# NEW TRENDS IN FISCAL STIMULATION EVALUATION

Angela TIMUȘ[40], PhD
Victoria COCIUG[41], PhD
Laura AFTENI[42], PhD(c)

**Abstract**

Fiscal and budgetary policy reflects the state's choice for necessary actions to be taken in order to ensure the population welfare and sustainable economic growth, naturally involving revenue mobilization and public spending. The insurance of a long-term macroeconomic growth is driven by several specific mechanisms and instruments, one representing the reduction of fiscal pressure by applying a system of tax incentives.Practically, all countries stipulate in their fiscal policies a robust set of instruments of special regimes, incentives and fiscal facilities to encourage the taxpayer to launch or consolidate his business to generate higher tax levy in the future. Such policies support sustainable economic growth, facilitate R & D-innovation, especially SMEs involved, eco-energy industries and high-value commodities, start-ups in IT, support scientific and technical progress.

Applying tax incentives through their incentive function involves transferring public revenue over the next period, as a result of reducing budget funding capacity, while many researchers and experts qualify postponement of revenue with a "budget expense". In this context, we intend to study in this paper the good practices of applying tax incentives in stable economies and in those aspiring to a higher level of development to identify models for assessing their impact on the budget, and implicitly on sustainable growth. The result of these researches will also be the identification of an optimal model for assessing tax incentives in the context of the specificity of the economy of the Republic of Moldova and the formulation of recommendations on the way of its implementation in order to regulate business stimulation policies by diminishing the fiscal pressure.

**Keywords:**tax incentives, effectiveness of tax incentives, methodology for tax incentives effectiveness evaluation

**JEL classification:**E620, H210

## Introduction

The necessity to boost economic development requires from the state to operate effectively such a system of taxes, which on the one hand would ensure the consolidation of the revenue side of the budget, and on the other hand would stimulate economic development. Under these circumstances, fiscal incentives play a leading role, being the most important instruments of fiscal policy, which can ensure both economic growth and social issues.

Current development model, which is aimed on stable economic growth to overcome the consequences of the 2007-2009 economic crisis, focuses on multiplying budget spending (Marinas M-C., 2010, pp.52-66), especially those focusing on education, health, pensions, support for low-income groups and the development of certain sectors of the economy. This allows solving some economic problems by correlating budget revenues and expenditures, creating the appearance of a policy with a social focus, but also stimulating the business environment through certain preferential taxation. However, such a fiscal policy, which lead to higher budget deficit is aggravated by the aging population, and in the long run will require increased expenditure on pensions, health and social services for the elderly. This is also true for our country.

To overcome the issue of increasing of the budget deficit, some economists (Toder E., 2005) propose to limit the budget of tax expenditures instead of increasing the tax burden. While tax incentives do not directly involve spending of budget funds, these measures tend to lead to a

[40]*National Institute for Economic Research Republic of Moldova, Chisinau, Republic of Moldova, email: ince.timush@gmail.com*
[41]*National Institute for Economic Research Republic of Moldova, Chisinau, Republic of Moldova, email: v_cociug@mail.ru*
[42]*National Institute for Economic Research Republic of Moldova, Chisinau, Republic of Moldova, email: afteni.laura@gmail.com*

reduction in budget revenues, so they reduce the resources available to resolve the tasks assigned to the state. Since tax exemptions and other tax incentives are in a similar way to budget spending, their use and wider use should be accompanied by justification for their need and effectiveness. Applying the concept of fiscal spending to the budget contributes to this goal. In this respect, it is relevant to study, justify and demonstrate in practice the methodological approaches to analyzing and assessing the tax expenditures of the budget.

## Concept of Tax Incentives

Tax policy has a double dimension in the national economy: one refers to the formation of public financial resources; the second is interventionist, which refers to concrete objectives of involvement, support and encouragement. State interventionist measures aims at modeling of the fiscal system and applying of the specific instruments, guiding market mechanisms correctly, influencing economic behavior, removing market distortions, encouraging certain sectors, supporting certain social strata - "to ensure the mobilization of bigger budget revenues, in the conditions of encouraging economic affairs, investments, concomitant promoting equity in their contribution to income, with the provision of social protection". However, when market failures are identified, specific measures must be taken, either fiscal ones, to boost competitiveness to achieve economic growth.

Applying tax incentives through its incentive function implies the transfer of public budget revenues over a future period as a result of reduced budget financing capacity, and researchers and experts qualify postponement of revenue with "budget expense" also called "tax expense" (Loie P., 1990, p. 78).

Awarding mechanism, the incentive addressability and the monitoring procedure are different, but they must always be included in an easy, transparent, predictable system for the taxpayer and society (Toder E., Wasow B., Ettinger M., 2002, p. 28).

The defining of the concept of fiscal incentive is ambiguous. Generally speaking, tax incentives are treated as tax deductions or tax base reductions, which lead to the diminution of tax liabilities of economic agents. In this sense, tax incentives can be considered both, as direct reductions of taxes or duties in the form of total or partial exemptions, as well as certain "tax benefits" that can be found in some sources under a separate classification as "tax preferences". Thus, tax deductions and reductions of the tax rates, low interest rates for tax credit, changes in terms of payment of tax (by providing of the tax credit investment, delaying and rates), which is not specifically in tax law as tax incentives, are often associated with them.

In another approach (2017, p.2), tax incentives are treated as different facilities, favourings, advantages, privileges granted legally in order to reduce the tax burdenTax incentives usually refers to a specific tax and take into account various elements of the tax: the taxpayer (invalids, retirees, students, etc.); the object of taxation that can be diminished (profit, income); the payment term that can be set for a more convenient period (land tax - after harvesting), etc. They represent a separate element, stipulated by the legislative and normative acts of tax (financial) and refer to reductions, exemptions, rebates, deferrals and rescheduling of payments to the budget. Conceptual delimitation of these components of tax exemptions is represented below:

- An exemption represents the deductions from the amount of tax or tax base that is applied to favor certain activities that uses the low-yield labor. They can also have a social character as in case of tax exemption for specific groups of the population. In this respect, exemptions are quantitative forms of tax incentives, as it identifies the exact amount that reduces the taxpayer's debt to the budget;

- The reductions target both social and economic purposes, such as the reduction of the tax base on the reinvested income tax in certain purposes, provided by law. Thus, reductions refers, in the same way as exemptions, to the quantitative component of tax incentives, but this facility is conditioned by the way of spending of the amount of tax liability, unpaid to the budget;

- Bonifications are granted to stimulate certain taxpayers to pay their obligations before the deadlines provided by law, usually before the first payment period. To make bonifications much effective, they have to be extended to more categories of taxpayers, concomitant increasing their

degree of interest, to make payers pay their obligations to the budget in advance, which is an advantage for the state under inflation conditions. In this regard, bonifications are already a more organizational measure, meant to optimize the process of payment of the tax obligation, rather than diminishing its value;

- Postponements and rescheduling are considering delaying payment terms, respectively fragmentation payment of amount to be paid to the budget in several rates, which not involve reducing of the amount of tax liability, but creating of an advantage that taxes can be paid after consolidation of the taxpayer's financial situation (in the case of newly created enterprises with a considerable investment contribution), but also after collection from consumers (in the case of indirect taxes paid in advance, such as VAT on imported goods).

In our opinion, the definition of fiscal incentive and fiscal facility (facilitation) cannot be treated as synonymous. The Dex of the Romanian language defines the notion of incentive as what stimulates, it is an impulse, an impetus, an urge, while the facility is the ability to achieve, to do something without great effort, with ease. Thus, applied to fiscal policy, we consider the definition of fiscal incentive much more opportune, because the effect of reducing of the tax burden on the taxpayer should be seen as an impuls for intensifying the activity of the real economy, the catalyst of economic growth.

In the Republic of Moldova, the notion of *fiscal incentive* is missing in the legislation, but it is understood by the notion of fiscal facilitation, defined in Article 5, point 33 of the Fiscal Code no.1163-XIII of 24.04.1997, which means the amount of tax or duty *unpaid* to the budget under the forms set out in Article 6 paragraph (9) point g). Thus, according to the above-mentioned norm, tax facilities (benefits) are elements taken into account in the estimation of the taxable object, to determine the amount of tax or duty and collecting it in the form of:

- partial or total exemption from tax or duty;
- partial or total exemption from payment of taxes or duties;
- reduced rates of taxes or duties;
- reducing of the taxable object;
- delays in the payment of taxes or duties;
- scheduling of tax liability.

Also in the Fiscal Code is delimitated the tax mechanism, incuding fees for special areas and special tax regimes. Thus, economic agents registered in the Free Economic Zones obtain various facilities related to the payment of income tax, VAT and customs duties, and investors are protected for ten years from legislative changes. At the same time, Article 6, pharagraph (9), point g) of the Fiscal Code provides that *the zero rate of VAT application is not considered a fiscal facilitation*.

Ensuring of the economic growth under the current budgetary constraints implies a rigorous analysis of the efficiency of tax incentives, especially in case of introducing new ones, and following of their economic, financial or social effects.

Evaluating of effectiveness of tax incentives should take into account the objective pursued by them. Thus, social incentives are an irrecoverable loss to the budget and are determined by the amount of financial resources that the state is willing to yield, in particular, from individuals' contribution. On the other hand, stimulating / boosting incentives aim at determining the economic agents on the development of economic sectors of national importance. These incentives can be investment or innovative, and imply real long-term recovery through widening the tax base, creating new jobs, increasing the efficiency of production factors, etc.

While tax incentives are part of the tax expenditure, however they do not involve cash expenditures from the state, such as subsidies or grants, but lost tax revenue. These costs determination is difficult because of influence of certain direct factors:

- the precision with which the incentive / facility stimulates the target activity;
- the level and mix of economic activity that will occur through the application of the incentive / facility, versus what will happen in the absence of the incentive / facility.

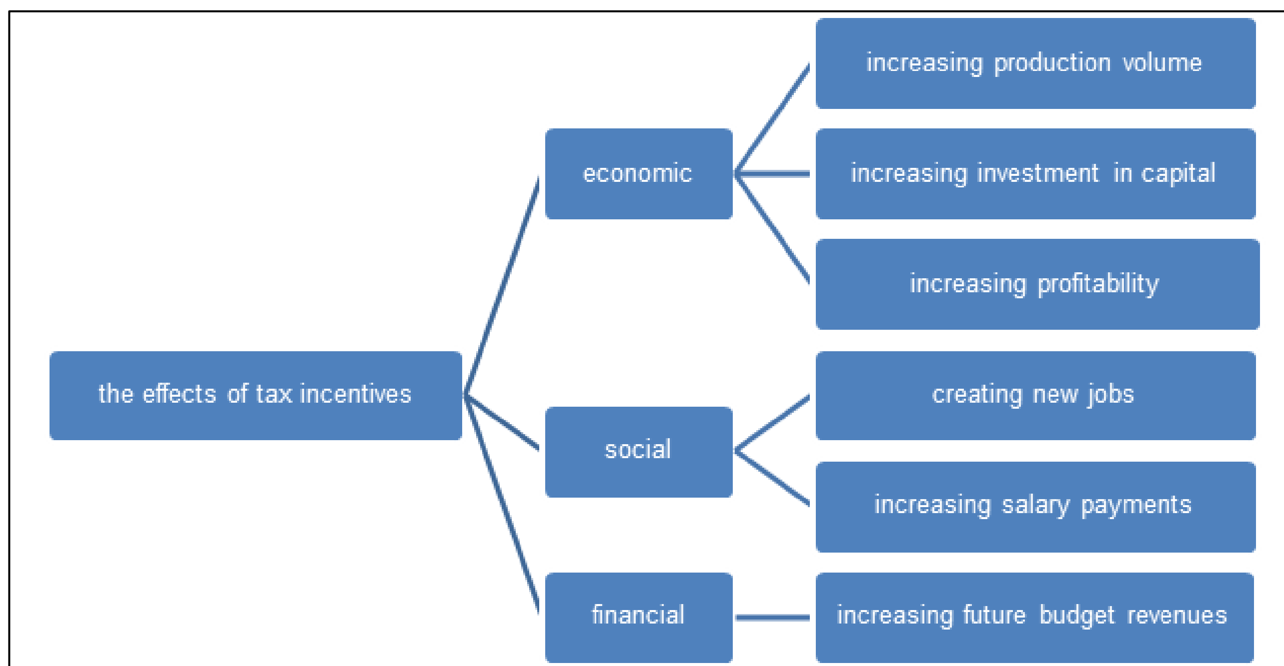
A general methodology for tax incentives effectiveness evaluation should be based on the classification of tax incentives depending on their target component, and the actual assessment shall be distinct for each category of tax incentives. Thus, fiscal incentives can be divided into three categories, according to the environment in which they achieve their efficiency (see Figure 1):

**1.social** – designed to support certain categories of citizens;

**2.financial** – which are aimed at eliminating / reducing the reverse financial flows and increasing future budget revenues;

**3.economic (incentive)** – with the aim of investments attraction and expantion of the economic potential.

**Figure 1 - The effects of tax incentives**




*Source:date proccesedby authors after Igonina L.L., Mamonova I.V., Suleimanov M.M. Assessing the efficiency of tax incentives in thesystem for managing regional finances. Economic and Social Changes: Facts, Trends, Forecast, 2016, no. 6, pp. 180-192.DOI: 10.15838/esc/2016.6.48.10*

Based on the analysis of existing literature in this field (Pecarscaia A. Iu., 2014, p.103), we have identified models for assessing tax incentives according to the effect they have on the economy.

## 1. Determining Budget Efficiency

$$BE_{iB} = \frac{\Delta TB_{iB} \times TR_{iB} + \Delta S_{iB} \times TR_{iIV} + BER_{iB}}{BL_{iB}} \quad (1)$$

$BE_{iB}$ - the budget efficiency of tax incentives under the basic tax system;

$\Delta TB_{iB}$ – increasing of the incentives tax base for each category of taxpayer, after providing the incentive *i*;

$\Delta S_{iB}$ – increasing of the salaries fund, after providing the incentive *i*;

$TR_{iB}$ – the tax rate under the basic tax system, %;

$TR_{iIV}$ – tax rate on personal income, %;

$BER_{iB}$ – budget expenditure reduction as a result of the incentive *i*;

$BL_{iB}$ – the budget losses (unearned income) after providing incentive *i*.

$\Delta TB_{iB}$ – the difference between the tax base of the tax for which the incentive is provided at the end of the period and at the beginning of the grant period.

$\Delta S_{iB}$ – the difference between the payroll fund at the end of the period and the beginning of the incentive's providing period.

$BL_{iB}$is determined:

a. if the tax incentive consists in the partial exemption from the tax base

$$BL_{iB} = TBR_i \times TR_i \quad (2)$$

$TBR_i$ – the value of the tax base reduction after providing the incentive *i*;

$TR_i$ – the de facto tax rate at the time of incentive's provision, %.

*b. if the tax incentive involves taxing at a reduced rate*

$$BL_{iB} = TB_i \times (TR_{1i} - TR_{0i}) \quad (3)$$

$TB_i$ – the size of the tax base subject to tax incentives action;

$TR_{1i}$ – the de facto tax rate at the time of incentive's provision, %;

$TR_{0i}$ – the tax incentive rate, %.

If $BE_{iB}$ value is less than 1, then the efficiency of the provided tax incentive under the general tax regime is low, if greater than 1, the efficiency is high.

## 2. Determining Social Efficiency Includes the Calculation of the Following Indicators

- Increasing the scriptic number of employees of small business subjects, beneficiaries of the tax incentive;
- Increasing the share of employees of the small business subjects benefiting from the tax incentive;
- Increasing the share of R&D workers in the total number of persons employed in small enterprises applying this tax system;
- Increasing the proportion of people who need social protection employed in small enterprises applying this tax system;
- Increasing the payroll fund for workers from small businesses applying this tax system;
- Increasing the payroll fund for R & D workers in small businesses applying this tax system;
- Improving the conditions and protection of work in small businesses applying this tax system;
- Increasing the overall skill level of workers employed in small businesses applying this tax system;
- Expanding of the provision of services by small businesses applying this tax system, ensuring the availability of services on a wider range;
- Improving the quality and expanding the range of services provided by small businesses applying this tax system;
- Increasing environmental safety in small enterprises in the manufacturing sector, applying this tax system;
- Infrastructure development.

## 3. Determining Economic Efficiency Includes the Calculation of the Following Iindicators

- Increasing the number of small businesses using this system of taxation;
- Increasing the number of innovative small businesses, using this tax system;
- Increasing the share of small enterprises that apply this tax system to the small business sector;
- Increasing the share of revenues from the sale of products, goods, works, services of small enterprises that apply this tax system;
- Increasing the share of revenue from the sale of innovative, high technology products by small businesses applying this tax system;
- Increasing the share of the volume of industrial production of small enterprises using this tax system;
- Increasing the share of the volume produced by small businesses using this tax system, innovative, high technology products;
- Increasing the share of fixed capital investment of small businesses applying this tax system;
- Increasing spending on R & D of small enterprises applying this tax system;
- Increasing the share of own R & D spending for small businesses applying this tax system;
- Increasing the share of small enterprises that apply this tax system in foreign trade turnover;
- Increasing of innovative products for export in small businesses that use this tax system;
- Reducing the number of small unprofitable enterprises that apply this tax system.

Economic efficiency of tax incentives is considered low, if increasing of the total volume of investments in companies, compared with the fiscal year when incentives have not been applied, does not exceed the amount of tax incentive.

The effectiveness of tax incentives assessment is not the key to success in their management. It is more important to monitor if their application was necessary and purposeful. In most cases, tracking the allocation of tax incentives highlights the following consequences of applications, which do not always lead to the expected result. Once the direct effects of tax incentives are identified, we can also point out the indirect ones, which are mostly negative:

1.the common nature of the incentives, which in many cases refers to certain purposes of encouraging and/or supporting of a sector (ex. innovation) without respecting the principle of their personalization. Thus, not all incentives have applicative arguments, some of which are unnecessary depending on the size of the firm or the nature of its activity within the preferential sector;
2.loss of tax revenue occured as a result of incentives that are not offset by the benefits for society, taking into account the principle of public money efficiency and tax system principles: neutrality, fairness and efficiency;
3.the opportunity cost of tax expenditures and implicit identifying and implementing other forms of encouragement that would have a greater effect based on the purpose and desired effect;
4.fraud, because incentives/support packages and other support measures can be applied by the beneficiary according to their common sense, especially if they are not sufficiently monitored;
5.implications on competition (Bolnick B., 2004), creating unequal conditions between various business representatives, and respectively generate an asset concentration effect for beneficiaries.

## Conclusions

Application by the taxpayer of tax incentives is a legitimate way to reduce his tax liabilities. Therefore, it seems necessary to assess the effectiveness of the tax benefits, both when introduced into the tax legislation and for a further prolongation.

Currently, evaluation of the effectiveness of tax incentives is performed only in case of adoption of the draft law on incentive establishing. Subsequently, neither income losses nor economic and social results obtained from the application of the tax incentive are monitored. All these makes it very difficult to make decisions about introducing new tax incentives, canceling existing tax incentives or extending them. Summarizing the above, and analyzing tax incentives assessment mechanism in the literature, we conclude the following:

There is no single and comprehensive methodology for assessing the effectiveness of tax incentives, which can be applied within even a single tax system. For each type of incentive, each purpose and group of taxpayers, it is desirable to develop optimal models for assessing the incentive efficiency according to the expected effect.

Assessment of efficiency of tax incentives can increase the transparency of the tax sphere, but also increase the compliance of taxpayers.

Assessment of tax incentives effectiveness contributes to tax regulation optimization of the entrepreneurship by selecting the most effective incentives for their development.

The economic efficiency of tax incentives is monitored/evaluated in terms of indicators that reflect the dynamics of economic outcomes such as revenue growth, increased labor remuneration, fixed capital growth, reduced production costs, and job creation.

Approach in terms of social impact analysis refers to indicators: the creation of new jobs, engaging of socially vulnerable people, and improvment of products and services quality offered by some organizations, increasing in welfare.

Establishing fiscal policy objectives for each period of national economic development, selecting appropriate tax regulation instruments, adhering to the principles of tax incentives will enable the state to exert an effective influence on socio-economic processes in society.

## Bibliography


Bolnick,B., (2004), Effectiveness and Economic Impact of Tax Incentives in the SADC Region.Technical Report to USAID/RCSA SADC Tax Subcommittee. SADC Trade, Industry, Finance and Investment Directorate;

Câmpeanu, E. M., Timuş, A., Trofimov, V., Pădurean, E. (2012), Tax and budgetary policies in economic theories, Chisinau: IEFS, p.112-132;

Clark, J., Arnold, E., (2005), Evolution of Fiscal R&D Incentives, Report to CREST OMC Panel, Technopolis, p. 5;

Cuterghina,G. V., Mingazinova,E.R. (2014),Methodology for assessing and monitoring the effectiveness of tax incentives: approaches and challenges. In: Izvestiya of the Far Eastern Federal University. Economics and Management, no.1, p. 84-99;

Dobrota, N., (coord.) (1999), Economic Dictionary, Economica Publishing House, pp.354, 356;

Hungerford, T. (2006), Tax Expenditures: Trends and Critiques. CRS Report for Congress. September 13, p. 11;

Kesti, J., (ed.), (2007), European Tax Handbook 2007.Amsterdam: IBFD ;

Loie, P. (1990), Finances publique, Cujas, Paris, p.78-79;

Malinina, T. A., (2010), Evaluation of tax incentives and exemptions: foreign experience and the Russian practice. Scientific works no. 146P, Moscow: Institute for Economic Policy, E.T. Gaidar, 212 p;

Marinas,M-C., (2010), The effectiveness of fiscal policy in fighting the economic crisis. An analysis based on economic literature,Theoretical and Applied Economics, Vol.XVII, No. 11(552), pp. 52-66;

Toder, E., (2005), Tax Expenditures and Tax Reform: Issues and Analysis. National Tax Association;

Toder, E., Wasow B., Ettlinger M. (2002), Bad Breaks All Around: The Report of the Century Foundation Working Group on Tax Expenditures. The Century Foundation Press;

Pecarscaia,A. Iu., (2014), The methodology for evaluation the effectiveness of tax regimes for small business, Modernization. Innovation. Research, Vol. 5, no. 1(17), p.102-106;

Yarkin, A.M., (2013) Analysis of the Impact of Taxes on Growth from the Point of Industries and Businesses, Moscow, Russian Academy of National Economy and Public Service under the President of the Russian Federation. Electronic copy available at: http://ssrn.com/abstract=2329717;

* * * (2017) Customs, Periodicalpublication of thecustoms service, no. 1(31), p. 2-20;

* * * (1997), Fiscal Code of RM, no.1163-XIII, Title I, art. 5 p. 33, art. 33-35;

* * * (1997), Fiscal Code of RM, no.1163-XIII, Title I, art. 6, pharag. 9, p. g);

* * * (1997), Fiscal Code of RM, no.1163-XIII,Title II, chapter 7„Taxation of certain categories of taxpayers”, art. 49. Economic agents’ residents of free economic zones;

* * * (1997), Fiscal Code of RM, no.1163-XIII, Title II, chapter $7^1$ and $7^2$.