

DIAGNOSTICS PARAMETERS OF THE FISCAL REGULATION IN TERMS OF MACRO-FINANCIAL STABILIZATION

The need to solve the problems of macro-economic stabilization of the country's economy on the basis of determining the tax system efficiency led to the actuality and importance of developing methodological issues of macro-economic tax regulation. In terms of macro-financial stability for the purpose of strategic analysis, the macroeconomic category of tax burden and its fiscal efficiency in terms of direct and indirect taxation is considered.

Tax burden indicators at a macro-level quantitatively measure the total level of tax payment and pumping up the budget. Based on the analysis of tax burden it is found that in Ukraine the major fiscal function is performed by consumption taxes (indirect taxes).

The methodological principles of the diagnostics of tax burden influence on macro-indices of economic stabilization are as follows: selecting parameters of monitoring tax burden state and fiscal burden efficiency; the assessment of an impact on fiscal efficiency on macro-indices. To prognosticate the efficiency of fiscal burden performance in terms of indirect taxes linear and exponential trend equations are calculated. In terms of the analysis of macro-financial stability the usage of tax rates of indirect taxes as indicators of fiscal efficiency provides sufficient reasons for the conclusions regarding long-term trends of pumping the budget.

Key words: fiscal regulation, stabilization indicators, tax rate, tax burden, trend models, macro-economic indicators

INTRODUCTION: The achievements of economic growth on long-term time horizons are the result of a balanced combination of economic, social, demographic, financial, investment and other components of a state policy. One of the main preconditions for their implementation is clearly defined intermediate and final policy objectives measured by using individual indicators and their complexes, systematically justified.

The implementation of a tax regulation mechanism depends on a significant number of interests and factors and is determined primarily by using appropriate macro-financial indicators that are necessary to ensure adequate comprehensive assessment of the conditions of making managerial decisions, to carry out preliminary analysis of their consequences and to select optimal scenarios of achieving strategic goals. The choice of macro-financial indicators provides the efficiency of government regulation and managing the potential risks of macro-economic stability and security.

The aim of this study is to determine methodological foundations of the choice of parameters of macro-financial stability diagnostics and identify relationships between macro-economic and macro-financial processes by means of tools of econometric modeling.

LITERATURE REVIEW: The issues of identifying macro-financial indicators in the sphere of public finance management are covered in the works of such foreign scientists: A. Aurbach, M. Barnhil, James M. Keynes, H. Kopits, J. Kremer, R. Mandell, M. Petrie, J. Taylor, K. Sims, P. Samuelson, T. Sargent, E. Stiglitz, M. Friedman, R. Hamminh, L. Hill, A. Shik and others. The domestic researchers who have made significant contribution to the disclosure of a financial indicator meaning include: O.I. Baranovskyi, I.F. Binko, O.D. Vasylyk, Z.S. Varnaliya, O.V. Herasymenko, M.M. Yermoshenko, Ya. A. Zhalilo, V.A. Lipkan.

The distinction of macro-economic and macro-financial spheres is important to research the economy's stabilization at the macro-level. The economic sphere analysis covers the following concepts: national production, national income, domestic demand, savings, investment and others. The indicators of a macro-financial sphere are revenues and expenditures of the consolidated budget, public debt, and indicators of credit and monetary field [1].

The need for indices-indicators occurs at the time of assessment of the current state and identification of economy's trends. Since management is a continuous cyclic process virtually in a single cycle indicators are used twice: in the process of assessing the situation to create an action plan and forecasting and evaluating the effects of these measures introduction.

The combination of indicators with control process is achieved by presenting it as a classical model of the management cycle - forecasting - planning - organization - implementation - control. As for the choice of the parameters of macro-level stabilization to determine an index of the gross domestic product (GDP), depending on the method individual components of the macro-economic indicator itself (aggregate demand, government procurements, gross investment, net exports) or regional indicators of the gross regional product (GRP), depending on analysis purposes are determined.

It should be noted that at the macro-level the division of financial indicators by analysis trends into efficiency, security and stability indicators is quite rare. Because of this issue the availability of different views on referring a certain indicator to a particular classification group and ways of their use for macro-analysis is a common problem.

The preservation of the base of forming public finance funds and relative sustainability of costs are necessary conditions for stable obligation performance at the macro-level. The realization of these tasks is provided by the indicators of the first condition – fiscal sustainability and the second one – monetary. Herein, tax field indicators are also included in the macro-security group as a part of the revenue structure. In terms of macro-financial stability for the purpose of strategic analysis the macro-economic category of tax burden and also its fiscal efficiency in terms of direct and indirect taxation is considered.

In economics there are several approaches to tax burden evaluation, namely:

- as the ratio of tax revenue to the budget to the value of total income of the private sector;

- as the difference between total revenues and expenditures and transfers from the budget for the private sector maintenance;
 - as the share of tax revenue to the gross domestic product [5, 7-10].

The tax rate is often used as an indicator of tax burden efficiency. The tax rate is the simplest index of those commonly used in characterizing tax burden. The advantage of this indicator is its prevalence in foreign countries [1, 6].

RESEARCH METHODOLOGY. In general, tax burden shows the income that residents pay to the budget in taxes and non-tax payments. There are several methods for calculating this indicator, depending on the analysis task and available resources. The most accurate method of calculating tax burden is to analyze the cost of each economy entity in terms of paying taxes and non-tax payments. For the purposes of fiscal regulation of supply and demand it is advisable to analyze tax burden in terms of direct and indirect taxes.

The revenue dynamics in terms of tax division by functional features – income taxes (direct taxes) and consumption taxes (indirect taxes) are shown in Fig. 1.

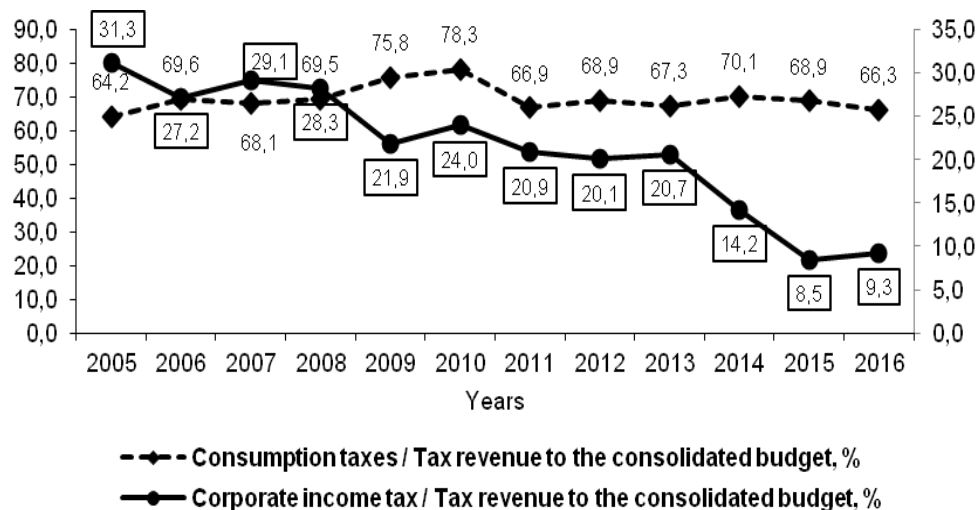


Fig. 1. Dynamics of the tax burden formation in Ukraine

Source: built by the authors based on [11, 12, 13, 14]

The indicators of tax burden at the macro-level reflect the fiscal policy efficiency that is quantitatively measure the cumulative level of their payments and pumping up the budget.

Fig. 2 and Fig. 3 show the tax rate dynamics in terms of direct and indirect taxes. It can be noted that there is a different dynamics character for tax rates by indirect and direct taxes: to decrease – by direct taxes, to increase – by indirect ones.

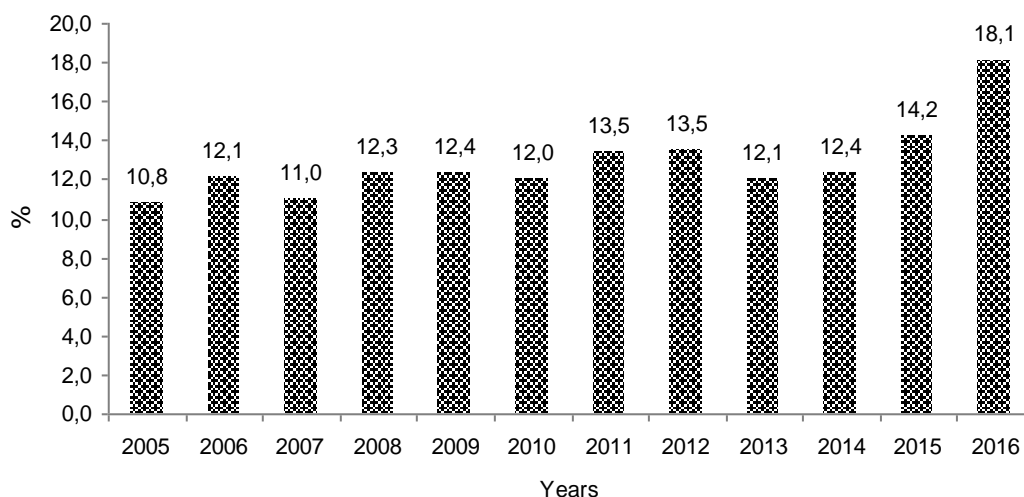


Fig. 2. Tax rate by direct taxes

Source: built by the authors based on [11, 12, 13, 14]

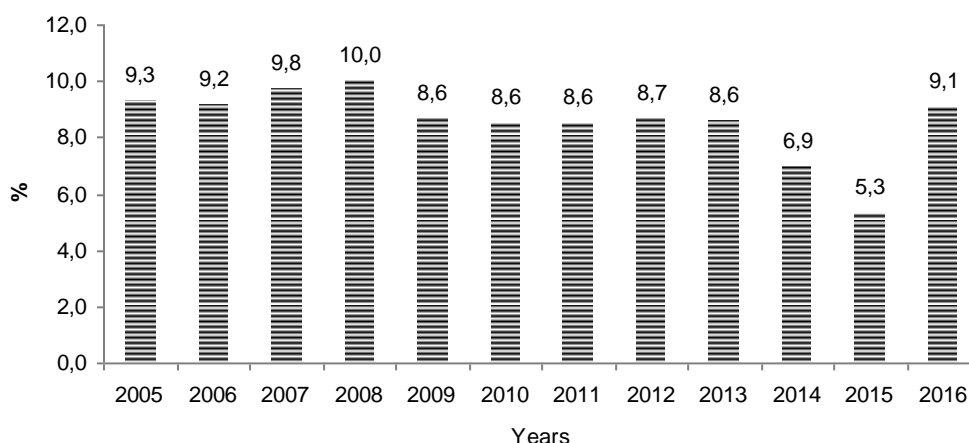


Fig. 3. Tax rate by indirect taxes (by consumption taxes)

Source: built by the authors based on [11, 12, 13, 14]

In 2015 there was the highest ratio of tax revenue of indirect taxes and the lowest by direct ones to the GDP for the period. The calculation of the tax rate level in terms of direct and indirect taxes determines tax regulation directions to stimulate demand or supply of financial resources.

It should be noted that unlike the national practice, the ratio of tax revenue to the gross domestic product is often used abroad, including the value of goods and services produced by residents outside the country [1].

In terms of the analysis of macro-financial stability, the ratio of tax revenue to the GDP gives sufficient grounds to draw the conclusions on long-term trends of pumping up the budget and identifying potential risks. However, tax revenue is not an indicator associated with the level of economic development. The level of non-payment of tax liabilities, the level of the shadow economy, sustainable development indices, financial security parameters are the reflection of the economic situation in the country and real macro-financial stability.

The methodological basis of the selection of macroeconomic stability and financial security parameters can be defined as follows: selecting monitoring parameters of the tax burden state and fiscal burden efficiency; the diagnostics of tax burden impact on macro-economic stabilization.

In general, the indicators can be classified according to certain characteristics that meet the study objectives. The index classification of the identification of economic development stabilization can be presented in Table 1.

Table 1. Classification of economic stabilization indicators

Classification	Types of indicators
<i>By way of development process evaluation</i>	<i>direct</i> – directly related to the review subject <i>indirect</i> indicators – indirectly reflect the characteristics of the object
<i>By time basis of indicator comparison</i>	<i>basic</i> – cover a period to be taken into comparison, <i>actual</i> – meet existing state <i>planned</i>
<i>By time direction of development process evaluation</i>	<i>retrospective</i> (bygone periods) <i>current</i> (interim, final) <i>prognostic</i> (forward periods)
<i>By level of detailing the structure of the indicator study object</i>	<i>holistic or integrated</i> (state budget revenues to the GDP) <i>element by element</i>
<i>By level of aggregation in the process of analyzing and evaluating</i>	<i>isolated</i> <i>group</i> <i>integrated</i>
<i>In terms of uniqueness</i>	<i>universal</i> indicators that can be used to analyze all types of enterprises <i>special</i> formed taking into account the features and characteristics of the study object
<i>According to measurement units</i>	<i>quantitative (numerical)</i> and <i>qualitative</i> . Among quantitative indicators there are groups of <i>absolute</i> (GDP, tax revenue, added value, etc.) and <i>relative (conditional)</i> indicators (fiscal efficiency, tax burden)
<i>By way of values presentation</i>	<i>point</i> and <i>interval</i> indicators. Interval indicators reflect a period of admissible values, point ones are limited with accurate values of the indicator.

Source: Authors' development

This distinction is caused by the need to combine absolute and relative indicators in the process of macro-financial analysis and an increasing tendency to use qualitative characteristics of economic phenomena.

Each classification of the study complex object is not exhaustive and may be supplemented with additional classification features in accordance with research goals in the process of socio-economic phenomena and processes research.

The selected parameters of macro-analysis must meet certain specifications as described in Table 2.

Table 2. Main characteristics of economic stabilization indicators

Specification	Meaning	How to use
<i>Certainty</i>	information property, which determines the degree of objective, accurate reflection of events and facts that occurred	As a means of ensuring transparency
<i>Timeliness</i>	as a time interval between the moment (period) in which there was a phenomenon or process, described by the statistical data and the date of readiness (provision) of these data	As a means of operational governance
<i>Reality</i>	means matching the level of technical and methodological support not only the method of indicator measuring, but its grounding and understanding.	As a means of government regulation

Source: Authors' development

MAIN RESULTS: To determine the level of tax burden the calculations were carried out by the tax rate, the other indicators are determined as shown in Table 3.

Table 3. Indicators of tax regulation efficiency

Indices	Method of calculation
Budget tax burden	Tax revenue to the consolidated budget / GDP * 100
Share of GDP centralization in the budget	Revenue to the consolidated budget / GDP * 100
Tax burden on labor	Single Social Tax / GDP * 100
Crude rate of tax burden	Budget tax burden + Tax burden on labor / GDP*100

Source: Survey [6]

The dynamics of the tax burden formation in Ukraine is presented in Table 4.

Table 4. Dynamics of the tax burden in Ukraine in 2005-2016 due to different types of tax payments, %

Indicator	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Average level
1.Income tax	3.73	4.19	4.83	4.84	4.87	4.73	4.16	4.35	4.41	3.94	2.77	5,82	4,39
2.Corporate income tax	5.28	4.74	4.72	5.01	3.57	3.71	4.21	3.94	3.71	2.51	1.76	2,53	3,81
3.VAT	7.67	9.26	8.25	9.71	9.27	8.89	10.01	9.88	8.76	8.76	9.02	13,84	9,44
4.Budget tax burden	22.22	23.11	22.36	23.98	22.78	21.60	25.74	26.29	24.15	23.16	25.63	27,31	24,04
5.Share of GDP centralization in the budget	30.40	31.57	30.51	31.42	31.60	28.95	30.64	31.72	30.22	28.73	32.94	32,84	30,98
6.Tax burden on labor	9.41	9.98	10.48	10.75	10.93	11.03	10.70	11.25	11.39	10.46	8.58	4,69	9,97
7.Crude rate of tax burden	31.63	33.09	32.84	34.73	33.71	32.63	36.43	37.54	35.54	33.61	34.21	32,00	34,01

Source: compiled by the authors based on [11, 12, 13, 14]

According to the data of Table 4 the average level of the tax burden in Ukraine does not differ significantly from the average indicator for EU countries. The main difference is tax revenue structure. In Ukraine, the share of indirect taxes prevails over direct ones, while in developed countries there is an opposite trend [2].

A clear development trend for the tax rate growth by indirect taxes in general and by excise duties is confirmed by the results of econometric analysis (Table 5). The linear equation coefficient of trend $\hat{y} = 11.05 + 0.22t$ shows that from 2005 to 2016 the tax rate by indirect taxes grew annually on average by 0.22%. If such a trend continues in the coming years, this tax rate will continue to grow. The excise duty over the period grew by 0.16% annually, as the linear model coefficient of the main trend of development for this indicator shows ($\hat{y} = 1.26 + 0.16t$). Analyzing the trend of this indicator change by individual components, we can state the tax rate growth by excise duty on imported goods. The rate value of trend equation $\hat{y} = -0.08 + 0.10t$ shows that the tax rate by excise duty on imported goods for 2005-2016 increased by 0.10%.

Table 5. Linear equations of tax rates trend by indirect taxes in Ukraine according to the data of 2005-2016

Indicator	Trend equation and the value of Student's <i>t</i> -test	Determination coefficient <i>R</i> ²	Fisher's <i>F</i> -test	DW-criterion of Durbin–Watson
Consumption taxes / GDP, %	$\hat{y} = 11.05 + 0.22t$ 23.53* 3.24*	0.538	10.5*	2.28*
VAT / GDP, %	$\hat{y} = 8.64 + 0.07t$ 19.14* 1.00	0.100	1.0	1.94*
Taxes on international trade and external transactions / GDP, %	$\hat{y} = 1.15 - 0.001t$ 4.47* 0.08	0.001	0.0	1.29**
Excise tax / GDP, %	$\hat{y} = 1.26 + 0.16t$ 6.66* 5.74*	0.786	33.0*	1.62*
Excise duty on domestic goods / GDP, %	$\hat{y} = 1.34 + 0.06t$ 7.78* 2.34**	0.377	5.5**	1.39**
Excise duty on imported goods / GDP, %	$\hat{y} = -0.08 + 0.10t$ 0.93 8.36*	0.886	69.9*	1.39**

Note: * – statistical certainty with probability $p = 0.99$ (significance level $\alpha = 0.01$);

** – statistical certainty with probability $p = 0.95$ (significance level $\alpha = 0.05$)

Source: compiled by the authors based on [11, 12, 13, 14]

From 2005 to 2016 the tax rate by direct taxes decreased annually on average by 0.32%, as is indicated by the coefficient of linear equation trend $\hat{y} = 10.43 - 0.32t$ (Table 6). A tendency to decrease is characteristic for the tax rate by an income tax. Of all the components of direct taxes there is growing dynamics only for the tax rate by the single tax for private individuals.

Table 6. Trend linear equations of tax rates by direct taxes in Ukraine according to the data of 2005-2016

Indicator	Trend equation and the value of Student's <i>t</i> -test	Determination coefficient <i>R</i> ²	Fisher's <i>F</i> -test	DW-criterion of Durbin–Watson
Direct taxes / GDP, %	$\hat{y} = 10.43 - 0.32t$ 19.03* 3.97*	0.637	15.8*	0.99**
Corporate income tax / GDP, %	$\hat{y} = 5.57 - 0.27t$ 16.83* 5.52*	0.772	30.5*	1.54*
Income tax / GDP, %	$\hat{y} = 4.73 - 0.08t$ 12.35* 1.41	0.180	2.0	0.78
Single tax for small businesses / GDP, %	$\hat{y} = 0.14 + 0.03t$ 1.96 2.73**	0.452	7.4**	0.55
Single tax on legal persons / GDP, %	$\hat{y} = 0.11 - 0.001t$ 5.73* 0.44	0.021	0.2	0.45
Single tax on individuals / GDP, %	$\hat{y} = 0.05 + 0.02t$ 1.00 3.62**	0.593	13.1*	0.77

Note: * – statistical certainty with probability $p = 0.99$ (significance level $\alpha = 0.01$);

** – statistical certainty with probability $p = 0.95$ (significance level $\alpha = 0.05$)

Source: compiled by the authors based on [11, 12, 13, 14]

Based on the statistical evaluation of the certainty of exponential and linear models it is revealed that for the forecast calculation of the tax burden in Ukraine by indirect taxes exactly trend linear equations can be recommended.

Conclusions. The need to solve the problems of macro-economic stabilization of the country's economy on the basis of determining the tax system efficiency led to the actuality and importance of developing methodological issues of macro-fiscal tax regulation of the economy.

The methodical fundamentals of a choice of macro-economic and macro-financial parameters and usage of the offered analytical tools of tax regulation at the macro-economic level through the application of defined parameters of the tax burden diagnostics are developed.

The relationship between the taxation level and macro-parameters of economic stabilization depends on assessing tax burden efficiency, which suggests asserting about the impact in the short term – of a tax rate, but in the long term – of tax burden.

Based on the analysis of tax burden it is found that the average tax burden in Ukraine is not significantly different from the average indicator for EU countries. The main difference of the tax burden in Ukraine from the European Union is not its level but the tax revenue structure. In Ukraine, the share of indirect taxes prevails over the direct ones, while in developed countries there is an opposite trend. That is, in Ukraine the main fiscal function is performed by consumption taxes (indirect taxes). To prognosticate the efficiency of fiscal burden performance in terms of indirect taxes trend linear and exponential equations are calculated.

Tax rates are selected to be the indicators of evaluating tax regulation efficiency. On the basis of trend analysis of tax rates it is established that tax rates by indirect taxes, revenue forecasting by which is fulfilled by means of trend linear equations, can be selected to stimulate the demand for financial resources.

DISCUSSION: The analysis of the relationships between the indices of sustainable development, financial security parameters and indirect taxes was introduced by the authors in the previous studies [3, 4]. The direction of future research of tax regulation at the micro-level provides the definition of direct taxes impact on financial and macro-indicators and the determination of their structure for development stimulation.

References

1. *Бойко А.А.* Податкове навантаження як критерій ефективності податкової політики / А.А. Бойко // Збірник студентських наукових праць. – Одеса. – 2013. – № 2. – С. 334–341.
2. *Богер О.В.* Компаративний аналіз податкового законодавства України та ЄС в контексті стимулювання інновацій / О.В. Богер // Економіка та держава: науковий журнал. – 2015. – №4. – С. 120-123.
3. *Демчишин М.Я., Ривак Н.О.* Стратегія формування фінансової безпеки України / Основи формування економічної безпеки України: Монографія / За ред. д.е.н. Мойсеєнко І.П. – Львів : Вид-во Сполом, 2011. – 208 с. – С.54-77.
4. *Мойсеєнко І.П.* Непрямі податки в механізмі гарантування фінансової безпеки України/ І.П. Мойсеєнко, Н.О. Ривак // Фіскально-бюджетні механізми забезпечення фінансової безпеки держави: колективна монографія. За заг. ред. Г.Я. Анілівської. - Львів: СПОЛОМ, 2012. - С. 32-48.
5. *Кушнірчук Ю.М.* Оптимізація рівня фіскального навантаження з метою економічного забезпечення держави / Ю.М. Кушнірчук // Науковий вісник НЛТУ України. – 2010. – Вип. 20.11 – С. 161-169.
6. *Цимбалюк І.О., Вишневецька Н.В.* Податкове навантаження як критерій ефективності ведення податкової політики [Електронний ресурс]. – Режим доступу: www.nbuv.gov.ua/old_jrn/Soc_Gum/Evu/2012_19_1/Tsymbaly.pdf.
7. *Годованець О., Маршалок Т.* Податкове навантаження: важливий чинник соціально-економічної стратегії держави / О. Годованець, Т. Маршалок // Економічний аналіз. – 2008. – № 3 (19). – С. 85-89.
8. *Савченко В. Ф.* Аналіз показників розвитку системи оподаткування в Україні / В.Ф. Савченко, А.Ф. Лось // Економіка і регіон. – 2011. – № 3. – С. 71-76. – [Електронний ресурс]. Режим доступу: http://nbuv.gov.ua/UJRN/econrig_2011_3_15.
9. *Червінська О.С.* Аналіз податкового навантаження в Україні та шляхи його оптимізації / О.С. Червінська, О.В. Коваль // Науковий вісник НЛТУ України. – 2014. – Вип. 24.6. – С. 307–313 [Електронний ресурс]. – Режим доступу : http://nbuv.gov.ua/j-pdf/nvntu_2014_24.6_49.pdf.
10. *Соколовська А.* Теоретичні засади визначення податкового навантаження та рівня оподаткування економіки / А. Соколовська // Економіка України : політико-економічний журнал. – 2006. – № 7. – С. 4-12.
11. Основні показники економічного розвитку [Електронний ресурс]. – Режим доступу : <http://costua.com/budget/revenue/pension/>.
12. Офіційний сайт Державної служби статистики [Електронний ресурс]. – Режим доступу : <http://www.ukrstat.gov.ua/>.
13. Офіційний сайт Міністерства фінансів України [Електронний ресурс]. – Режим доступу: http://www.minfin.gov.ua/control/uk/publish/archive/main?cat_id=77643.
14. Бюджетний моніторинг. Аналіз виконання бюджету за 2005-2016 рр. [Електронний ресурс]. – Режим доступу : <http://www.ibser.org.ua/monitoring/byudzhethnyy-monitoring-analiz-vykonannya-byudzhetu>.

І. Мойсеєнко, д-р екон. наук, проф.

Львівський державний університет внутрішніх справ, Львів, Україна

Л. Гальків, д-р екон. наук, проф.

Національний університет «Львівська політехніка», Львів, Україна

М. Демчишин, канд. екон. наук, доц.

Львівський торговельно-економічний університет, Львів, Україна

ПАРАМЕТРИ ДІАГНОСТИКИ ФІСКАЛЬНОГО РЕГУЛЮВАННЯ В УМОВАХ МАКРОФІНАНСОВОЇ СТАБІЛІЗАЦІЇ

Визначено методичні основи вибору параметрів діагностики стану макрофінансової стабілізації. Описано класифікацію та основні характеристики індикаторів стабілізації економіки. Для цілей фіскального регулювання попиту та пропозиції запропоновано проаналізувати податкове навантаження та його ефективність в розрізі прямих та непрямих податків. Розроблено методичні основи діагностики впливу податкового навантаження на макрпоказники стабілізації економіки: вибір параметрів моніторингу стану податкового навантаження та ефективності фіскального навантаження; виявлення взаємозв'язків між макроекономічними та макрофінансовими

процесами за допомогою інструментів економетричного моделювання. Описані моделі тренду є основою аналітичного інструментарію податкового регулювання на макроекономічному рівні.

Ключові слова: фіскальне регулювання, індикатори стабілізації, податковий коефіцієнт, податкове навантаження, моделі тренду, макропоказники.

И. Моисеенко, д-р экон. наук, проф.

Львовский государственный университет внутренних дел, Львов, Украина

Л. Галькив, д-р экон. наук, проф.

Национальный университет «Львовская политехника», Львов, Украина

М. Демчишин, канд. экон. наук, доц.

Львовский торгово-экономический университет, Львов, Украина

ПАРАМЕТРЫ ДИАГНОСТИКИ ФИСКАЛЬНОГО РЕГУЛИРОВАНИЯ В УСЛОВИЯХ МАКРОФИНАНСОВОЙ СТАБИЛИЗАЦИИ

Определены методические основы выбора параметров диагностики состояния макрофинансовой стабилизации. Описана классификация и основные характеристики индикаторов стабилизации экономики. Для целей фискального регулирования спроса и предложения предложено проанализировать налоговую нагрузку и ее эффективность в разрезе прямых и косвенных налогов. Разработаны методические основы диагностики влияния налоговой нагрузки на макропоказатели стабилизации экономики: выбор параметров мониторинга состояния налоговой нагрузки и эффективности фискальной нагрузки; выявление взаимосвязей между макроэкономическими и макрофинансовой процессами с помощью инструментов эконометрического моделирования. Описанные модели тренда являются основой аналитического инструментария налогового регулирования на макроэкономическом уровне.

Ключевые слова: фискальное регулирование, индикаторы стабилизации, налоговый коэффициент, налоговая нагрузка, модели тренда, макропоказатели

References (in Latin): Translation / Transliteration/ Transcription

1. Boyko, A. (2013). Tax burden as a criterion of tax policy efficiency. Collection of student papers. Odesa, 2, pp. 334-341.
2. Boher, O. V. (2015). Comparative analysis of the tax legislation in Ukraine and the EU in the context of innovation stimulating. Economics and state: scientific journal, 4, pp. 120-123.
3. Demchyshyn, M. Ya. & Ryvak, N.O. (2011). Strategy of the financial security formation in Ukraine. Fundamentals of the economic security formation in Ukraine: Monograph. Ed. by Doctor of Economic Sciences Moysseyenko I.P. Lviv. Spolom, pp. 54-77.
4. Moysseyenko, I.P. (2012). Indirect taxes in the mechanism of guaranteeing the financial security of Ukraine. Fiscal and budgetary mechanisms to ensure the financial security of the state: collective monograph. Ed. by H. Ya. Anilovska. Lviv: Spolom, pp. 32-48.
5. Kushnirchuk, Yu.M. (2010). Optimization of the fiscal burden level for state's economic securing. Scientific bulletin of NLTU of Ukraine. Vol. 20.11, pp. 161-169.
6. Tsybalyuk, I.O. & Vyshnevskya, N. Spolom V. Tax burden as a criterion for the efficiency of a tax policy. Available at: www.nbu.gov.ua/old_jrn/Soc_Gum/Evu/2012_19_1/Tsybalyuk.pdf.
7. Hodovanets O., Marshaljuk T. (2008). Tax burden: an important factor in the state's socio-economic strategy. Economic Analysis. № 3 (19), pp. 85-89.
8. Savchenko V. F. (2011). Analysis of development indicators of the taxation system in Ukraine. Economics and Region. № 3. pp. 71-76. – Available at: http://nbuv.gov.ua/UJRN/econrig_2011_3_15.
9. Chervinska O.S. (2014). Analysis of the tax burden in Ukraine and ways of its optimization. Scientific bulletin of NLTU of Ukraine. Vol. 24.6. pp. 307-313. Available at: http://nbuv.gov.ua/j-pdf/nvntu_2014_24.6_49.pdf.
10. Sokolovska A. (2006). Theoretical principles of tax burden determination and the economy's taxation level. Ukraine's Economy: political and economic journal. № 7, pp. 4-12.
11. Key economic indicators. Available at: <http://costua.com/budget/revenue/pension/>.
12. The State Statistics Service of Ukraine. Macroeconomic indicators. Available at: <http://www.ukrstat.gov.ua/>.
13. Ministry of Finance of Ukraine. Financial indicators. Available at: http://www.minfin.gov.ua/control/uk/publish/archive/main?Cat_id=77643.
14. Budget Monitoring. Analysis of the budget performance (2005-2016). Available at: <http://www.ibser.org.ua/monitoring/byudzhetnyy-monitoring-analiz-vykonannya-byudzhetu>.

1. Boyko A.A. Podatkove navantazhennya yak kryteriy efektyvnosti podatkovoyi polityky / A.A. Boyko // Zbirnyk student-s'kykh naukovykh prats'. – Odesa. – 2013. – № 2. – S. 334–341.
2. Boher O. V. Komparatyvnyy analiz podatkovoho zakonodavstva Ukrainy ta YES v konteksti stymulyuvannya innovatsiy / O. V. Boher // Ekonomika ta derzhava: naukovy zhurnal. – 2015. – №4. – S. 120-123.
3. Demchyshyn M.YA. Ryvak N.O. Stratehiya formuvannya finansovoyi bezpeky Ukrainy / Osnovy formuvannya ekonomichnoyi bezpeky Ukrainy: Monohrafiya / Za red. d.e.n. Moysseyenko I.P. – Lviv : Vyd-vo Spolom, 2011. – 208 s. – S.54-77
4. Moysseyenko I.P. Nepryami podatky v mekhanizmi harantuvannya finansovoyi bezpeky Ukrainy/ I.P. Moysseyenko, Ryvak N.O. // Fiskal'no-byudzhetni mekhenizmy zabezpechennya finansovoyi bezpeky derzhavy: kolektyvna monohrafiya. Za zah. red. H.YA. Anilovskoyi. - Lviv: SPOLOM, 2012. - S. 32-48.
5. Kushnirchuk YU.M. Optymizatsiya rivnya fiskal'noho navantazhennya z metoyu ekonomichnoho ubezpechennya derzhavy /YU.M. Kushnirchuk // Naukovyy visnyk NLTU Ukrainy. – 2010. – Vyp. 20.11 – C. 161-169.
6. Tsybalyuk I.O. Vyshnevskya N.V. Podatkove navantazhennya yak kryteriy efektyvnosti vedennya podatkovoyi polityky Elektronnyy resurs. Rezhym dostupu [www.nbu.gov.ua/old_jrn/Soc_Gum/Evu/2012_19_1/Tsybalyuk.pdf](http://nbuv.gov.ua/old_jrn/Soc_Gum/Evu/2012_19_1/Tsybalyuk.pdf).
7. Hodovanets' O., Marshalok T. Podatkove navantazhennya: vazhlyvyi chynnyk sotsial'no-ekonomichnoyi stratehiyi derzhavy / O. Hodovanets', T. Marshalok // Ekonomichnyy analiz. – 2008. – № 3 (19). – S. 85-89.
8. Savchenko V. F. Analiz pokaznykiv rozvytku systemy opodatkovannya v Ukraini / V. F. Savchenko, A. F. Los' // Ekonomika i rehion. - 2011. - № 3. - S. 71-76. - Rezhym dostupu: http://nbuv.gov.ua/UJRN/econrig_2011_3_15.
9. Chervins'ka O.S. Analiz podatkovoho navantazhennya v Ukraini ta shlyakh yoho optymizatsiyi / O.S. Chervins'ka, O.V. Koval' // Naukovyy visnyk NLTU Ukrainy. – 2014. – Vyp. 24.6. – S. 307–313 [Elektronnyy resurs]. – Rezhym dostupu : http://nbuv.gov.ua/j-pdf/nvntu_2014_24.6_49.pdf.
10. Sokolovska A. Teoretichni zasady vyznachennya podatkovoho navantazhennya ta rivnya opodatkovannya ekonomiky / A. Sokolovska // Ekonomika Ukrainy : polityko-ekonomichnyy zhurnal. – 2006. – № 7. – S. 4-12.

11. Osnovni pokaznyky ekonomichnoho rozvytku [Elektronnyy resurs]. – Rezhym dostupu : <http://costua.com/budget/revenue/pension/>.
12. Ofitsiyyny sayt Derzhavnoyi sluzhby statystyky [Elektronnyy resurs]. – Rezhym dostupu : <http://www.ukrstat.gov.ua/>.
13. Ofitsiyyny sayt Ministerstva finansiv Ukrainy [Elektronnyy resurs]. – Rezhym dostupu: http://www.minfin.gov.ua/control/uk/publish/archive/main?cat_id=77643.
14. Byudzhetyy monitorynh. Analiz vykonannya byudzhetu za 2005-2016 rr. [Elektronnyy resurs]. – Rezhym dostupu : <http://www.ibser.org.ua/monitoring/byudzhetyy-monitoryng-analiz-vykonannya-byudzhetu>.

INFORMATION ABOUT AUTHORS (META-DATA)

Мойсеєнко Ірина Павлівна

доктор економічних наук, професор, професор кафедри фінансів та обліку, Львівський державний університет внутрішніх справ, Львів, Україна

Контактна інформація: вул. Максима Кривоноса, 1, Львів, Львівська область, 79000
032-238-11-25, +38(097)332-16-62, iruna_m2015@ukr.net

Моисеенко Ирина Павловна

доктор экономических наук, профессор, профессор кафедры финансов и учета, Львовский государственный университет внутренних дел, Львов, Украина

Moiseyenko Iryna Pavlivna

Doctor of Economic Sciences, Professor, Department of Finance and Account, Lviv State University of Internal Affairs, Lviv, Ukraine

Гальків Любо́в Іванівна,

доктор економічних наук, професор, професор кафедри менеджменту та організацій, Національний університет «Львівська політехніка», Львів, Україна

Контактна інформація: +38(067)794-02-94, lubakram@gmail.com

Галькив Любовь Ивановна,

доктор экономических наук, профессор, профессор кафедры менеджмента и организаций, Национальный университет «Львовская политехника», Львов, Украина

Halkiv Lyubov Ivanivna

Doctor of Economic Sciences, Professor, Department of Management of Organizations, National University "Lviv Polytechnic", Lviv, Ukraine

Демчишин Марія Ярославівна

кандидат економічних наук, доцент, доцент кафедри вищої математики та кількісних методів, Львівський торговельно-економічний університет, Львів, Україна

Контактна інформація: +38(067)427-01-61, mariya.demchyshyn@gmail.com

Демчишин Марія Ярославівна

кандидат экономических наук, доцент, доцент кафедры высшей математики и количественных методов, Львовский торгово-экономический университет, Львов, Украина

Demchyshyn Mariya Yaroslavivna

Candidate of Economic Sciences, Associate Professor, Department of Mathematics and Quantitative Methods, Lviv University of Trade and Economics, Lviv, Ukraine