

I.P. Moiseenko (Lviv State University of Internal Affairs, Ukraine)

N.O. Ryvak (Lviv National University of Ivan Franko, Ukraine)

MONITORING PARAMETERS OF THE LEVEL OF ECONOMIC SECURITY OF UKRAINE

The article describes the approaches to the selection of parameters of early warning of economic crises. The impact of fiscal factors on the level of economic development of Ukraine has been analysed. Specific features of the choice options for monitoring the level of economic security in a techno-globalised environment have been outlined.

Keywords: economic security, sustainable development indicators, indicators to measure the economic security level, monitoring parameters.

І.П. Мойсеєнко (Львівський державний університет
внутрішніх справ, Україна)

Н.О. Рывак (Львівський національний університет
імені Івана Франка, Україна)

ПАРАМЕТРИ МОНІТОРИНГУ РІВНЯ ЕКОНОМІЧНОЇ БЕЗПЕКИ УКРАЇНИ*

В статті здійснено опис підходів до вибору параметрів системи раннього попередження економічної кризи. Проаналізовано стан впливу фіскальних параметрів на рівень економічного розвитку України. Описано особливості вибору параметрів моніторингу рівня економічної безпеки в умовах техноглобалізму.

Ключові слова: економічна безпека, індекси сталого розвитку, індикатори вимірювання рівня економічної безпеки, параметри моніторингу.

Рис. 2. Табл. 2. Літ. 10.

И.П. Мойсеенко (Львовский государственный университет
внутренних дел, Украина)

Н.О. Рывак (Львовский национальный университет
имени Ивана Франка, Украина)

ПАРАМЕТРЫ МОНИТОРИНГА УРОВНЯ ЭКОНОМИЧЕСКОЙ БЕЗОПАСНОСТИ УКРАИНЫ

В статье описаны подходы к выбору параметров системы раннего предупреждения экономического кризиса. Проанализировано состояние влияния фискальных параметров на уровень экономического развития Украины. Описаны особенности выбора параметров мониторинга уровня экономической безопасности в условиях техноглобализма.

Ключевые слова: экономическая безопасность, индексы постоянного развития, индикаторы измерения уровня экономической безопасности, параметры мониторинга.

Problem setting. To mobilise and realise the economic potential of Ukrainian society on its successful way out of economic and financial crisis it seems appropriate to build up a model of Ukrainian economy development based on the potential theory and the theory of security. The concept of economic security of Ukraine has to ensure the transition from security operations to public safety development. Implementing the concept of economic security of Ukraine requires integrated solu-

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tions for the organisational, legal, scientific, methodological, analytical and informational support in the above area. The implementation of the state economic security strategy of Ukraine should be focused on building the system of national interests and values involving standards of living, functioning of business entities and the society development [2; 6].

The national policy envisages the application of theoretical and methodological foundations of the economic security concept development, i.e.: identification of characteristics and classification of internal and external threats and risks; revealing and monitoring the factors which threaten the state socioeconomic security system; determination of criteria and parameters attributed to the national and state economic interests [5].

Form the systems theory perspective economic security is an attribute of an economic system that characterises its state and has to be interpreted by the criteria-based evaluation. The nature of economic security is recognised through the system of criteria and indicators. A criterion is a quantitative or qualitative characteristic on which estimation of the current state, comparison of alternatives, classification of objects and phenomena is to be carried out. The criteria of economic security are conveyed by indices (indicators), i.e. the numerical characteristic associated with certain attribute of an economic object, process or solution. A criteria-based evaluation of economic security might be interpreted as an estimation of the state of the economy with regard to the high priority processes revealing its contents toward realisation of national economic interests.

Latest research and publications analysis. The first and the most complicated step in building the national system of early crisis warning is the selection from a multiple range of economic indicators the ones which would enable timely identification of the likelihood of financial instability occurrence with a high probability. Monitoring of such indicators facilitates levelling the threats to the sustainable economy functioning and makes up a basis for decision-making in the economic adjustment policy framework [2; 3; 5; 6; 9].

There is a variety of different methods available for risk assessment, although they all encounter the same problem of the indicators selection. Table 1 summarizes some research findings in the field.

The Institute of Economics and Forecasting has been commissioned to deliver a high-quality analysis of basic macroeconomic indicators to assess the risk of threats to the sustainable economic development of Ukraine.

The monitoring system facilitates the qualitative approach to identification of the variables dynamics enabling to predict a crisis.

Qualitative (analytical) approach is based on *graphic comparison of fundamental economic indicators dynamics within a crisis period, before and after the crisis, as well as in the undisturbed state.*

A large number of factors, affecting the underlying causes and sources of crises, further complicates the problem of identification of threats of a coming crisis and thus in the long run becomes an impediment to developing an accurate list of indicators for the early warning system. Special difficulties are encountered by including the determinants affecting the economy's sensitivity, which cannot always be measured quantitatively. These might be institutional factors, political situation, world/global

development indices (natural disasters, conflicts, wars) etc. Among such determinants are also those that drive the behaviour of market participants – manufacturers, consumers, and regulators.

*Table 1. Approaches to the selection of macroeconomic indicators for instability assessment**

	Indicators systems	Assessment indicators
1	Indicators of currency crises	For identification the indicators were grouped into four categories: internal variables, international variables, indices characterising external debt and external environment.
2	Indicators predicting a banking crisis	Indices of internal macroeconomic policy, external economic environment, national financial structure, exchange rate models and the indices that reflect management and monitoring issues.
3	Indicators of currency and banking crisis	Levels of financial liberalisation and monetary sector development, current operations and capital accounts of the balance of payments, variables representing the real sector, fiscal variables.
4	Macroeconomic indicators of financial security	Currency rate, export, trading terms and conditions inflation, monetary tools, monetary aggregates, world interest rates.
5	Macroeconomic indicators of economic development	GDP growth rate, gold and foreign exchange reserves, actual exchange rate, current operations balance, export, external debt, internal credit, actual interest rate, inflation, capital outflow, money supply, trading terms and conditions.
6	Assessment system of monitoring threats to sustainable economic development	Groups (categories): real sector; balance of payments; financial sector; banking sector.
7	Financial stability monitoring	GDP growth rate, industrial output dynamics, current operations account of the balance of payments, gold and foreign exchange reserves, external debt, monetary and currency market parameters.

* developed with reference to [8; 9].

International practice patterns for the estimation of such a subjective factor involve a number of expectation indices (e.g., indicator of consumers' sensitivity or the index of business activity level across a country) which are based on sociological polls results [7; 10].

The US experience demonstrates frequent use of similar indices, in particular the business activity index of the National Association of Managers, the Federal Reserve Bank of Atlanta business activity index, Consumer Confidence Index etc. [7–10].

The business activity index across the country is particularly widely used in the EU countries. The most significant indices used in Japan are: 1) conditions of running business; 2) manufacturing and sales; 3) demand and supply, price level; 4) income; 5) direct investment; 6) employment; 7) taxation conditions [9].

For the relevant and timely detection of threats, with regard to the subjective expectation factor, its quantitative and qualitative assessment in the crisis period in Ukraine is best revealed by the results of the following two sociological polls:

- *"Ukrainian enterprises' business expectations"*, by the National Bank of Ukraine, containing the generalised information on estimations of top Ukrainian enterprises in relation to their current and future business activity, inflation and rate expectations, changes of economic situation in the country;

- *"Index of consumer moods"*, held by the GFK, a Ukrainian research company and the International Center for Policy Studies, which on the basis of random survey

of the national households identify the consumers' moods, current state of the economics and inflation expectations of the population [1; 4; 7].

Hence, the controversy in a variety of theoretical and methodological aspects evokes further reasoning and the development of a set of new categories, criteria and indicators that would enable defining and analysing the basic tendencies of economic security parameters change.

Only the combination of theoretical principles and concepts with practical actions would enhance the design of a reliable mechanism to ensure the economic security.

Research objectives: argumentation of the selection of parameters for monitoring the economic development and the state security.

Unresolved issues. Selection and updating of the range of indices reflecting the occurrence of financial instability in the country's economic development, as well as the operations on their permanent monitoring require methodological and methodical analysis of approaches to the selection of parameters of the crisis early warning system and identification of threats to the state economic security.

Key research findings. In general, a need to build up a system of early warning in Ukraine seems appropriate, since it diminishes the time lag between the risk estimation and the possibility for decision making. Development of the national system offers an advantage over the use of information gained from similar systems in other countries, for it accounts for the peculiarities of the national economy development and is based on the indices reflecting the "sensitive" problems of Ukraine.

Analysis of the indicators affecting the economic development of Ukraine and the economic security parameters dynamics might provide evidence for a crisis occurrence probability. That is the system of early crisis warning monitoring parameters has to estimate the impact of economic development macroindices on economic security parameters. The peculiarities of building such systems of early crisis warning in Ukraine could be defined as follow:

- *absence (and inaccuracy) of information for identification of a large number of risk factors* that makes some relevant indices drop out of consideration (for the lack of information to describe them);

- *irrational behaviour of economic agents in a crisis period* (information about risks increase might itself become an additional factor of instability);

- *a possibility of various interpretations of indicators changes subject to the general economic and/or political context* (changes can be interpreted as a negative trend, as well as positive fluctuations);

- *inability to predict and assess a large number of risks due to the fact that they had not been come across before;*

- *inimitability of crises and their parameters due to countries' peculiarities and development levels* [3; 5; 6].

Economic security indicators is the actual statistics of a country's economy development charactering economic phenomena and trends in more detail [1; 3; 4]. Special attention in a techno-globalistic environment is to be focused on such basic indicators of economic security as gross domestic product (GDP); inflation rate; budget deficit; unemployment rate; increase in indices of application of educational, scientific and innovation potential; the level and quality of life; energy dependence;

the scope of shadow economy; the level of tax burden and their impact on macro-economic development and the economic security parameters (Table 2, Fig. 1 and 2).

Table 2. Analysis of indirect taxes dynamics and economic security indicators in Ukraine over 2006–2010*

Indicator	Years					Overall average annual increase / average annual growth rate
	2005/ 2006	2006/ 2007	2007/ 2008	2008/ 2009	2009/ 2010	
Taxes on international trading and external operations, mlrd. UAH						
Overall increase	0,24	1,06	0,14	-3,93	0,79	-0,341
Growth / recession rate	1,039	1,169	1,019	0,473	1,223	0,936
Excise tax, mlrd. UAH						
Overall increase	-0,21	0,38	-0,04	3,91	1,26	1,059
Growth / recession rate	0,973	1,050	0,995	1,487	1,106	1,108
VAT, mlrd. UAH						
Overall increase	11,28	0,52	12,18	-10,49	1,82	3,062
Growth / recession rate	1,333	1,012	1,267	0,819	1,038	1,077
Profit tax, mlrd. UAH						
Overall increase	-0,11	2,90	3,78	-11,58	0,93	-0,816
Growth / recession rate	0,995	1,125	1,145	0,612	1,051	0,962
Indirect taxes, mlrd. UAH						
Overall increase	11,19	4,87	16,05	-22,08	4,80	2,965
Growth / recession rate	1,157	1,059	1,184	0,786	1,059	1,039
Gross domestic product (GDP), mlrd. UAH						
Overall increase	46140,29	66281,04	41850,24	-84670,63	45889,25	28098,04
Growth / recession rate	1,105	1,136	1,076	0,858	1,090	1,048
Gross domestic product (GDP) per capita, UAH						
Overall increase	1049,15	1487,35	969,81	-1781,51	1058,20	556,598
Growth / recession rate	1,112	1,143	1,081	0,862	1,095	1,058
Capital investment, mln. UAH						
Overall increase	22313,46	37638,75	-164,89	-63038,38	-10959,44	-2842,1
Growth / recession rate	1,201	1,282	0,999	0,631	0,898	0,973
Banking interest rates in national currency (on credits), %						
Overall increase	-1,00	-1,00	3,40	-0,60	-0,20	0,12
Growth / recession rate	0,939	0,935	1,236	0,966	0,988	1,007

* developed with reference to [1; 7].

The key economic criteria for the economic security strategy implementation with effective use of the country's intellectual potential, in authors' opinion, envisage the following measures:

- increase in the GDP share, distributed to science-intensive sectors and knowledge-based services (budget expenditures dynamics);
- advanced growth rates for knowledge-based services in economics (structural changes dynamics);
- increase in financing science-based industries and research activity by the activity types (expenditures dynamics);
- innovation activity growth rate by various directions, share of innovative manufacturing in GDP (dynamics);
- permanent research capacity growth;
- permanent increase of the high-tech industry employees share;
- growth of the average educational level of active business population of Ukraine;

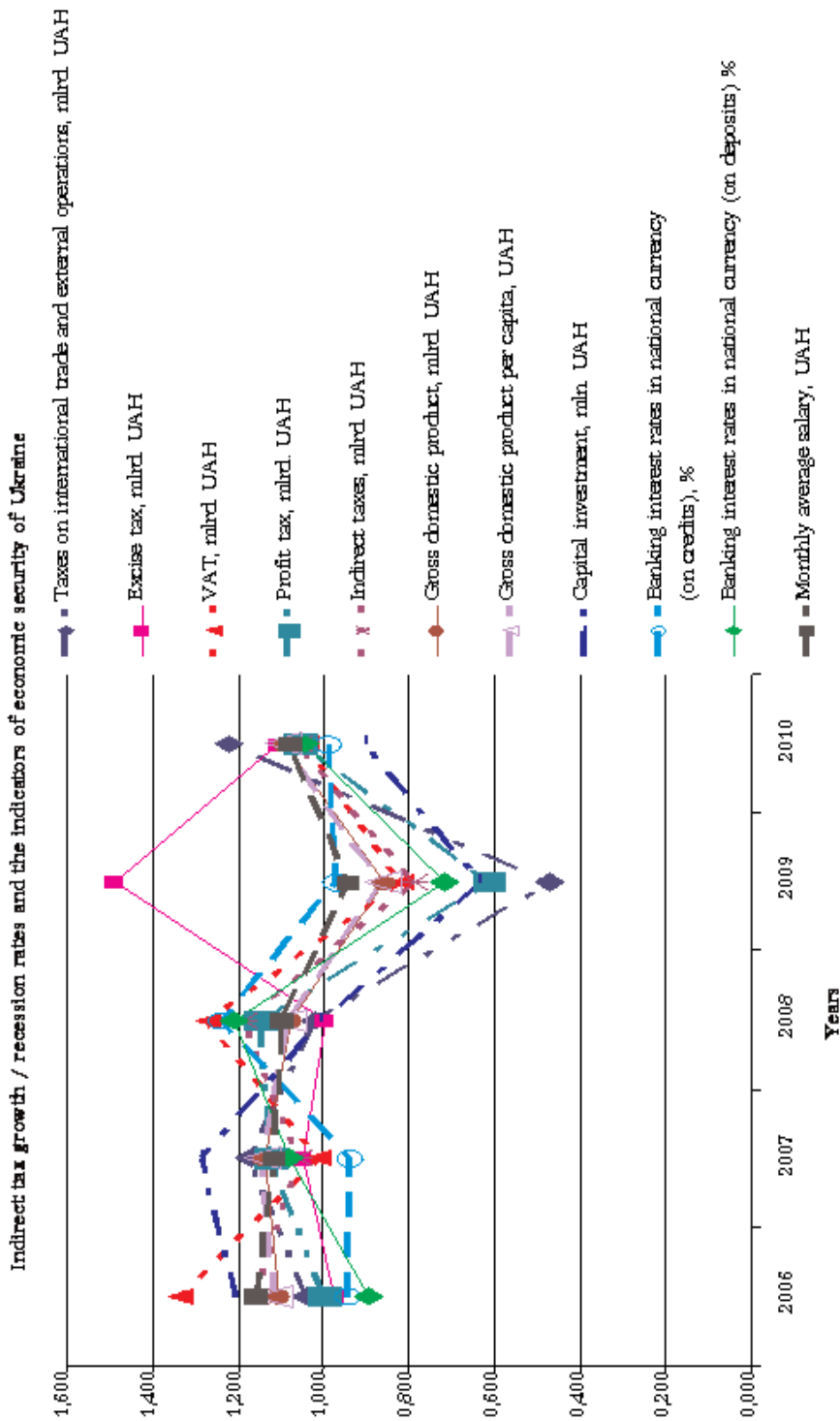


Figure 1. Dynamics of fiscal and economic security indicators, developed with reference to [1; 7]

- increase of knowledge-based personnel mobility;
 - average income growth rate in the knowledge-based economy sector against other industries etc.

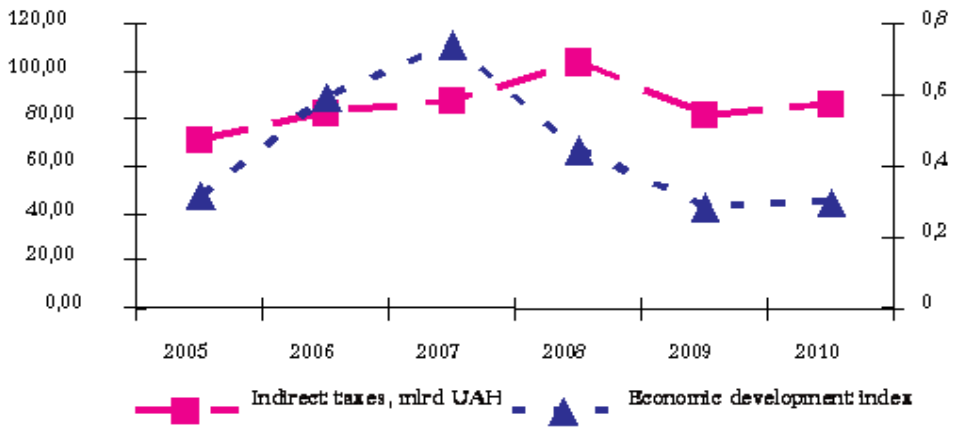


Figure 2. Impact of indirect taxes on economic development indices, developed with reference to [1; 7]

Conclusions. Among the most efficient indicators selected by foreign scientists as the factors indicating the financial instability of 2008–2009 in Ukraine the following ones should be mentioned: *the spread between domestic and foreign interest rates, domestic credit, current account of the balance of payments, inflation (CPI), gold and foreign exchange reserves.*

The list of the indicators tested by the qualitative (analytical) method, worth to be included into the crisis early warning monitoring system of Ukraine, in addition to the above mentioned, might comprise the following indices: *GDP and industrial production growth rates, gross external debt, inflow/outflow of capital, trading terms and conditions, money multiplier, actual exchange rate and the stock market index*, since they have demonstrated a relevant response to financial instability and in future might trigger as an alert (preventive signal) for the next possible crisis episodes.

The indicators monitoring has to be delivered taking into consideration the conditions of the techno-globalistic environment and thus is to be complemented by the economic security measurements based on application of the country's intellectual potential.

The economic security indicators enable not only to quantify the required parameters of the economic system development, but also set up qualitative objectives related to economic security and application of the variety of patterns of the development potential.

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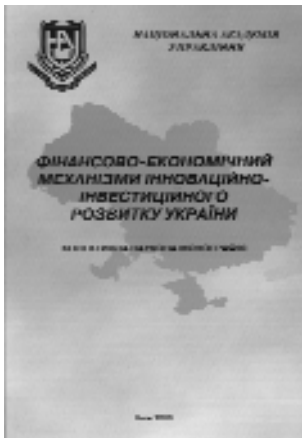
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КНИЖКОВИЙ СВІТ



СУЧАСНА ЕКОНОМІЧНА ТА ЮРИДИЧНА ОСВІТА
ПРЕСТИЖНИЙ ВИЩИЙ НАВЧАЛЬНИЙ ЗАКЛАД
НАЦІОНАЛЬНА АКАДЕМІЯ УПРАВЛІННЯ

Україна, 01011, м. Київ, вул. Панаса Мирного, 26
E-mail: book@nam.kiev.ua
тел./факс 288-94-98, 280-80-56



Фінансово-економічні механізми інноваційно-інвестиційного розвитку України: Колективна наукова монографія / Кириченко О.А., Єрохін С.А. та ін.; За наук. ред. д.е.н., проф. О.А. Кириченко. – К.: Національна академія управління, 2008. – 252 с. Ціна без доставки – 25 грн.

Монографія присвячена актуальній проблемі світової та вітчизняної економічної науки, викладені теоретико-методологічні питання формування стратегії інноваційно-інвестиційного розвитку національної економіки та формування її фінансово-економічного механізму. В основу викладу матеріалу монографії покладені багаторічні дослідження науковців в галузі економічної теорії, фінансів та банківської справи, які були апробовані на сторінках авторитетного журналу "Актуальні проблеми економіки" в 2004–2007 роках. В монографії обґрунтовано шляхи переходу економічної системи України від підприємства до рівня держави на більш високий цивілізаційний рівень за рахунок створення ефективного фінансово-економічного механізму інноваційно-інвестиційного розвитку.