

УДК 336.22:005.334]-027.531-047.44(477)(045)

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**TAX RISK MANAGEMENT SYSTEM AND EVALUATION OF A
TAX RISK MANAGEMENT QUALITY**

The subject of the article is a systematic analysis of tax risk management in Ukraine. The purpose of the article is to develop a methodology for determining the quality of state tax risk management, as well as to calculate the integral index and components of the quality assurance index of state tax risk management in Ukraine for the period from 2001 to 2016. The research used methods of system analysis, synthesis and historical. On the basis of the study of the structure of the tax system, the system of state tax risk management is formulated, its goals, tasks, principles, objects, subjects and stages are characterized. A methodology for assessing the quality of state tax risk management is proposed, its structural and parametric characteristics are substantiated. The author's estimates of the quality of state tax risk management in Ukraine for 2001 – 2016 are given. The results of the study can be applied in the construction of a system of state tax risk management in Ukraine, as well as in identifying priority steps to improve the government's tax risk management.

Keywords: *state tax risk management, risk management quality assessment, tax risks, risk management structure.*

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**СИСТЕМА УПРАВЛІННЯ ПОДАТКОВИМИ РИЗИКАМИ ТА
ОЦІНЮВАННЯ ЯКОСТІ ДЕРЖАВНОГО ПОДАТКОВОГО РИЗИК-
МЕНЕДЖМЕНТУ**

У статті здійснюється системний аналіз управління податковими ризиками в Україні. Метою статті є формування методики визначення

якості державного податкового ризик-менеджменту, а також розрахунок інтегрального індексу та складових індексу якості державного податкового ризик-менеджменту в Україні за період 2001 – 2016 років. У дослідженні застосовано методи системного аналізу, синтезу та історичний. На основі дослідження структури податкової системи сформульовано систему державного податкового ризик-менеджменту, охарактеризовано його цілі, завдання, принципи, об'єкти, суб'єкти та етапи. Запропоновано методiku оцінювання якості державного податкового ризик-менеджменту, обґрунтовано її структурні та параметричні характеристики. Приведено авторські оцінки якості державного податкового ризик-менеджменту в Україні за 2001 – 2016 роки. Результати дослідження можуть бути застосовані при побудові системи державного податкового ризик-менеджменту в Україні, а також при визначенні пріоритетних кроків з удосконалення державного управління податковими ризиками.

Ключові слова: *державний податковий ризик-менеджмент, оцінювання якості ризик-менеджменту, податкові ризики, структура ризик-менеджменту.*

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СИСТЕМА УПРАВЛЕНИЯ НАЛОГОВЫМИ РИСКАМИ И ОЦЕНИВАНИЕ КАЧЕСТВА ГОСУДАРСТВЕННОГО НАЛОГОВОГО РИСК МЕНЕДЖМЕНТА

Предметом статьи является системный анализ управления налоговыми рисками в Украине. Целью статьи является формирование методики определения качества государственного налогового риск-менеджмента, а также расчет интегрального индекса и составляющих индекса качества государственного налогового риск-менеджмента в Украине за период 2001 - 2016 годов. В исследовании применены методы системного анализа, синтеза и исторический. На основе исследования

структуры налоговой системы сформулировано систему государственного налогового риск-менеджмента, охарактеризованы его цели, задачи, принципы, объекты, субъекты и этапы. Предложена методика оценки качества государственного налогового риск-менеджмента, обоснованы ее структурные и параметрические характеристики. Приведены авторские оценки качества государственного налогового риск-менеджмента в Украине за 2001 – 2016 годы. Результаты исследования могут быть применены при построении системы государственного налогового риск-менеджмента в Украине, а также при определении приоритетных шагов по совершенствованию государственного управления налоговыми рисками.

***Ключевые слова:** государственный налоговый риск-менеджмент, оценка качества риск-менеджмента, налоговые риски, структура риск-менеджмента.*

Formulation of the problem. The problem of building a system of public administration of tax risks in Ukraine is relevant, as more than 80% of our state's budget revenues are taxes, and the methods of state tax risk management (hereinafter – STRM) are used in the states-leaders of international ratings of taxation systems quality, in particular [13]. To improve the effectiveness of the STRM, it is necessary to assess its quality in order to identify the reserves for its increase. Tax risks (hereinafter – TRs) are defined as a complex socio-economic phenomenon, which consists in the possibility of improper performance of the tax system (hereinafter – TS) of its functions and is characterized by: the magnitude of expected losses due to the impact on the TS of risk factors (characterizes the probability and amount of possible losses), as well as the perception of risk by the subjects of taxation. The STRM is the activity of public authorities (hereinafter – PAs) and officials in cooperation with local self-government bodies, civil society, aimed at reducing expected losses from the implementation of TR factors.

The purpose of the study is to develop a methodology for assessing the

STRM quality, as well as to calculate the STRM quality indices in Ukraine for the period from 2000 to 2016.

Tasks to be resolved to achieve the goal:

- Characteristics of the integral STRM structure;
- Determination of the STRM stages and their importance;
- Formulation of the methodology for assessing the STRM quality;
- Calculation of STRM quality assessments in Ukraine for the period from 2000 to 2016.

Analysis of publications that initiated the solution to this problem.

Problems of risk management (hereinafter – RM), in particular tax risk management, are devoted to the work of both academics and practitioners. From West European studies worth attention is the work of Andy Osborne [15]. From the American – Carl Pritchard. Among the Ukrainian researchers, the issues of the RM – V. Vitlinsky, G. Velykoivanenko [1], N. Ievtushenko [4], M. Stepura [9] and O. Tesak [11]. There are practical developments in the field of STRM: since 2004, a group of experts from the European Union (Fiscal Risk Management Platform Group) has been working on the development of TR management techniques, in 2010 the EU issued a Compliance Risk Management Guide for Tax Administrations [12], where the theoretical part was revised and examples of the use of STRM methods in the EU are given. The tax risk management system is devoted to the article [4] N. Ievtushenko. RM of the formation of budget tax revenues is dedicated to the dissertation of M. Stepura [9]. The effectiveness of the RM of business entities is devoted to the work of O. Tesak [11]. In our opinion, the current problem of assessing the STRM quality in publications is highlighted fragmentarily and requires research.

Presenting main material. According to O. Tesak, evaluation of RM quality is possible due to the evaluation of its effectiveness. To analyze the effectiveness of RM it is necessary to develop a method of analysis, to establish a list of indicators

of evaluation of the effectiveness of RM. Then the actual values for each indicator of RM efficiency and its overall level should be determined [11, p. 163]. According to O. Tesak, the effectiveness of RM should be evaluated according to the following indicators: the level of economic profitability of spending on RM – (1) the proportion (hereinafter – Prop.) of the amount of losses that could be avoided as a result of RM in the amount of expenses for the implementation of RM measures; (2) the level of achievement of planned positive RM results – Prop. of losses magnitude, which virtually managed to be avoided due to RM in the total amount of losses, which was planned to be prevented due to RM; (3) the level of retention of risks within the permissible level – the Prop. of the value of turnover that was carried out with the entities, the risks of relationships with which do not exceed the allowable value, due to RM, in the amount of total turnover; (4) the level of positivity of trends in the level of risk changes as a result of RM – the amount of turnover with entities with which for a long period of time risk does not increase, does not increase, being minimal; (5) the level of timeliness of measures from the RM – Prop. of the number of timely measures that prevented the loss of the total number of RM activities; (6) the level of positive impact of measures on RM – Prop. of effective measures taken in the total number of RM activities.

The structure of the STRM, according to M. Stepura, contains [9]: the object and subject; principles, objectives and goals (within the overall strategy); stages and tools of management. In Ukraine, it is expedient to build a STRM system. According to N. Ievtushenko, the tax risk management system is a synthesis of the results of control and systematization of deficiencies and violations of legal acts by business entities in the process of economic activity, schemes of tax evasion, as well as general features that may indicate the existence of the above violations [4, p. 75]. In our opinion, the system of public administration of tax risks is a normatively and methodically defined structure of tasks, powers and responsibilities of government bodies and officials aimed at reducing the expected

losses due to non-fulfillment of the functions of the TS. The system of STRM contains in its composition: goals, tasks, principles, objects and subjects.

The **tasks of the STRM** can be divided into its stages. In the works of Western researchers [15] and practitioners [12], the RM steps are five major steps:

1. Identification of risks.
2. Risk assessment.
3. Definition of countermeasures.
4. Application of countermeasures.
5. Analysis and conclusions in order to further RM improvement.

Unlike the above-mentioned works of Western authors, the monograph [1] contains a wider list of key RM stages, which can be cited in the STRM context as follows:

1. Evaluation and analysis of the emergence of the whole set of possible TRs;
2. Detection of TR, which establishes the possible parameters of all risks;
3. Comprehensive risk analysis with calculation of parameters of possible mutual influence on the functioning of the TS;
4. Risk reduction (action planning). The search for methods of high-quality protection against unacceptable risk, the development of a specific mechanism for their implementation. Planning for prevention and risk management;
5. Control of possible or existing situation. Control of circumstances for an adequate response to their changes at a certain stage;
6. Implementation of the action plan in case of implementation of TR factors;
7. Analysis, conclusions and proposals for further improvement of the STRM.

Also, the tasks of the STRM can be distributed to the elaboration of each of the ten groups of TR factors:

1. Subjective beliefs of taxpayers (hereinafter – TP);
2. Corruption offenses and other illegal actions;

3. Acceptance of low-quality tax legislation (hereinafter – TL);
4. Lowering the quality of the organizational structure of the fiscal department;
5. Reducing the quality of technical support for tax administration;
6. Growth of the cost of work of the State fiscal service of Ukraine (hereinafter – SFSU);
7. Natural-climatic and anthropogenic emergencies;
8. Military invasions, annexation of part of the territory of the state;
9. International economic sanctions;
10. Lowering the volume of international economic activity.

Among the **principles** of the STRM are the following:

- complexity of risk processing – coverage of all sources of TRs;
- legality – the STRM compliance with the requirements of the current legislation);
- equality of all taxation part takers before the law;
- informational sufficiency – collection of sufficient information for detecting, controlling, eliminating and preventing risks by the STRM subjects;
- appropriate cooperation – informational and administrative cooperation of PAs between themselves, with local authorities, with TPs, with civil society institutes and subjects of international politics in order to increase the effectiveness of the STRM;
- the focus on the implementation of the entire complex of functions of the tax system, which, in addition to fiscal, includes regulatory and controlling.

The **object** of the STRM in Ukraine is the state tax system, a complex set of TR factors, authorities, civil society and the external environment (subjects of international politics, the natural environment and climate).

The **subjects** of the STRM are PAs, in particular SFSU, and officials.

The integral STRM quality index is calculated as the sum of products of

normalized (from "0" to "1") values of output indices that characterize the quality of each stage, to their respective weighting factors:

$$IQI = \sum_{j=1}^7 Q_j W_j \quad (1), \text{ where:}$$

IQI – Integral STRM quality index;

Q_j – Source index of j-th stage of the STRM quality;

W_j – Weight factor of j-th stage of STRM.

The sum of W_j is equal to 1; the values are distributed as follows: the weight factor W_6 , which characterizes the most important stage of the STRM – the organization of working out the TRs, receives a value of more than three quarters (0.8), the coefficients W_1 and W_2 get a value of 0.015 because the stages of information-analytical and risk identification are informational, the coefficients of the risk analysis and planning stages of reducing the degree of TRs of W_3 and W_4 are 0.025, since they are transitional to the risk processing, the coefficients W_5 and W_7 , based on the above, get the value 0.06. Note that the determination of the values of these weight coefficients is the subject of a separate scientific study. The quality of each stage of the STRM, except for the fifth and seventh, is evaluated as follows: "1" means the highest quality, and "0" is the lowest.

The quality of processing each of the ten groups of TR factors is evaluated from "0" – the lowest to "1" – the highest. Determination of weight coefficients to groups of factors of PR, measurement of their relationship is the subject of a separate study. Here weighted coefficients are taken equal to each other.

Among the output indexes are indicators of quality performance by the authorities and responsible officials of the above-mentioned stages of the STRM:

1. **Q_1 – the quality of the information-analytical stage**, which consists in gathering information about all possible TR factors and classification of these factors. In our opinion, the list of tax risk factors mentioned in [7, p. 102] can be reduced from twelve to ten groups: subjective persuasion of the TPs; corruption

crimes and other illegal activities; acceptance of low-quality TL; decrease in the quality of the organizational structure of the SFSU; lowering the quality of technical support for tax administration; increase in the cost of work of SFSU; military invasions, annexation of parts of the state territory; climatic and man-made emergencies, international sanctions and economic decline in international economic activity. The normative-legal support and functioning are assessed:

- TR databases filled by SFSU staff – $Q_{1.1}$ – the effectiveness was adopted equal to 0.7 from 2001 to 2008 and from 2011 to 2014, since 7 of the 10 factors of the PR were assigned to the risk: subjective persuasion of the TP; corruption crimes and other illegal activities; acceptance of low-quality TL; decrease in the quality of the organizational structure of the SFSU; lowering the quality of technical support for tax administration; increase in the cost of work of SFSU; military invasions, annexation of parts of the territory.

- In 2009-2010, the effectiveness was estimated at 0.8 ($0.7 + 0.1$), due to the attempt to establish a national database of the TRs of Ukraine;

- Information Complex for filling information on PR – $Q_{1.2}$ – receives a zero assessment; – reception of information on the TRs is not regulated;

- systems for interaction with tax authorities of other countries and international organizations in order to identify and classify possible TR sources – $Q_{1.3}$ – the value of the index for establishing cooperation with IOTA increased in 2006 to 0.25 in 2012, with the assistance of the EU in the development of information – technical capacities of the Ministry of Income and Collections of Ukraine – to 0.5, 2013 – to 0.75 due to the development of cooperation with the OECD, 2014 – to 0.9 due to the strong development of cooperation with the IOTA, 2016 – to 1 because Ukraine During the 20th General Assembly of IOTA in 2016, the State Fiscal Service of Ukraine was first elected president of IOTA for 2016/2017 years [2];

- Automated information systems (hereinafter – AIS), which calculate

the most probable and cost risks – $Q_{1.4} = 0$. The indicated AIS are absent.

2. Q_2 – identification of the TRs, which establishes the possible parameters of all possible TRs. The legal and regulatory framework governing the detection of TR is evaluated. This indicator is rated 0.7 because of the ten groups of TR factors authorities identified seven and three (climatic and man-made emergencies, international sanctions and economic decline in international economic activity) are not identified legally.

3. Q_3 – quality of the complex analysis of the TR with the calculation of the degree of possible impact of the risk on the functioning of the TS. It is estimated the process of systematized processing of available information on the TR in order to make a managerial decision, accompanied by an assessment of the parameters of the TR. This indicator receives a value of 0.7, since the authorities of the ten groups of factors of the TR are analyzed, again, only seven, and three – are not identified.

4. Q_4 – index of quality of functioning of PAs in planning the reduction of the degree of TRs – planning of actions for prevention, and in the implementation of TRs:

4.1. Ensuring the state of sustainable development of society, by [9] (as $Q_{4.1}$): – improving the quality and safety of life of people who are expressed by quality indices:

4.1.1. State environmental protection policy; for [9], the quality index of this category of state policy will be designated as $Q_{4.1.1}$;

4.1.2. socio-institutional policy; for [9], the index of the quality of this category of government policy will be designated as $Q_{4.1.2}$;

4.1.3. economic policy, for [9], the index of the quality of this category of government policy will be designated as $Q_{4.1.3}$;

4.2. The implementation of the state defense policy (index of quality policy category denoted as a $Q_{4.2}$ and calculate the amount of defense spending divided by

3% of GDP. The Ministry of Defense of Ukraine (hereinafter – MDU) is the main body among PAs in the formation and implementation of state policy on national security in the military sphere and defense, and therefore the defense expenditures are budgetary expenditures for the MDU. According to the expert, lieutenant-general of the Armed Forces of Ukraine, Doctor of Economics, V. Muntiyan, the optimal volume of expenditures for financing Armed Forces of Ukraine in the amount of 3% of GDP. [5] The study showed sources [3], [6], the amount of funding for the MDU for over 15 years ranged from 0.968% to 1.624% of GDP.

4.3. Improvement and monitoring of legislation – the quality index of this component of the STRM will be designated as $Q_{4.3}$ and we will accept as the average arithmetical meanings of "Voluntary fulfillment of tax obligations" (hereinafter – VFTA) and "Tax Compliance costs" (hereinafter – TCC) from the report [7, p. 10].

4.4. Anticorruption work of SFSU and other PAs – the index of the quality of this category of government policy will be designated as $Q_{4.4}$ and identified with the Transparency International Corruption Perceptions Index (hereinafter referred to as CPI), calculated by Transparency International [12].

The Q_4 index is an arithmetic average of $Q_{4.1}$ to $Q_{4.4}$.

5. Q_5 - qualitative assessment of the control of a possible or existing situation - quality control of circumstances to adequately respond to their changes. According to the authors, the indicator of the quality of this stage of the STRM is the ratio of tax revenues, in euro, for the current year to the revenues for the past year [6].

6. Q_6 - qualitative assessment of the implementation of the program of action for the elaboration of the TR of the state:

6.1. $Q_{6.1}$ - processing of the group of PR factors – subjective factors, demotivation of the TPs to taxable activities and payment of taxes. As this index, the average arithmetic index of the economic component of Ukraine's sustainable

development (identical to $Q_{4.1.3}$) and the VFTA indicators and "tax administration quality" are given in [6]. The VFTA indicator is calculated as the percentage of "optimal" answers to the question "Remember all taxes and fees that your company pays. In your opinion, what is the current level of tax burden your enterprise compares with the optimal (acceptable for your enterprise)?" The survey was conducted among a representative sample of entrepreneurs in Ukraine. As an indicator of "quality of tax administration" we have taken the indicator "TCC". This indicator was calculated on the basis of the results of the survey of the company "GFK Ukraine" as a simple arithmetic mean of the "no" answers to the question "Do you consider burdensome tax accounting, tax reporting, interaction with the tax authorities?"

6.2. $Q_{6.2}$ – index of quality of processing of the second group of factors – violation of the legislation in the taxation process. Calculated as the arithmetic mean of the integral CPI in Ukraine, according to [13], and the probability of detecting cases of tax evasion, according to [7, p. 10] divided by 100 (the highest possible value is "1", the lowest is "0");

6.3. $Q_{6.3}$ – elaboration of adoption of low-quality tax legislation – It is proposed to assess the value of a number of VFTA figures calculated on the basis of the results of the TP survey as a simple arithmetic mean of the "no" answers to the question "Do you consider the burdensome costs for (1) tax accounting, (2) submission of tax reporting, (3) interaction with the tax authorities?" [7, p. 7];

6.4. $Q_{6.4}$ – elaboration of reducing the quality of the organizational structure of the SFSU, for the TPs is identical to the index $G_{6.3}$;

6.5. $Q_{6.5}$ – elaboration of reducing the quality of the tax administration technical supporting, for the TPs is identical to the index $G_{6.3}$;

6.6. $Q_{6.6}$ – elaboration of reducing the SFSU financial effectiveness, for the TPs is identical to the index of VFTO [7, p. 10];

6.7. $Q_{6.7}$ – elaboration of a natural and men-made catastrophes (when there

are no catastrophes $Q_{6.7} = 1$, when there are some catastrophes – $Q_{6.7} = 0$);

6.8. $Q_{6.8}$ – elaboration of a military-political tax risks (when there are no military conflicts $Q_{6.8} = 1$, when there are some military conflicts – $Q_{6.8} = 0$);

6.9. $Q_{6.9}$ – elaboration of a foreign economic tax risks (when there are no foreign economic sanctions $Q_{6.9} = 1$, when there are some foreign economic sanctions – $Q_{6.9} = 0$);

6.10. $Q_{6.10}$ – elaboration of a foreign trade tax risks (when there are no foreign trade sanctions $Q_{6.9} = 1$, when there are some foreign trade sanctions – $Q_{6.9} = 0$).

7. Q_7 – STRM development quality index – ratio of average arithmetic indexes $Q_1 - Q_6$ of the STRM for the current year to the previous one.

For the first year, Q_7 is assumed to be equal to the arithmetic mean $Q_1 - Q_6$.

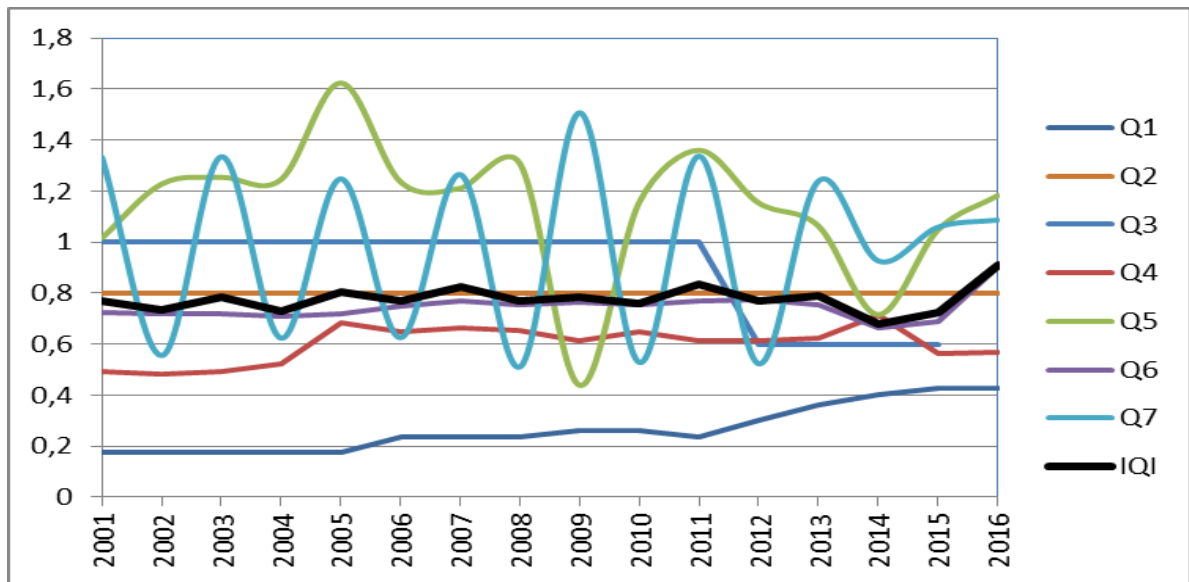
For complex indexes – Q_1 , Q_4 and Q_6 - values are calculated as arithmetic average outgoing indices. The dynamics of the quality of STRM is given in Table 1.

Table 1.

The dynamics of the STRM Integral Quality Index (IQI) and its input indices $Q_1 - Q_7$

Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Q_1	0,18	0,18	0,18	0,18	0,18	0,24	0,24	0,24	0,26	0,26	0,24	0,3	0,36	0,4	0,425	0,425
$Q_{1.1}$	0,7	0,7	0,7	0,7	0,7	0,7	0,7	0,7	0,8	0,8	0,7	0,7	0,7	0,7	0,7	0,7
$Q_{1.2}$	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
$Q_{1.3}$	0	0	0	0	0	0,25	0,25	0,25	0,25	0,25	0,25	0,5	0,75	0,9	1	1
$Q_{1.4}$	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Q_2	0,7	0,7	0,7	0,7	0,7	0,7	0,7	0,7	0,7	0,7	0,7	0,7	0,7	0,7	0,7	0,7
Q_3	0,7	0,7	0,7	0,7	0,7	0,7	0,7	0,7	0,7	0,7	0,7	0,7	0,7	0,7	0,7	0,7
Q_4	0,3	0,31	0,32	0,32	0,33	0,36	0,36	0,35	0,35	0,34	0,34	0,34	0,34	0,72	0,56	0,57
Q_5	1,02	1,23	1,26	1,25	1,62	1,24	1,21	1,31	0,44	1,16	1,36	1,15	1,06	0,72	1,05	1,18
Q_6	0,72	0,72	0,72	0,71	0,72	0,75	0,77	0,75	0,76	0,76	0,77	0,78	0,75	0,66	0,69	0,91
Q_7	1,32	0,57	1,33	0,62	1,24	0,63	1,26	0,51	1,51	0,52	1,14	0,51	0,95	0,93	1,06	1,09
IQI	0,77	0,74	0,79	0,73	0,80	0,77	0,82	0,77	0,78	0,76	0,82	0,75	0,76	0,68	0,73	0,91

There are results of the surveys of the company "GFK Ukraine" only for the period from 2001 to 2011 [7]. The results for the next periods are calculated with mentioned values for 2011 year.



Pict.1. The dynamics of the STRM Integral Quality Index (IQI) and its input indices $Q_1 - Q_7$. Source: authors' calculations on data [2, 3, 6, 7, 9].

The fall in the quality index of STRM in 2009 will be explained by the global financial and economic crisis, and in 2014, Russia's aggression against Ukraine.

Conclusions. In order to avoid systemic crisis phenomena (reducing the competitiveness of the branches of the economy, up to their collapse, a significant budget deficit, insufficient implementation of the tax potential of the economy, political destabilization of society, reducing the state's defense capability, threatening national security, loss of external markets, etc.), as well as to increase the level of performance of the functions of the Ukrainian tax system, a special system of the STRM is necessary. To implement this system, a separate Law of Ukraine should be developed and adopted, in which the principles, goals and objectives are set and the main concepts of the STRM are defined. For a more detailed regulation of the STRM, a Resolution of the Cabinet of Ministers of Ukraine is required.

The STRM should take place in seven stages:

1. Informational and analytical;
2. Detection of TRs;
3. Complex TRs evaluation;
4. Planning action to reduce risk;
5. Control of the situation;
6. Processing of detected significant TRs;
7. Analysis for further improvement of the STRM.

The dynamics of the STRM quality in Ukraine reflected the impact of all of the above-mentioned TR factors, and the greatest impact on the dynamics of the STRM quality index was made by destructive monetary and insufficiently effective for preserving the territorial integrity of Ukraine's PA defense policy.

Reference:

1. Вітлінський В. В. Ризикологія в економіці та підприємстві / В. В. Вітлінський, Г. І. Великоіваненко. – К. : КНЕУ, 2004. – 480 с.
2. Державна фіскальна служба України. Офіційний портал. Міжнародне спіробітництво. [Електронний ресурс] Режим доступу: <http://sfs.gov.ua/diyalnist-/mijnarodne-/>
3. Законодавство України [Електронний ресурс] Режим доступу: www.zakon.rada.gov.ua
4. Євтушенко Н. О. Податкові ризики та система керування ними України / Н. О. Євтушенко // Вісник Дніпропетровського університету. Серія : Менеджмент інновацій. 2016. Випуск 6. – С. 68.
5. Мунтіян В. І. Економічна безпека України / Мунтіян В. І. – К.: КВІЦ, 1999. – 464 с.
6. Національний банк України. Офіційне інтернет-представництво. [Електронний ресурс] Режим доступу: www.bank.gov.ua
7. **Ошибка! Источник ссылки не найден.**
8. Романенко В. В. Джерела податкових ризиків / В. В. Романенко // Моделювання та інформаційні системи в економіці. 2016. № 92. С. 97
9. **Ошибка! Источник ссылки не найден.**
10. Степура М. М. Ризик-менеджмент формування податкових доходів бюджету : дис. ... кандидата економ. наук : 08.00.08 / Степура Марина Михайлівна. – Київ, 2011. – 267 с.

11. Тесак О. В. Аналіз ефективності управління ризиками взаємовідносин промислового підприємства із суб'єктами внутрішнього та зовнішнього середовища [Електронний ресурс] // Вісник Хмельницького національного університету. – 2011. № 5, т. 1. — Режим доступу: http://www.nbu.gov.ua/old_jrn/Soc_Gum/Vchnu_ekon/2011_5_1/163-166.pdf
12. Compliance risk management guide for tax administrations. [Electronic source]. Access mode: http://ec.europa.eu/taxation_customs/resources/documents/common/publications/info_docs/taxation/risk_managt_guide_en.pdf
13. **Ошибка! Источник ссылки не найден.**
14. PWC. Paying Taxes 2014. [Electronic source]. – Access mode: <http://www.pwc.com/gx/en/paying-taxes/data-tables.jhtml>
15. Risk Management Made Easy. Andy Osborne & Ventus Publishing ApS. – 2012. – 56 p.

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