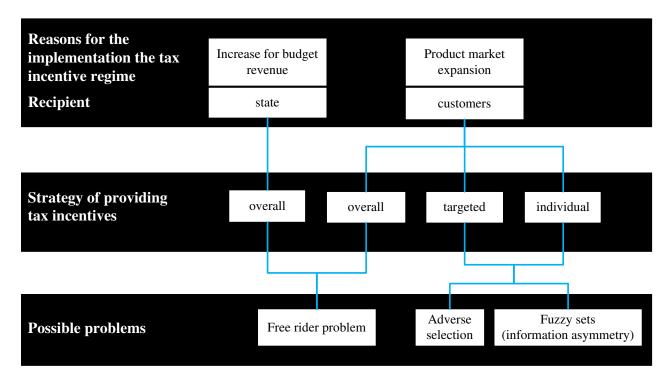
I.e. there is a danger that budget revenues will not increase but decrease, because new investors will not be able to compensate for the normed decrease of tax payments. The failure of such an operation seems even more probable, taking into account that the privileged segment increases by attracting a priori less efficient investors, who, unlike those already acting in the economy, become profitable only on condition of incentive taxation.

In tax regulation to overcome market imperfectness following problem points should be consider:

- 1) <u>the overall incentive tax strategy</u> may lead to occurrence of free rider problem, when investors who do not produce the needed good also use benefits;
- 2) the targeted incentive tax application may lead to adverse selection (Akerlof, 1970), as well as to the identified problem (the difficulty of determining whether some investor meets the necessary requirements and how far) that is a special case of asymmetry of information and a premise for opportunistic behavior;
- 3) also the danger of the opportunism of interacting parties is available when applying **the individual incentive tax strategy**: as a result of both identification problem and classical problems of interaction between principal and agent.

The general scheme of incentive tax regimes and problems caused by it, look like it (Fig. 1):

Figure 1. The classification of incentive tax regimes



As can be seen from Fig. 1, the application of the overall incentive tax regime (for the whole economy or for separate segments) poses a danger of occurrence of free rider problem. The mechanism of it is as follows.

Incentives apply to all subjects of a particular segment (industries, territories, enterprises with foreign investments, etc.) of the national economy. The purpose of this step is the same as with reducing tax burden for the whole economy: in addition to intensifying the sector's activity as a result of the improvement of the economic climate, it is also the expansion of the tax base by attraction of new agents who have refused to work in the economy with higher tax rates. In this case the free rider problem is as follows: the government tries to remedy the deficient supply of a certain good in a certain sector by attracting additional investors or expanding the production assortment of acting investors. At the same time, not all subjects in the sector produce the needed good or the quality of their product is insufficient. It can be noted that in this case benefits should be granted only to effective enough producers of the necessary good, but this strategy will be not overall, targeted or individual. At the same time, the presence and practice of applying the overall incentive strategy is explained by the fact the targeted preferential regime needs identification of the

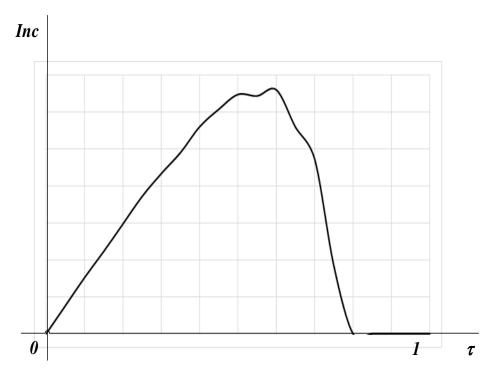
conditions for granting privileges and potential beneficiaries what can be too complicated or unprofitable. As a result, there is a circle of agents in the sector that do not produce the good, i.e. are not useful for the economy in this aspect, but, at the same time, use an incentive regime together with others. It is a classic case of free rider problem.

The main problem, that in such situations furthers market failures, is increase in the specific cost of using the good for those agents who pays for it, because of its use for them becomes loss-making. Hence they stop funding, and the use of the good is stopped.

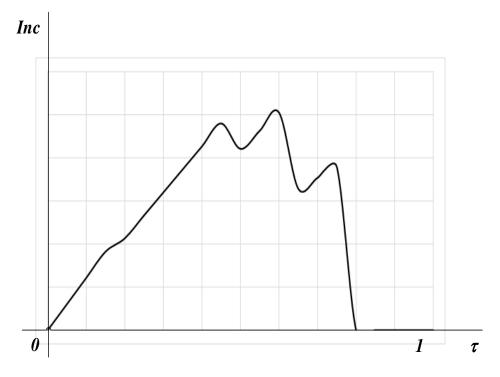
When applying the overall incentive tax regime, an analogue of the charges of financing the cost of using the good is the insufficient payment of funds from government budget. The incentive regime decreases the budget revenues both due to the activity of those economic agents who satisfy the supply of the needed good, and those who do not do so. As a result, even with the expansion of the tax base by attracting new investors, the budget may not get full revenues, what in future will make it impossible to implement incentives by the government that can also be defined as a classic case of free rider problem.

Let's consider under which basic conditions the expansion of the tax base as a result of reduce tax burden leads to an increase in budget revenues, and under which ones does not lead to it. The simulation of the mechanism of behavior of economic agents regarding their reaction to the dynamics of tax burden shows that graphically the dependence of budget revenues is Laffer curve (Trabandt, 2011). In (Sokolovskiy, 2018) the author shows Laffer curve may have several local maxima for the opportunistic behavior of contractors (both tax evasion and sanctions, in spite of observance of agreements). However, the study evidences that the reason for the existence of several maxims is not necessarily opportunism, as can be seen from Fig. 2 a)-c), showing the dependence of budget revenues from tax burden for linear, power-series and sigmoid distributions of economic agents by their efficiency.

Figure 2. The dependence of budget revenues from tax burden (linear, power-series and sigmoid distribution)



a) linear distribution



b) power-series distribution



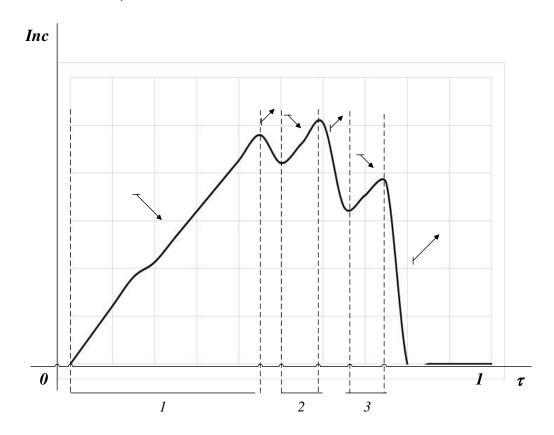
c) sigmoid distribution

Source: Author's development

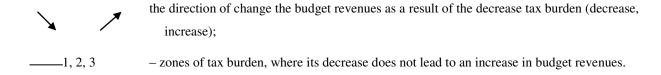
In Fig. 3 (exponential distribution) is shown intervals, the decrease within which tax burden does not lead to increase budget revenues, that is, we get an inefficiency market state: as a result of free rider problem, the state budget loses revenues, at the same time the incomplete market is not filled with scarcity good.

goods, but to create barriers to entry, that not only to prevent added investments, but to decrease their own productivity.

Figure 3. The dependence of budget revenues from tax burden (exponential distribution)

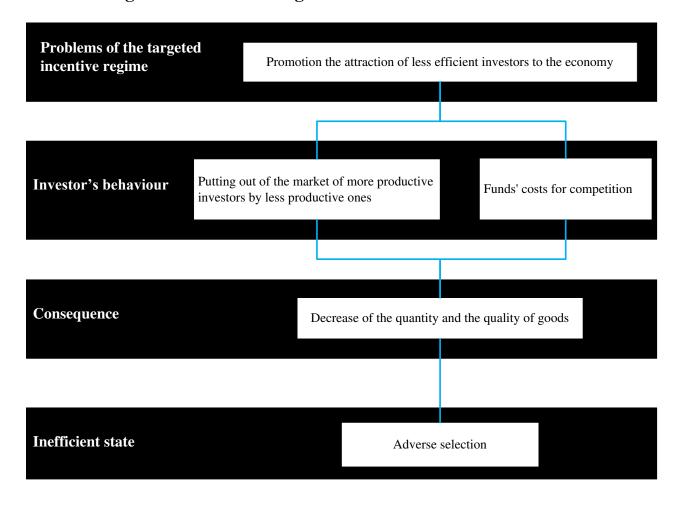


Source: Author's development



As noted above, the implementation of a targeted or individual tax incentive regime poses the danger of the emergence of a problem adverse selection. The general logic of causing of the adverse selection problem by the implementation of above regimes is shown in Fig. 4. Detailed causal relationships are as follows.

Figure 4. Mechanism of emergence of adverse selection problem when applying the targeted incentive tax regime



Due to obtainment incentives a priori less efficient investors become more productive than a priori more efficient, that acting under the usual tax regime. Hence the first ones put others out of the market. As a result, less productive new investors do not complement but take the place of more productive old ones, what leads to a general deterioration in efficiency of economy.

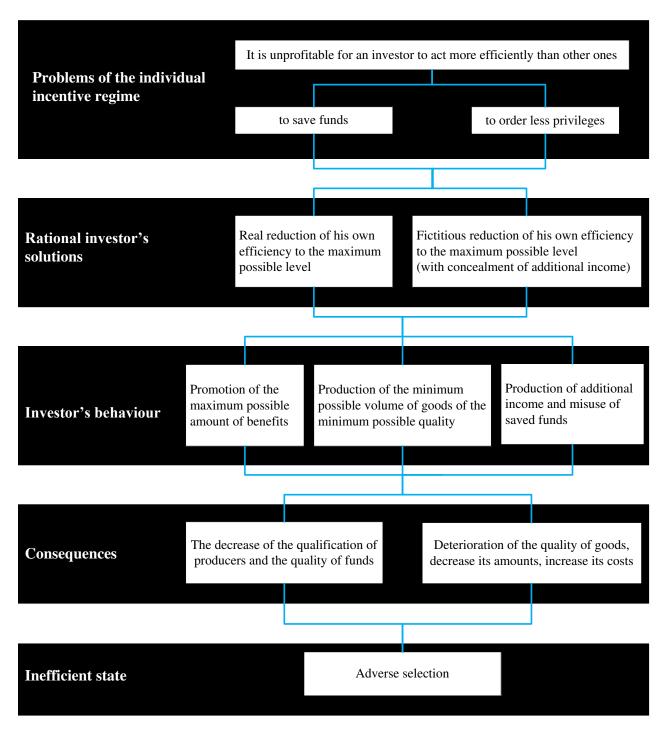
The above aids to the formation of a competitive struggle: "old" investors may direct their funds not to improve the quality or increase the number of produced Consequently, in both cases, volumes of products and their assortment do not increase but decrease, and the goal of implementing of incentives – the market's filling of goods – is not achieved.

It is observed above that the selectivity of the application of the targeted (individual) incentive tax regime needs the identification of a set of potential benefit's recipients. Since the criteria for expediency of provision (or termination) of

benefits are often rather blurred, there the issue arises about the interaction of an economic agent and a government official, when the agent tries to convince the officer that he deserves a tax incentive. Such interaction situation is enough usual and investigated. In particular, it is known it contains a danger of opportunistic behavior and a corrupt component. In detail in this article it is not considered.

Another reason for the eventual formation of an ineffective state (which also can be classified to adverse selection) is the differentiation of its size, is characteristic of the individual incentive regime. The mechanism of the emergence of the problem adverse selection due to the implementation of differentiated tax incentives is shown in Fig. 5.

Figure 5. The individual incentive tax regime



Detailed causal relationships of this mechanism are as follows.

It is possible (especially given the above considerations regarding the high probability of budget losses due to the implementation of incentive regime), that the government cannot be able to apply the incentive regime to the whole economy field, and before him becomes the issue of distributing a limited amount of benefits among potential applicants whose demands exceed the capabilities of the government.

In this case is fixed the actual deficit of a certain benefit, and hence - the need for it. The next step is to outline a set of economic agents that can provide the production critical goods.

To a given set of subjects a incentive tax regime is applied i.e. they pay a smaller amount of funds from their activities.

The latter makes it possible to equate tax incentives and subsidies, i.e. less than normal tax rate can be considered like targeted financial grants for subjects from the defined set.

So that we have the interaction "government – agent": when the government allocates some amount of funds to an agent (or, that the same, takes from him less than normal), in return that agent will produce needful goods with needful characteristics of needful quality. However, in this case it is should take into account the following.

In determination the amount of benefits for a particular investor on the basis of his declared needs (e.g. proportionate to needs), it is unprofitable for the investor to develop them with high productivity, i.e. to try to minimize the costs of implementing a fixed number of actions (or what is the same, to maximizing the number of implemented actions taken for fixed funds). It can be explained in this way.

If the investor, by "ordering" the amount of benefits that is similar to other investors for the production of some fixed volume of the needed good, spends less than has ordered, through saving resources and high productivity, and takes away as a bonus a part of preferential revenue, the government-manager may decide that an order from that investor is excessive and to reduce amounts his subsequent orders. This put the investor at a disadvantage than others ones, if only because in order to achieve more productivity compared to others investors, he must further increase his professional level and/or spend extra efforts.

If an investor orders a lesser volume of benefits, the one that is necessary for the production of goods, he receives precisely this amount. It also puts this investor in a worse position than others (see above).

As a result, in view of the inexpedience of saving funds, rational choice of an effective investor is one of two options:

- 1) either he may to work not better than others, i.e. not to use his potential in full;
- 2) or he may to take measures more efficiently than others, as a result, save funds and to hide its by misreporting.

In other words, the rational choice of an efficiency investor is to demonstrate his activity is no different from the other investors' activities.

Too, it is advisable for this investor to work as badly as possible, that is to say, to provide the minimum possible volume of the produced goods of the minimum possible quality (to a certain identified limit), saving on production and appropriating the saved.

Such priorities are to any of the investors, so it is logical to assume after a time all investors will try:

- ✓ to lobby maximum possible the volume of benefits;
- ✓ to produce the benefit inefficiently possible i.e. to produce either the minimum possible volume of goods or a fixed amount of goods with a minimum quality (or both);
- ✓ to assign unused funds by presenting distorted evidence about the costs of producing goods.

As a result we get:

- ✓ the low level of goods production;
- ✓ the using of funds is not as needed, but for own benefit (appropriation, theft);
- ✓ not skill increase of specialists because for it is unprofitable, and often its decrease.

Obviously the described situation corresponds to the model of ineffective interaction such as a market for "lemons" (Akerlof, 1970).

Thus it should be not distribute funds according to the stated needs. At the same time, the principle of "from cost" is just as ineffective, because the investors' behavior in this case fundamentally is not different from the one described above: for them is profitable to spend as much as possible, but to make as less and as worse as

possible, either are to save time and effort (and other resources), or to appropriate savings.

However, the opposite principle of distribution, when agents are stimulated, depending on their saved costs, is also not effective: agents save costs by deteriorating the quality of their goods.

In addition, there is an opportunistic behavior of investors who have no legally to benefits. They may try to mislead the government, simulating themselves as beneficiaries and not paying taxes. This model of interaction is essentially a model of tax evasion.

# Methods and models

Since the above conditions and solutions are methodologically searched in an analytical form, the main methods of research was chosen mathematical modeling of economic processes, in particular, optimization methods, methods of game theory, etc.

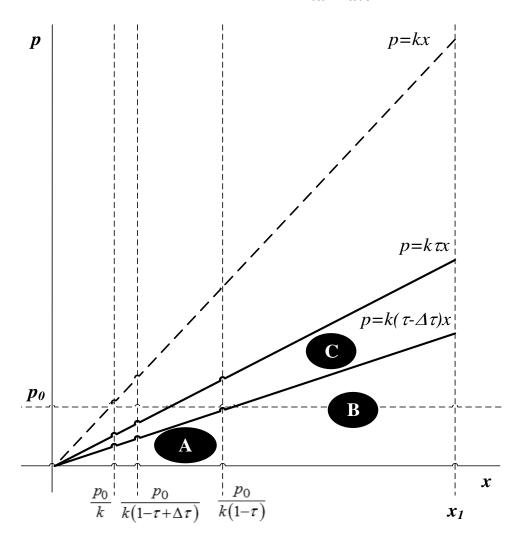
Elements of tax incentive system for which it is expedient to develop economic and mathematical models are the following:

- ✓ analysis of increase/decrease of tax revenues resulting from implementation of tax incentives: revenues; finding the dependence of increase of investors on decrease of tax burden, calculation of a marginal number of investors and the revenue-optimal result;
- ✓ changes in set of investors resulting from implementation of targeted tax incentives and eventual appearance of new investors; rise of adverse selection;
- ✓ "government investors" relations;
- ✓ analysis of strategy of broadly-based tax incentives; likelihood of free-rider problem;
- ✓ principles of allocation of tax incentives as limited resource; economic behavior of investors in this case.

A limited volume of the article make it possible to consider here only first and second models.

We consider the model comparison of budget revenues in the ordinary and preferential regimes. Fig. 6 illustrates a situation, when government tries to increase budget revenue (or pursues some other aims) by the expansion the tax base by stimulating the attraction of new investors to the certain field through reducing tax burden.

Figure 6. Tax revenues and the value for taxable base of standard and reduced tax rate



Source: Author's development.

Can determine the amount of tax revenues in the case of usually tax rate  $\tau$  and when it is decreased to  $\tau - \Delta \tau$ . According to the graphs in the Fig. 6 income after usually tax  $\tau$  higher than the base level (what is determined e.g. by bank deposit rates)  $(y(x)(1-\tau) \ge y_0)$ , is earned by investors who fall into the interval [0; x], and the

amount of tax paid by each of them is equal to  $y(x)\tau$  (lower curve). Under the incentive tax regime  $\tau$ - $\Delta \tau$  the number of investors, whose income after tax are more than determined base level, increases (the interval  $[0; x+\Delta x]$ ), however, the amount of tax revenue decrease to  $y(x)(\tau-\Delta \tau)$ . Consequently, we have a differently directed dynamics of two factors, that form the total amount of tax payments. Therefore, will implementation of incentive regime lead to an increase in revenues or no, depends on the specific values of above factors. In Fig. 6 fiscal charges in the usual tax regime amount the total area of sectors A and B, and in the incentive tax regime – the total area of sectors B and C. The sector B is a joint part for both regimes, so the increase of revenue from incentive regime compared to usual one means that the area of sector C is larger than the area of sector A.

Formally it can be written is follows. Tax revenues under current tax regime are:

$$G(\tau) = \tau \int_{0}^{y^{-1}\left(\frac{y_0}{1-\tau}\right)} y(x)dx, \qquad (1)$$

tax revenues under tax incentive regime -

$$y^{-1} \left( \frac{y_0}{1 - \tau + \Delta \tau} \right)$$

$$G(\tau - \Delta \tau) = \left( \tau - \Delta \tau \right) \int_{0}^{1 - \tau + \Delta \tau} y(x) dx, \qquad (2)$$

where  $y_0$  – is the level of replacement;

y(x) – is the productivity of investment in economics, ordered according to high values;

 $y^{-1}$  – function inversed to y.

The expansion of the tax base leads to an increase in tax revenues when the fulfillment of the condition  $G(\tau) < G(\tau - \Delta \tau)$ , i.e.

$$G(\tau) < G(\tau - \Delta \tau) \Leftrightarrow \frac{\int\limits_{0}^{y^{-1} \left(\frac{y_{0}}{1 - \tau}\right)} y(x) dx}{\int\limits_{0}^{y^{-1} \left(\frac{y_{0}}{1 - \tau + \Delta \tau}\right)} y(x) dx} < \frac{\tau - \Delta \tau}{\tau}$$

$$\int\limits_{0}^{y^{-1} \left(\frac{y_{0}}{1 - \tau}\right)} y(x) dx$$

$$\frac{\Delta \tau}{\tau} < 1 - \frac{\int\limits_{0}^{y_{0}} y(x) dx}{\int\limits_{1 - \tau + \Delta \tau}^{y_{0}} y(x) dx}.$$

$$\int\limits_{0}^{y^{-1} \left(\frac{y_{0}}{1 - \tau + \Delta \tau}\right)} y(x) dx$$

$$(3)$$

Conversely for

$$\frac{y^{-1}\left(\frac{y_0}{1-\tau}\right)}{\int\limits_{y^{-1}\left(\frac{y_0}{1-\tau}\right)} y(x)dx}$$

$$\int\limits_{y^{-1}\left(\frac{y_0}{1-\tau+\Delta\tau}\right)} y(x)dx$$

even the expansion of the tax base does not compensate for the decrease tax burden and lead to a loss of budget revenues.

Let's consider the case of the uniform distribution of investors by their efficiency (y = kx):

$$G(\tau) = \frac{\tau}{2k} \left( y_1^2 (1 - \tau) - y_0^2 \frac{1}{1 - \tau} \right);$$

$$G(\tau - \Delta \tau) = \frac{\tau - \Delta \tau}{2k} \left( y_1^2 (1 - \tau + \Delta \tau) - y_0^2 \frac{1}{1 - \tau + \Delta \tau} \right).$$

where  $y_l$  – is the maximum level of normalized profitability (in industry or region).

So implementation of tax incentive regime will lead to increase of tax revenue

on condition, when 
$$\frac{y_0^2}{y_1^2} > (1-\tau)(1-\tau+\Delta\tau)(1-2\tau+\Delta\tau)$$
.

### **Discussion**

Analysis of the motives of decision making and behavioral factors of investors and the government with using the proposed models shows that the incentive tax regime leads a number of dangers of failure to achieve those goals that are considered the basis for its implementation.

The first obvious fault of implementing privileges is the deterioration of the overall level of efficiency of the economic field (market, industry, territory), on which it is implemented. It is happening due to that the easing of tax pressure (granting of privileges) leads to the economy of investors, which otherwise would not be going to enter here, which otherwise did not show desire to enter here, first of all because the usual tax regime did not let them to provide sufficient profitability of their activities. Thus, to investors who get a profit under usual regime, less efficient ones are added, which receives profit only under incentive taxation.

Among other troubles of the incentive regime, may be outline follow ones.

Granting benefits exclusively for a potential increase in budget revenues is a enough risky and doubtful solution, which should be carefully estimated. Completely successful cases of implementation of this step are almost unknown in the world practice.

The implementation of incentive regime to remedy the market incompleteness is more reasonable. However, it should be take into account such issues.

The providing tax incentives to all agents can lead to the formation of free rider problem, when subjects, who do not produce a needed good, use incentives also.

In return the targeted application of benefits is dangerous, except for the problem of identification of investors (because it is not always easy to determine whether a certain investor meets needed requirements and to what extent), also to the possibility of forming adverse selection, when due to obtainment benefits a priori less

efficient investors become more productive than a priori more efficient, that acting under the usual tax regime, hence putting others out of the market. As a result, in addition to the fact that the objective of implementing privileges, i.e. meeting of market demand, since new investors do not complement but replace the old ones, also this process is accompanied by a general deterioration of efficiency, as investors that leave the market are more productive than those ones that change them.

Additionally it should be noted the possible inefficiency of competition. New investors are involved in order to reduce sales prices and/or to diversify the product mix, due to increase demand, and in this way to overcome or reduce the market incompleteness. In return "old" investors may direct their funds not to improve the quality or increase the number of produced goods, but to create barriers to entry, that not only to prevent added investments, but to decrease their own productivity. As a result, there will be achieved the opposite effect than expected one: the volume of products and their assortment will not increase but decrease.

An analysis of the model of government - investor relations, when investors may unfoundedly qualify for benefits, testifies there is a segment of the effectiveness of investors (to be more exact, a segment of tax burden in absolute terms) such, if an investor fall into it, then it is to his benefit to behave opportunistically, simulate the beneficiary, and it is unprofitable for the government to control the behaviour of these investors.

However, even when avoiding mistakes in determining benefits' recipients, there remains the problem of the effectiveness of incentives use.

Based on the logical analysis of the principles of the distribution of benefits and the behavior of their recipients in these conditions, it may be state that the only effective behaviour of the benefit's distributor is to be to specify as fully as possible the benefits and provision conditions of privileges, i.e. to determine clearly as possible the dependence of the amount of benefits from the quantity and quality of goods, the development and implementation of which have to be provided by investors. But since it is impossible for large volumes of complex goods, maximum unification and the creation of a base of unified goods are needed.

Thus, the tax incentive regime cannot be considered as a normal state of economic system, but only as an exception. Therefore its using must be limited and very clear.

Measures that can to some extent protect the economy from the failures of implementation preferential taxation are as follows.

- 1. Before granting privileges it is necessary to make a clear definition of the goals of their implementation: whether it is a increase of funds, or increase of goods, or both.
- 2. Also, a careful calculation (at least, estimation) of all potential benefits and losses is needed. It should be identify dangerous zones where there is a high probability of opportunistic actions of investors and the failure of the state.
- 3. A priori to take a decision on the type of incentive regime: overall, targeted or individual, hence to pay attention to the typical in this regime issue.
- 4. It is necessary to specify of requirements for potential beneficiaries: a thorough relationship between provision of privileges and conditions of the goods' production.
- 5. The mechanism of implementing the incentive regime must take place not by hand, but by an automatic in advance preset control; the abolition of benefits must be clearly linked to the correction of the situation with the provision of benefits or increase in budget revenues.

So, the general analysis of motives decision making and behavioral factors of investors and the government shows, the incentive tax regime contains a number of dangers of failing to achieve those goals that are considered the reason of its implementation, namely:

- ✓ decrease of the overall efficiency of the economic segment;
- ✓ shaking out a priori more efficient investors by less effective;
- ✓ the unacceptability of well-known principles for the distribution of tax incentives under conditions of limited resources: in proportion to applications, "from spent" or "from saved".

# Conclusion

Therefore, in the proposed study the risks of inefficient implementation of the preferential taxation regime were discovered, the causes and factors of this inefficiency were identified and mechanisms for the formation of ineffective states were revealed.

The main result is establishment of the mechanism of causing the government tax policy to create ineffective stable states in the market.

It is shown, even if contractors behave fairly rationally, overall incentive tax regime can cause even bigger market failure but targeted and individual ones can lead to adverse selection.

The dependence of budget revenues from tax burden is Laffer curve. It is proved this curve may have several local maxima.

For overall incentive tax regime two groups of tax burden intervals was defined: within the intervals of group *I* the reduction tax burden facilitates to the increase of budget revenues, within the intervals of group 2, does not facilitate to this.

Established regularities, despite their non-numerical nature, may help to make managerial decisions, since discovered inefficient states and norms outline the set of real dangers that should be taken into account by the manager when implementing preferential taxation.

Directions of further researches can be following:

- ✓ to deepen the formalization of the mechanisms of providing benefits and the formation of ineffective states and norms of agents' behavior;
- ✓ to develop warning and prevention mechanisms of inefficient states in the application of implementing and operating incentive regimes;
- ✓ to investigate real acting above mechanisms in the actual application of incentive taxation.

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