FINANCE SECURITY INTEGRAL EVALUATION MECHANISM ON THE BASIS OF THE POULTRY INDUSTRY ENTERPRISE

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The article gives approaches to the definition 'evaluation of the financial safety of the enterprise'. There have been given the analysis of the financial safety of the enterprise as well as structural logical scheme of the procedure of the analysis of the financial safety of the enterprise. The author offers personal formula of the integral evaluation of the financial safety of the enterprise. There have been evaluated and compared paltry companies according to the level of the financial safety.

Keywords: financial safety, paltry company financial safety, evaluation, approach, system, structural logical scheme, integral indicator of the financial safety of the enterprise.

The scientific issue layout and its significance. Under the financial economic crisis and euro integration processes nowadays Ukrainian enterprises work in uncertain changes at the market situation, imperfectness of financial economical and organizational legal mechanism of evaluation of the financial safety. The companies interact with a great number of counteragents who strive to pursue their own interests thus creating huge threats outer surrounding. The mechanism of evaluation of the financial safety of the enterprise must be formed and put into operation on the basis of solving the problems, connected with multi factors which enable to control and foresee the modern surrounding for functioning the system of the financial safety of the enterprise. They are also connected with comparison of the dynamics of changes, diagnosis of the state, fast adaptation and taking decisions as to management depending on the spheres of the activity. The main issues in the paltry industry is the absence of the unified method

of the evaluation of the financial safety, the unified approach as to the management of the mechanism of the provision of the enterprise financial safety , the authority realization and their deputies and top-managers their insufficient acknowledgement ; the unified mechanism of financial safety evaluation, created on the basis of the research about the peculiarities of the industry; taking into consideration the individuality of a separate firm or company; targeting the customers. The problem of the evaluation of the financial safety of the paltry industry has been burning nowadays.

Research analysis of the problem. The issue of the evaluation of the financial safety of the enterprise has been tackled by the following scientists economists such as: O.V. Arefieva, I.I. Bilomistna, K.S. Goriacheva, A.V. Kovalchuk, O.V. Nusiniva , O.B. Petrina and others.

The aim and the tasks of the article. The aim is the performance of the evaluation of the financial safety of the enterprise.

To achieve the stated aim it has been necessary to solve the following tasks:

- To use the approaches as to the evaluation of the financial safety of the enterprise,

- To introduce the analysis system of the financial safety of the enterprise,

- To consider the structural logical scheme of the analysis procedure of the financial safety of the enterprise,

- To give the description of the integral indicator of the financial safety of the enterprise,

- To evaluate and compare companies in the paltry industry according to the level of their financial safety.

The lay out of the contents and giving grounds of the research results.

Let us investigate the approaches as to evaluation of the financial safety of the enterprise. (Table 1)

Table 1.

The approaches to the definition 'evaluation of the financial safety of the enterprise'.

Author	Approach
K.S. Goriacheva [1, p.65-67]	She considers the main element of the evaluation rate of the provision of the financial safety of the enterprise is the clean profit. On the basis of this criterion it is possible to build up all indicator system to characterize the state of the financial safety. The indicators of the financial safety act as the quantity characteristics of the financial safety state which are selected to characterize the financial safety of the enterprise.
O.V.Nusinova [2, p. 63-64]	To the level of the financial safety of the enterprise the remust be anin fluence the rate of the compensation the loss of the capital value by means of dividend payment to the investors. If the dividend payments are equal or exceeds economical amortization then there is no lowering of the financial safety. If the economical amortization exceeds the sums of dividend payments then there appears debts with owners , which must be taken into consideration while calculate the initial business value on the basis of which the level of the financial safety is defined.
O.V. Arefieva [3, p.17-26]	To define the financial safety of the enterprise the author suggests using the evaluation of financial steadiness, liquidity, the evaluation of capital circulation, evaluation of return and pursue the integral finance analysis.
N.V. Biloshkurska [4, p.155-156]	The author suggest sevaluating financial economical safety of the enterprise on the basis of the indicator including coefficient of the fund return of the fixed capital, coefficient of the labour productivity, coefficient of the capital-labor ratio coefficient return materaliv coeficientт working inventory turnover, coefficient depreciation
V.V. Khrapkina [5, p.193]	The author suggests undertaking the evaluation of the current rate of the financial safety according to the following approaches of the analysis: analysis of the financial reports of the enterprise within its financial manufactory activity, which includes enterprises structure capital analysis, liquidity which includes the analysis of the capital structure of the enterprise, analysis of its pay ability and financial steadiness , the analysis of the expenses, the analysis of the profits and debts, the analysis of the competitive advantages and comparative analysis as to the competitive, the analysis of the assortment of the products, the analysis of the level and quality of the enterprise management.

Let us look in to the formula of the integral estimation of the financial safety of the enterprise which was calculated by experimental way and looks the following: [6, p.1-22]:

$$S_{FSE}=0,42S_R+0,49 S_P+0,8 S_{BA}+0,43 S_{FS}+0,38S_{PS},$$
$$\text{where (1.)}$$

S_{FS} – integral indicator of the financial safety (insafety) of the enterprise;

S_R – combined indicator of the profitableness (unprofitableness) estimation ;

S_P – combined indicator of the solvency (insolvency) estimation;

S_{BA} – combined indicator of the estimation of the business activity (fading);

S_{FS} – combined indicator of the estimation of the financial steadiness (unsteadiness);

S_{PS} – combined indicator of the effectiveness (ineffectiveness) of the property state.

To the element of the combined indicator of the effectiveness (ineffectiveness) of the property state.

S_{PS} we suggest regarding the part of the circular production funds in circular currency, part of the main tools in assets, coefficient of the demolishing of the main tools, coefficient of the renewing the main tools, the part of the long term financial investments in assets, the part of the circular of the production assets, the part of the circular production funds in circular currency, the coefficient of the mobility of the assets.

To calculate the combined indicator of the business activity (fading) S_{BA} we have taken into consideration the following indicators: circulating assets, assets ratio, coefficient of the circulating current money, coefficient of the circulating supplies, coefficient of the circulating debetorska debt, coefficient of the circulating of the ready made products, coefficient of the circulating payables.

To the combined indicator of the estimation of the profitableness (unprofitableness) **SR** we suggest regarding: profitableness of the capital from the conventional activity, the profitableness of the capital, the profitableness of the private capital,the profitableness of the production funds, the profitableness of the sold products according to the assets of the operation activity, the profitableness of the sold products according to the final asserts, coefficient of the reinvestments, coefficient of the steady economical growth, ratio of the paid interests and the profit.

To the combined indicator of the estimation of the financial state (steadiness/unsteadiness) of the enterprise activity S_{FS} we suggest regarding: coefficient of the provision of the circular assets with own means, maneuverability of the working capital, maneuverability of the own circular means, the coefficient of the provision of the own circular means, co-

efficient of the coating of the means, the coefficient of the financial independence , the coefficient of the financial dependence, the coefficient of maneuverability of the personal capital, the coefficient of the concentration of the lending capital, the coefficient of the financial steadiness, the indicator of the financial risk, the coefficient of the financial steadiness.

To the combined indicator of the solvency (insolvency) S_P we refer: the coefficient of the current liquidity, the coefficient of the fast liquidity, the coefficient of the absolute liquidity, the ratio of the short term payables.

The given mechanism of the practical quantitative calculation of the financial safety state is accept able in case of purposeful monitoring and quantitative estimation of the danger in the dynamics, comparison, and doing the rating estimation in the particular branch of industry.

By means of the expert estimation there have been established norm meanings of the integral indicator of the financial safety of the enterprise, as the following:

(-5 до 0] – the dangerous financial state of the enterprise;

[from 0 to 1] – provision of the low level of the financial safety of the enterprise;

[from 1 to 5] – provision of the middle level of the financial safety of the enterprise;

[5 and higher] – provision of the high level of the financial safety of the financial safety of the enterprise .

Let us look into integral indicator of the enterprises: «Plemptakhodadgosp Brovarskiy», JSC «Vasylkivska Poultry Farm «, JSC «Kyivska Poultry Farm», JSC «Krushinsckiy poultry complex», JSC «Poultry Farm Ukraina».

Table 2.

Integral indicator of the financial safety of the JSC 'Plemptakhodadgosp Brovarskiy'in the years of 2007-2015.

Indicator	Years								
	2007	2008	2009	2010	2011	2012	2013	2014	2015
$0,38S_{MC}$	0,09	0,09	0,07	0,07	0,07	0,07	0,07	0,02	0,06
$0,8S_{ДА}$	0,43	0,08	0,02	0,05	0,02	0,02	0,1	1,9	1,53
$0,42S_R$	0,01	0,02	0,06	0,02	0,03	0,39	-0,03	0,02	0,01
$0,49S_П$	0,04	0,03	0,04	0,04	0,09	0,08	0,06	0,05	0,02
$0,43S_{ФС}$	1,40	1,16	1,26	0,63	-1,72	0,10	1,72	-1,04	-2,05
S_{FSE}	**1,97**	**1,38**	**1,45**	**0,81**	**-1,51**	**0,66**	**1,93**	**0,95**	**-0,42**

The source: calculated by the author on the basis of the National commission of the Securities and Stock Market data [7]

Table 3.

Integral indicator of the financial safety of the JSC of theVasylkivska Poultry Farmin 2007-2015.

Indicator	Years								
	2007	2008	2009	2010	2011	2012	2013	2014	2015
$0,38S ps$	0,045	0,03	0,03	0,03	0,04	0,04	0,05	0,04	0,05
$0,8S_{BA}$	0,31	0,12	0,04	0,05	5,36	10,34	0,31	1,65	1,32
$0,42S_R$	-0,12	-0,08	-0,03	0,05	0,01	-0,02	0,01	0,01	-0,01
$0,49S_P$	0,01	0,01	0,01	0,01	0,03	0,03	0,02	0,04	0,03
$0,43S FS$	-5,21	-4,34	-2,06	-2,11	-0,27	-0,30	-0,13	-0,55	-2,85
S_{FSE}	**-4,97**	**-4,26**	**-2,01**	**-1,97**	**5,17**	**10,09**	**0,26**	**1,19**	**-1,46**

The source: calculated by the author on the basis of the National commission of the Securities and Stock Market data [7]

Having considered table 3 data it is clear to see that «Plemptakhodadgosp Brovarskiy» is financially securein the years of 2007-2010 and in the years of 2012-2014, and within this period of time the enterprise has had the low level of the financial safety , that is up to 2011 and in 2015 the integral indicator of the financial safety has had the negative meanings and that testifies the fact that the enterprise was financially insecure.

Having considered tables 5 and 7, it is clear to see that the 'Vasylkivska Poultry Farm' in the years from 2007 till 2010 and in 2015 was financially insecure and the negative meanings in the given table testifies about a dangerous financial situation. In the period from 2011 till 2014 the enterprise was financially insecure.- the level of being insecure was more than so it made up 5.17 and 10.09 accordingly. There was a slight rise up in 2012 in comparison to 2011 and the indicator was 4.92, which testifies the fact of a positive dynamics in providing financial safety of the enterprise. In 2013 the enterprise had the low level of the financial safety that is higher than 1 and it made up 0.26, and in 2014 1.19 the middle level of the financial safety. In 2011 and in 2012 the indicator was much higher than 5.

Table 4.

Integral indicator of the financial safety on the example of the JSC 'Kyivska Poultry Farm' in the years of 2007-2015.

Indicator	Years								
	2007	2008	2009	2010	2011	2012	2013	2014	2015
$0,38S_{ps}$	0,04	0,04	0,04	0,06	0,05	0,02	0,04	0,04	0,04
$0,8S_{BA}$	2,06	2,02	0,58	3,04	0,51	0,58	0,52	0,25	-0,02
$0,42S_R$	-0,01	0,02	-0,01	0,04	0,01	0,01	0,01	0,02	0,02
$0,49S_P$	0,02	0,01	0,03	0,03	0,02	0,02	0,02	0,02	0,02
$0,43S_{FS}$	0,34	0,32	0,35	0,66	0,69	-0,40	0,10	0,03	-0,03
S_{FSE}	**2,45**	**2,41**	**0,99**	**3,83**	**1,27**	**0,23**	**0,69**	**0,36**	**0,03**

The source: calculated by the author on the basis of the National commission of the Securities and Stock Market data [7]

Table 5.

Integral indicator of the financial safety of the JSC 'Krushynsky Paultry Complex' in the years of 2007-2015.

Indicator	Years								
	2007	2008	2009	2010	2011	2012	2013	2014	2015
$0,38S_{ps}$	-0,26	0,02	0,05	0,09	0,14	0,24	0,55	1,05	0,93
$0,8S_{BA}$	3,04	1,5	1,01	2,05	0,14	0,37	0,77	0,04	1,11
$0,42S_R$	0,02	0,01	0,01	0,01	0,02	0,04	-0,01	-0,01	-0,01
$0,49S_P$	1,80	2,76	0,04	0,08	0,08	0,75	0,29	0,09	0,08
$0,43S_{FS}$	5,41	0,14	8,01	4,65	0,53	3,46	2,83	0,39	0,29
S_{FSE}	**10,01**	**4,43**	**9,12**	**6,88**	**0,91**	**4,86**	**4,43**	**1,56**	**2,40**

The source: calculated by the author on the basis of the National commission of the Securities and Stock Market data [7]

Having considered table 5 data it is clear to see that JSC 'Kyivska Poultry Farm' was financially insecure in the years 2007-2015. It was defined the low level of financial safety in 2009, 2006-2015, that is lower than 1 and it made up 0.99; 0.23; 0.69; 0.36; 0.03 respectively. The middle level of safety was traced in 2007-2008 and 2010-2011 and it made up 2.45; 2.41; 3.83; 1.27 – that is more than 1.

Having considered table 6 data it is clear to see that JSC 'Krushynsky Paultry Complex' in the years 2007-2015 was a financially secure enterprise accordingly to integral indicators of the financial safety enterprise. This indicator was higher in 2007, in 2009-2010 and it made up 10.01; 9.12; 6.88 accordingly and that fact testified a high level of financial safety. The middle level of the financial safety was in 2008 (4.43), in 2012 (4.86), in 2013-2015 (4.43, 1.56, 2.40), that is in the range from 1 to 5. The low level of the financial safety was in 2011 with the meaning 0.91 which is lower than 1.

Having considered table 7 data JSC 'Ukraina Poultry Farm' in the years of 2007-2015 was financially secure, that is the integral indicator of the financial safety of the enterprise was higher than zero. The high level of the financial safety was seen in 2007-2008, 2011 and 2015and it made up 8.23; 9.30; 5.12; 10.04 that is above 5. The middle level of safety was seen in 2009-2010 and from 2012 till 2014 and it made up 4.56; 4.42; 2.58; 2.42; 10,04, that higher 5.

Middle strength safety was watched in 2009-2010 and from 2012 for 20 4.43 which is in the range of 1 through 5.

To concordance the calculations of the integral indicator of the financial safety of the enterprise in this economical branch can be presented in the following table.

Table 6.

Integral indicator of the financial safety of the JSC 'Ukraina Poultry Farm' in 2007-2015.

Indicator	Years								
	2007	2008	2009	2010	2011	2012	2013	2014	2015
$0,38S_{ps}$	0,03	0,03	0,03	0,03	0,02	0,03	0,03	0,02	0,02
$0,8S_{BA}$	6,81	7,77	3,08	1,71	2,48	1,89	1,09	2,21	5,59
$0,42S_R$	0,02	0,02	0,02	0,02	0,03	0,02	0,03	0,05	0,02
$0,49S_P$	0,03	0,07	0,14	0,49	0,38	0,16	0,16	0,15	0,14
$0,43S_{FS}$	1,34	1,41	1,29	2,17	2,21	0,48	1,11	1,99	4,27
S_{FSE}	**8,23**	**9,30**	**4,56**	**4,42**	**5,12**	**2,58**	**2,42**	**4,43**	**10,04**

The source: calculated by the author on the basis of the National commission of the Securities and Stock Market data [7]

Table 7.

Grouped integral indicator of the financial safety in several enterprises of the Poultry industry in the years of 2007-2015.

Enterprise	Years								
	2007	2008	2009	2010	2011	2012	2013	2014	2015
'Plemptakhodadgosp Brovarskiy'	**1,97**	**1,38**	**1,45**	**0,81**	*-1,51*	**0,66**	**1,93**	**0,95**	**-0,42**
'Vasylkivska Poultry Farm'	**2,45**	**2,41**	**0,99**	**3,83**	**1,27**	*0,23*	**0,69**	*0,36*	**0,03**
'Kyivska Poultry Farm'	*10,01*	**4,43**	*9,12*	**6,88**	**0,91**	**4,86**	**4,43**	**1,56**	**2,40**
'Krushynsky Paultry Complex'	*-4,97*	*-4,26*	*-2,01*	*-1,97*	*5,17*	*10,09*	**0,26**	**1,19**	*-1,46*
'Ukraina Poultry Farm'	**8,23**	*9,30*	**4,56**	**4,42**	**5,12**	**2,58**	**2,42**	*4,43*	*10,04*

The source: calculated by the author on the basis of the National commission of the Securities and Stock Market data [7]

Having considered table 8 data it is clear to see that the lowest integral indicator of the financial safety in 2007-2010, in 2013-2015 in JSC 'Vasylkivska Poultry Farm' and it made up -4,97; -4,26; -2,01; -1,97; 0,26; -1,46 respectively, in 2011 JSC 'Plemptakhodadgosp Brovarskiy', that is -1,51, in 2012 p. and 2014 p. 0,23; 0,36 respectively. The highest indicator of the financial safety was in JSC 'Krushynsky Paultry Complex' in 2007, 2009-2010, 2013 and it made up 10,01; 9,12; 6,88; 4,43 respectively, in 2011-2012 JSC 'Vasylkivska Poultry Farm' that is 5,17; 10,09 respectively, in 2008 and in 2014-2015 JSC 'Ukraina Poultry Farm' , that is : 9,30; 4,43; 10,04 respectively.

Having considered table 9 data it is clear to see that the 1st place in the financial safety in the years of 2007, 2009, 2010, 2013 was in JSC 'Krushynsky Paultry Complex'; in 2011, 2012 was in JSC 'Vasylkivska Poultry Farm'; in 2008, 2014-2015 was in JSC 'Ukraina Poultry Farm'. The last place in the years of 2007-2010, 2013 p, 2015 was occupied by JSC 'Vasylkivska Poultry Farm'; in 2013, 2014 by JSC 'Plemptakhodadgosp Brovarskiy', in 2013 , 2014 by JSC 'Kyivska Poultry Farm'.

Table 8.

Rating estimation of the financial safety of the enterprises in the Poultry Branch Industry

Enterprise	Years								
	2007	2008	2009	2010	2011	2012	2013	2014	2015
JSC 'Plemptakhodadgosp Brovarskiy'	3	4	3	4	*5*	*4*	*3*	4	4
JSC Vasylkivska Poultry Farm'	4	3	4	3	3	*5*	4	*5*	**3**
JSC 'Kyivska Poultry Farm'	*1*	2	*1*	*1*	4	2	*1*	2	2
JSC 'Krushynsky Paultry Complex'	*5*	*5*	*5*	*5*	*1*	*1*	5	3	5
JSC Ukraina Poultry Farm'	2	*1*	2	2	2	3	2	*1*	*1*

Conclusions and the outlook of the following development. The scientific results of the given researchallow the author to solve the scientific task, which lies in investigation the task and working out necessary provision and giving better methodological and practical steps to the mechanism of the estimation of the financial safety of the enterprise. The research of the estimation of the financial safety of the enterprise has proved that the analysis of the financial safety by the scientists is done from the position of the effective enterprise performance. But it is not taken into account the dangers, which are escorted by financial managerial performance, production fading, non-effective property status, unsteadiness. Having analyzed methodological approaches as to the estimation of the financial safety of the enterprise and clarifying a bunch of unsolved tasks , the author suggested the methodology of the analysis on the basis of the calculation of the integral indicator and taking into consideration the scientific method of the systematic analysis. To calculate the integral indicator of the financial safety of the enterprise is important to take in to consideration the combined indicators, which reflect financial state of the enterprise like: effectiveness (ineffectiveness) of the property status, profitability (unprofitability) liquidity, pay ability (non pay ability), financial steadiness (unsteadiness), business activity (fading). There have also been tack led the mechanism of practical calculations of the enterprise financial safety stat which is applicable in case target pursuing and giving the quantitative estimation of the safety in dynamics, comparison, having the rating estimation in a separate branch of production.

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