Estimation of the tax potential as a part of budgetary potential

Roman Zhebchuk

Economic Department, Yuriy Fedkovych Chernivtsi National University, UKRAINE, Chernivtsi, Kotsubinsky street 2, E-mail: r.zhebchuk@gmail.com

Abstract – The author describes the method calculating of tax potential in the process of budget planning as part of the budgetary potential.

Key words – budgetary potential, budget planning, public finance, fiscal potential, structure of budgetary potential.

I. Introduction

Today, budget planning of high quality is difficult to imagine without the estimation of the abilities of administrative and territorial unit to fill the budget, which together form its fiscal capacity.

The budgetary potential is the financial basis for social and economic development of the territory. The possibilities of realization of tasks for development of the administrative and territorial unit depend on the extent of budgetary potential and the level of its usage. It therefore determines the need for estimation of budgetary potential and its components in the process of budget planning in Ukraine.

II. Essence of budgetary potential

The review of current scientific literature and research of scientists' vision of the essence of the category of "budgetary potential" [1; 2; 3] state that today there is no single point of view with regards to this concept among scientists. At the same time, it is worth noting that the aforementioned research provides the opportunity to determine our own vision of this category. From our point of view, budgetary potential is a part of the financial capacity of an administrative and territorial unit (country, region, district, city, town, village), which comprises the total amount of funds that can be accumulated from all sources into the budget of the administrative-territorial entity for a specific period of time and under existing economic conditions.

The main components of the budgetary potential are tax potential and non-tax potential. Tax potential is a part of budgetary potential of administrative and territorial unit (country, region, district, city, town, village), namely the total amount of funds that can be accumulated through compulsory payments (section "tax revenue" of budget classification) into the local budget during the particular period of time and under existing economic conditions.

The non-tax potential is part of the budgetary potential of administrative and territorial unit (country, region, district, city, town, village) which is the total amount of funds that can be accumulated using tools, non-obligatory payments (all other sections of the budget classification of income except for the "tax revenue" section) into the local budget during a particular period of time and under existing economic conditions.

III. Estimation of fiscal potential

Based on international experience and the need for the evaluation of the budgetary potential, as well as the importance of using it within practice of budget planning in Ukraine we offer the following algorithm of estimating the tax potential.

In particular, according to results of our research and practice of levying of tax payments, not only the characteristics of the tax base must be considered while evaluating the tax potential, but debts to the budget system of each type of taxes and it's repayment of previous years should also be taken into account. Thus, the tax potential of separate tax can portray the following formula:

$$ПП_{Tij} = Н_{ij} + Д_{ij} + Нед_{ij} \qquad (1)$$

where $ПП_{Tij}$ – tax potential of the j-th obligatory payments in the i-th year.

$Н_{ij}$ – charges of the j- th mandatory payment at the end of the i-th year.

$Д_{ij}$ – additional charges on the j-th obligatory payment at the end of the i-th year as the result of the inspection of institutions which administer compulsory payments.

$Нед_{ij}$ – revenues that could come in at the end of the i-th year as repayment of arrears of previous years.

j – compulsory payment that is included in the section of the part «tax income» of budgetary classification [4].

i – year for which the calculation is made.

Taking this into the consideration, the total amount of tax potential of the territory in the i-th year ($ПП_{Ti}$) can be calculated based on the following equation which is proposed by us:

$$ПП_{Ti} = \Sigma\ ПП_{Tij} \qquad (2)$$

where $\Sigma\ ПП_{Tij}$ - the sum of tax potential of all mandatory payments in the i-th year which add to the local budget.

According to the practice of executing local budgets by incomes in Ukraine, there is a discrepancy between the fact and planned income tax payments to the treasury of the local community. This reflects the level of filling of budget by taxes. In our view, this factor should be taken into account during the budget planning. We suggest to consider the effect of this factor by the coefficient of filling ($К_Н$) which is useful during planning of separate item of tax revenues as well as overall. The algorithm of calculating of planned separate tax payment is proposed below:

$$ПН_{пл j} = ПН_{пр j} * К_{Н j} \qquad (3)$$

where $ПН_{пл j}$ – income from the j-th obligatory payment which is planned for the next budget period.

$ПН_{пр j}$ – forecasted amount of revenues from the j-th obligatory payments of next budget period.

$К_{Н j}$ – coefficient of filling of the j-th obligatory payment.

While calculating $К_{Н ij}$ it is necessary, in our opinion, to take into account the actual level of income on obligatory payments and their comparison with the level of the potential revenue for each payment, i.e. with their potential (4). This comparison will reflect the capacity utilization rate of mandatory payments, or serve as a reflection of the level of taxes filling the budget.

$$К_{Н ij} = ПН_{ф ij} / ПП_{Tij} \qquad (4)$$

where $\text{K}_{\text{н}_{ij}}$– coefficient of filling of the j-th obligatory payment in the i-th year. $\text{ПН}\phi_{ij}$ – fact revenues of the j-th obligatory payments in the i-th budget year/ $\text{ПП}_{\text{т}_{ij}}$ – tax potential of the j-th obligatory payments in the i-th budget year.

In order to improve the quality of budgetary planning we consider it appropriate to calculate the coefficient of filling by taxes for several periods and has its average value $\overline{K_{H}}$ taken into account when calculating the planned revenue next budget period. According to this, the average density factor taking into account the time factor can be counted as follows:

$$\overline{K_{H}}_{j} = \frac{\sum_{i}^{t} K_{H_{ij}}}{T} \qquad (5)$$

where $\overline{K_{H}}_{j}$ – average rate of filling of the j-th obligatory payment for T years. $\text{K}_{\text{н}_{ij}}$ – coefficient of filling of the j-th obligatory payment in the i-th year. i, …, t – years, for which average coefficients filling of j-th obligatory payments are used in the calculation $\overline{K_{H}}_{j}$. T – number of periods (years) for which the average coefficient of filling is calculated.

The average coefficient of filling of obligatory payment which we analyzed (land tax) for the years 2010-2014 is 0,927.

As a result, the formula of planned revenue of the j-th obligatory payment, which combines tax potential and budget planning , transforms into the following:

$$\text{ПН}\text{пл}_{j} = \text{ПН}\text{пр}_{j} * \overline{K_{H}}_{j} \qquad (6)$$

where $\text{ПН}\text{пл}_{j}$ – sum of incomes from the j-th obligatory payments planned for the next budget period. $\text{ПН}\text{пр}_{j}$ – forecasted revenues from the j-th obligatory payments in the next budget period. $\overline{K_{H}}_{j}$ – average rate of filling from the j-th obligatory payment for T years.

However, the total amount of planned revenues from the obligatory payments can be calculated as follows:

$$\text{ПН}\text{пл} = \sum_{j}^{k} \text{ПН}\text{пл}_{j} \qquad (7)$$

where $\text{ПН}\text{пл}$ – total revenues from mandatory payments planned for the next budget period.

$\sum \text{ПН}\text{пл}_{j}$ – the amount of planned revenues of all j-th mandatory payments that is planned for the next budget period and levied in the analyzed period.

j, …, k – all mandatory payments, which are used in calculating the coefficient of filling in the i-th year.

Conclusion

In brief, the author proposed method (1)-(7) of tax potential calculation which allows to determine its extent and, on the basis of these data, to calculate the amount of planned tax revenues. Further studies will focus on creating methods of calculating non-tax component of budgetary capacity.

References

[1] Zhebchuk R. L. Byudzhetnyy potentsial ta yogo mistse v protsesi byudzhetnogo planuvannya [Online] / R. L. Zhebchuk // Visnyk Odes'koho natsional'noho universytetu. Ekonomika . - 2013. - T. 18, Vyp. 3(1). - p. 144-147. – Available: http://nbuv.gov.ua/j-pdf/Vonu_econ_2013_18_3(1)__38.pdf

[2] Zhebchuk R. L. Otsinyuvannya podatkovoho potentsialu yak elementu byudzhetnoho potentsialu v protsesi byudzhetnoho planuvannya [Online] / R. L. Zhebchuk // Ekonomika rozvytku. - 2014. - № 3. - p. 68-74. - Available: http://nbuv.gov.ua/j-pdf/ecro_2014_3_16.pdf

[3] Zhebchuk R.L. Teoretyko-metodolohichni osnovy otsinky nepodatkovoyi skladovoyi byudzhetnoho potentsialu terytoriyi / R. L. Zhebchuk // Formuvannya rynkovykh vidnosyn v Ukrayini: Zbirnyk naukovykh prats'. Vyp.11 (162)/Nauk.red. I.H. Mantsurov. - K., 2014. - p. 32-36.

[4] Pro byudzhetnu klasyfikatsiyu. Nakaz Ministerstva finansiv Ukrayiny #11 vid 14.01.2011. [Online]. – Available: http://www.minfin.gov.ua/control/uk/ publish/ article%3Fart_id=356065&cat_id=355990