



## OPTIMAL TAX POLICY – FINANCIAL CRISIS OVERCOMING FACTOR

**George Abuselidze**

*Doctor of Economics, Shota Rustaveli State University (Georgia,) Georgia*

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### ABSTRACT

*Among economic reforms implemented for overcoming of world financial and economic recessions the special accent is brought to macroeconomic stabilization; strengthening of financial sphere is recognized one of imperatives of economic policy and considerable precondition of its ensuring includes adjustment of tax policy. Creation of optimal tax policy is one of the most difficult problems of economic sciences. One of the main lines of tax budget reformation includes formation of tax code taking into consideration optimal tax burden. Besides, realization of tax strategy shall be economically grounded. Tax rates and preferences and the forms of punishment of tax violators shall be selected not mechanically, but by means of mathematic calculation taking into consideration real economic situation. Just these matters are covered by the present work.*

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### 1. INTRODUCTION

In the modern period among the economic reforms implemented in the world the especial accent is placed to macroeconomic stabilization, besides, strengthening of financial sphere is recognized one of imperatives of economic policy, what is impossible without argued budget and tax policy. Successful transformation requires strong financial support, one of the main preconditions whereof includes settlement of fiscal legislation. In this matter immediate interests of government and various social groups come to collision. It is universally recognized that tax burden affects not only budget revenues, but investments, production factors, price standards etc. Finally, all above affects socioeconomic position of country.

Above mentioned concerns the difficulties of finding of correct correlation (i.e. intervention of government into functioning of economy, total volume of taxes in country, tax burden) of private and public bases for creation of welfare, what is related to development of economy, matters of stable economic growth, but the problem is complicated with the task of increase of justice in the distributive relations. The matter is that application of tax policy for reduction of injustice in

distributive relations typical for market economy distorts taxes to significant extent: for the purpose of achieving of more justice it is required to sacrifice some part of effectiveness.

Proceeding from above specified, creation of optimal tax and budget system is one of the most difficult problems. Tax burden increasing budget revenues shall not although depress private business.

Policy of any country economic stabilization is correct and effective, when government applies fiscal policy measures knowingly, on the scientific level and achieves approaching of product yield to potential level, what preserves inflation targeting.

For analyzing of influence of tax burden on economy and economic activity it is especially important to what extent integrated tax burden is distributed between different economic players, manufacturers and consumer, different strata of population, as even in conditions of complete admissibility of tax burden the taxes may be heavily distorted due to its wrong distribution.

## 2. LITERATURE REVIEW

In respect of tax pressure the properties of economic activeness and production volume acting positively and negatively through aggregate effects are explained by ((Christopher Heady) (José María *et al.*)) (David and Christopher) (Kenneth Judd) (Robert Barro *et al.*) and Etc.

According to so called pessimistic concept (pessimistic concept, [www.wisegeek.com/what-is-keynesian-economics.htm](http://www.wisegeek.com/what-is-keynesian-economics.htm)) it is impossible to establish any dynamic regularities in this process, as due to incidental circumstances various tax payers bear different tax burden. Proudhon stated that all taxes finally focus at final consumers of products and cause reduction of their income, disproportions and losses in economics, injustice in society (Pierre-Joseph) According to optimistic production (The Fiscal Times, 2012) - contra wisely, all the taxes finally evenly distribute between all tax payers in direct proportion to goods consumption and utility.

Mathematic concept based on theory of marginal utility of production which founders the famous scientists Bohm-Bawerk, Walras etc. were (Kugaenco and Belyanin, 1999), illuminated research of this problem and use for its explanation such economic categories, as demand, supply and price, i.e. elasticity of demand and supply. They consider relation of these categories to taxes.

Statistic concept tries to explain the named phenomena by the way of fundamental analyzing of the statistic data received resulted multiple statistic observation.

According to E. Atkinson and J. Stiglitz (Atkinson *et al.*, 1995), payment of taxes results reduction of individuals' incomes. They really grow poorer and have to suspend retirement, reduce spare time on cost of growing working hours etc.

Adam Smith regarded taxes as the index of freedom for tax payers, but for Montesquieu nothing and no one needs such a wisdom and mind as defining tax size and that part, which stays with a tax payer.

Adam Smith (Smith, 2011) wrote about the necessity of existing optimal tax policy in the country: "The owner of the capital is actually the citizen of the whole world and doesn't represent the property of one country. He will immediately leave the country with undesirable tax condition and

invest his capital in the country where he will be able to run his business and property without pressure”.

Since earliest times, many famous scientific economists, including Nobel Prize winners, moved into front line the question of decreasing tax burden in the country that would encourage economic activity and increase tax revenue of the budget.

The principal factors determining extent of impact of taxation pressure on economic activity and output include profitability of production in the sector, competition severity, manufacturing and sale of concrete products, industrial specificity of sectors, regions and spheres, general social and politic condition in the country, incomes of the various sections of population and their economic status.

### **3. METHODS OF RESEARCH**

Deduction, Synthesis, comparative analysis of scientific literature, statistical analysis, Historical approach.

### **4. SURVEY**

Qualitative and quantitative analysis of present economic situation in the world proves that the reason and factor of financial budget crisis is versatile and of large-scale. Due to lack of united intelligent strategy situation becomes worse and weakness of fiscal policy becomes apparent. As a result, fulfillment of the obligations provided by budget become impossible both in the receipts and expenditures parts. Growing of budget revenues is very important indeed. As we think, such growth shall base on optimal tax burden (Abuselidze, 2012). First of all, in such conditions government improves business environment, what is extremely important for development of private sector.

Although, in some cases a tax is imposed upon a legal person having appreciably less income than player’s subsistence level and compulsory tax sum. Small-scale businessmen are in especially heavy situation, because if they ”honestly” pay taxes, they factually have no income. Besides, they have to seek money outside their enterprise to pay taxes or sell production facilities, i.e. they have to work at complete loss (Abuselidze, 2008). Individuals actively seek and often find the ways of partial or full shifting of tax. When taxes exceed optimal tax burden, economic activity passes from the sphere of high taxes to those of low and/or preferential taxes. Such ways of tax avoiding cause lowering of economic activity and reduction of budget revenues from tax.

Tax avoiding exhibits in concrete purposeful actions of tax payer allowing him to avoid or reduce tax obligation. It shall be remarked that reduction of taxes resulted unintended, careless actions shall not be considered tax avoidance, although in accordance with valid tax legislation such case tax payer is not released from responsibility.

In most cases taxes are avoided by the following ways: hiding or nonregistering of incomes (profits) or other taxable facilities, falsification of accounting, late payment of taxes, failure or

delay to present documents required for tax calculation and payment, also non-reasonable use of tax remissions etc.

High specific weight of taxes enforces manufacturers to reduce production volume, what causes job restriction and growth of unemployment. So, the situation is such that government, as a tax collector, fairly requires tax paying, but businessmen, as tax payers require tax reduction. All above causes conflict between government and tax payers and analyzing this situation we have to respond to the question: how heavy tax burden shall be?

Economically strong state is based on effective operation of tax system, what requires not only optimal tax rates, but high tax culture of each payer, such as understanding of necessity of tax collection and payment, high responsibility of each businessman and tax collector and generally, quality of management.

Since the old times famous economic scientists, including Nobelists, have placed the problem of reduction of tax burden in the forefront to promote economic activeness and growth of budget revenues from taxes. We have dedicated many researches to this problem (as we think, it is possible if based on mathematical exactness) (Abuselidze, 2012).

Although, for effective operation of fiscal policy not only optimal tax burden, but high tax culture of each payer is required. But at the modern stage we remark the tend of mass-scale hiding and evasion of taxes, political parties' influence and patronage, corrupt transactions with tax authorities.

Economically strong state is based not only on optimal tax burden, but understanding of necessity of tax collection and payment, high responsibility of each businessman and tax collector and generally, quality of management.

Low tax culture is caused with the following reasons: high tax rates, large scale of corruption, defective tax legislation, tax payers' ignorance of social welfare resulted with government spending of funds mobilized in the budget.

Tax avoidance causes great losses to society, as it results reduction of budget revenues and correspondingly less amount are spent for social, economic and other needs. The amount of such loss grows in proportion to quantity of tax violators:

$$H_i = H_i(O_i) \quad (1)$$

where  $H_i$ - loss caused due to  $i$  tax violations;  $O_i$ -quantity of tax violators.  
Income gaining by tax violators also grows simultaneously with growth of  $O_i$ :

$$G_i = G_i(O_i) \quad (2)$$

where  $G_i$  is tax violator's income.

Net loss of society, i.e. expenses due to  $i$  tax violations  $D_i(O_i)$  is determined with difference between  $H$  loss and  $G$  income:

$$D_i(O_i) = H_i(O_i) - G_i(O_i) \quad (3)$$

Amount of tax violations is affected by many factors, from genetic inclination to social and marital status of tax violators. In other equal conditions, the higher is possibility of elimination and punishment of tax violators, the less is quantity of tax violations. Many people consider that change of possibility of punishment has stronger impact on quantity of tax violators, than change of severity of punishment.

Individuals commit violations is case, when favour expected from such action exceeds favour which he could gain resulted other, legal activities.

Our approach represents dependence between quantity of tax violations committed by concrete person, on the one hand, and possibility of punishing of this person and severity of punishment, on the other hand, also between other variables, such as the incomes which could be gained by tax violator by lawful activities, violator's readiness to committing tax violation. This function may be presented as follows:

$$O_j = O_j(P_j, f_j, U_j) \quad (4)$$

where  $O_j$  is quantity of violations committed by  $j$  violators during determined period of time;  $P_j$  is possibility of punishment of violator;  $f_j$  is punishment for each violation;  $U_j$  is a variable representing combined influence of the rest factors.

The higher is possibility of punishing of violator, the less is quantity of violations. Also growth of punishment severity reduces quantity of violations, because favour expected from committing of violation reduces.

There are many kinds of punishment, but for the purpose of this case we here consider penalty. Punishment touches not only violator, but other members of society. Total cost of punishment is a sum of violator's penalty cost and income or loss of the rest society related to this punishment. Penalties paid by violators make incomes for the rest members of society and equals to violators' loss minus penalty payment cost. So, society's expenses related to penalty are approximate to zero.

Optimal form of penalty for such violation, as tax avoidance, is a penalty which advantages in comparison with the other forms of punishment are as follows: imprisonment or other kinds of punishment absorbs society recourses, including guards, supervisors and violators themselves. As for penalty, it is a transferal tax which does not require any costs from the other members of society; in case of penalty application it is easier to determine severity of punishment, than in case of any other kinds of punishment; penalty provides compensation of loss caused to society, other kinds of punishment, in contrary, increase the losses due to related expenses.

Penalty, as a monetary form of punishment, represents “price” of tax violation better, than such punishments, as imprisonment, measured with time units. That is why, we consider reasonable the provision of the fourth paragraph of article 132 of Tax Code of Georgia, according to which prosecution shall not start if the principal sum of taxes imposed additionally are paid within 45 working days after receipt of Tax Request, i.e. punishment serves the fiscal purposes.

Optimal value of penalty may be represented with the following equity:

$$F_i = H_i(O_i) + C_i(O_i) \quad (5)$$

where  $C_i(O_i)$  is cost related to detection of tax violator and execution of punishment, i.e. tax violator has to compensate not only loss caused resulted his action, but costs related to punishing.

Optimal condition stipulates minimization of social losses  $D_i(O_i)$ . This condition may be met in case of reduction of tax violations quantity, what depends on two main factors: possibility of violators detection and size of punishment.

Pain of punishment reduces society’s losses caused with violations and grows social welfare, as violators have to give up violations. How can we achieve growth of welfare, i.e. “effectiveness” of public policy?

Social welfare is measured with incomes, but “effectiveness” – as a correlation of maximum possible growth of incomes and growth which would have been achieved in case of avoidance of all tax violations causing net loss. So, growth of effectiveness of public policy is possible by the way of selection of optimal value of such variables, as possibility ( $P$ ) of punishing of tax violators and size of punishment ( $f$ ).

We can mathematically determine effectiveness as follows:

$$E = \frac{D(O_1) - [D(\hat{O}) + C(P; \hat{O}) + bpf\hat{O}]}{D(O_1) - D(O_2)} \quad (6)$$

where  $f$  and  $\hat{O}$  are optimal values;  $O_1$  – quantity of tax violators, which would have been committed in the period of time  $p=f=0$ ;  $O_2$  – value of  $O$  which minimizes  $D$ ;  $bpf\hat{O}$  - loss expected by tax violator resulted punishment. So, effectiveness of public policy is determined mainly with two factors:  $p$  and  $f$ .

That is why, government fixing tax burden, changing any tax or its rate shall preliminarily calculate, who will really bear this tax and only after that make appropriate resolution of such change, fixing, reduction or rising.

Proceeding from above mentioned tax system needs improvement and adjusting to reality. To prevent losses to society due to taxes tax burden shall be fairly distributed. i.e. tax system shall be fair, what makes precondition for its effectiveness. It is enough clear, as fiscal policy is immediately related to and influences on budgetary system structure, functions and interrelation of various level budgets, policy of transfers, tax policy and customs tariffs.

All above mentioned makes clear that scientifically developed and well-grounded fiscal policy is required. Such policy shall be based on the principle of distribution of tax yield between payers of various incomes. Proceeding from above mentioned, setting up of optimal tax and budgetary systems is one of the most difficult problems of economic science and practice. Tax and budgetary systems shall be arranged such way that provides stimulation of development of private business resulted growth of budget revenues.

## 5. CONCLUSION AND RECOMMENDATIONS

One of the problems which, as we think, considerably prevents optimal operation of tax system is that taxation policy lost contact with united public economic policy. That is why, as we think, it is time to develop new complex program of economic reforms which would balance macro and microeconomic policy and adjust all its elements to each other.

Apart from all above mentioned, relation of tax burden with business and budget revenues from taxes is important for formation of optimal tax budgetary system. Besides, it shall be mentioned that there are such meanings, as ex.  $t=0$  and  $t=100$  (the article covering this problem is published in Journal of Applied Finance & Banking, vol. 2, no. 6, 2012, 121-130) in case of which tax remissions are not accumulated in budget, nor business functions, because without taxes ( $t=0$ ) state cannot exist, as well as in conditions of maximum tax rate ( $t=100$ ) business dies. Although, there are levels, differ from the said rates, namely  $t_1=50\%$  (Laffer) and  $t_2=38,2\%$  (Abuselidze), when budget revenues from taxes and business activeness differ (Abuselidze, 2012).

And finally, it may be mentioned that tax and budgetary systems are not pragmatic yet. If our aim includes achievement of economic growth, promotion of investments, reduction of unemployment etc., we shall develop the appropriate program. As for realization of tax strategy, it shall be economically grounded. Tax rates and preferences shall be selected not mechanically, but by means of mathematic calculation taking into consideration real economic situation.

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