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MODEL OF MANAGEMENT EXPRESS EVALUATION OF FINANCIAL PERFORMANCE OF THE LATVIAN ORGANIZATION AS THE FACTOR OF STRENGTHENING OF ITS SAFE VITAL ACTIVITY

The model of management express evaluation of financial performance of the Latvian organization is built through use of methods of expert evaluations, mixed polling, voting, rank correlation, combination of quantitative and qualitative rates and point-gravimetric method.

The expert selection criteria have been applied: 1) education in the field of economics, finances or entrepreneurship management – at least, Master's degree; 2) work experience in the field of finances or economics in Latvia – not less than 15 years; 3) professional development in the program connected with financial analysis – not more than 3 years ago; 4) position taken – manager of finance or economics service.

7 experts from different sectors of industrial and non-industrial sector of the Latvian economy were included into the expert group for pilot study. Regarding each qualitative and quantitative rate suggested by the explorer, the experts voted pro or contra in relation to its inclusion in the model, with a possibility to offer their own options for the components, and the rates having the vote majority were included into the basic study.

10 experts participated in the basic study, and to ensure representation, 5 experts from different branches of the industrial sector and 5 experts from different branches of the non-industrial sector of the Latvian economy were taken. Experts defined the weight rates of parameters, granting them their rank numbers, and the evaluation of these rates' significance was made through rank correlation. At first, the ratios of integral qualitative factor's weight were defined. Then, the weight ratios of components of the final model were defined, in which the integral qualitative ratio was included.

Experts selected the components of integral qualitative ratio (Table 1). Each of these components in the final model basing on the selected interpretation assessment is evaluated in points from 0 to 3.

Basing on the performed calculations a model of express evaluation of financial performance of the Latvian organization for managers was given:

$$N = 0,20X_1 + 0,20X_2 + 0,13X_3 + 0,11X_4 + 0,10X_5 + 0,07X_6 + 0,06X_7 + \\ + 0,13(0,26Y_1 + 0,20Y_2 + 0,17Y_3 + 0,16Y_4 + 0,12Y_5 + 0,09Y_6)$$

where X_i = value of quantitative ratio X_i of the analyzed organization / normative branch value of the quantitative ratio X_i ;

Table 1 - Qualitative ratios of financial performance of the organization for managers

No.	Components	Interpretation assessment to be selected	Po- ints
1	Level of efficiency of accounting system	High level of efficiency of accounting system	3
		Average level of efficiency of accounting system	2
		Low level of efficiency of accounting system	1
		Constant accounting violations	0
2	Level of financial planning and control system	High level of financial planning and control system	3
		Average level of financial planning and control system	2
		Low level of financial planning and control system	1
		Lack of financial planning and control system	0
3	Level of organization of management accounts	High level of organization of management accounts	3
		Average level of organization of management accounts	2
		Low level of organization of management accounts	1
		Lack of organization of management accounts	0
4	Level of financial service competence	High level of financial service competence	3
		Average level of financial service competence	2
		Low level of financial service competence	1
		Incompetency of the financial service	0
5	Level of provision of financial security	High level of provision of financial security	3
		Average level of provision of financial security	2
		Low level of provision of financial security	1
		Lack of provision of financial security	0
6	Level of professional development of the employees	High share of employees going through professional development	3
		Average share of employees going through professional development	2
		Low share of employees going through professional development	1
		Lack of professional development by the employees	0

X_1 = value of return on sales of the analyzed organization / normative branch value of the return on sales;

X_2 = value of return on assets of the analyzed organization / normative branch value of the return on assets;

X_3 = value of financing ratio of the analyzed organization / normative branch value of the financing ratio;

X_4 = value of current liquidity ratio of the analyzed organization / normative branch value of the current liquidity ratio;

X_5 = value of return on equity of the analyzed organization / normative branch value of the return on equity;

X_6 = value of absolute liquidity ratio of the analyzed organization / normative branch value of the absolute liquidity ratio;

X_7 = value of assets turnover ratio of the analyzed organization / normative branch value of the assets turnover ratio;

Y_i = value of qualitative ratio Y_i of the analyzed organization evaluated in points / normative point value of the qualitative ratio Y_i ;

Y1 = value of level of efficiency of accounting system of the analyzed organization evaluated in points / normative point value of the level of efficiency of accounting system;

Y2 = value of level of financial planning and control system of the analyzed organization evaluated in points / normative point value of the level of financial planning and control system;

Y3 = value of level of organization of management accounts of the analyzed organization evaluated in points / normative point value of the level of organization of management accounts;

Y4 = value of level of financial service competence of the analyzed organization evaluated in points / normative point value of the level of financial service competence;

Y5 = value of level of provision of financial security of the analyzed organization evaluated in points / normative point value of the level of provision of financial security;

Y6 = value of level of professional development of the employees of the analyzed organization evaluated in points / normative point value of the level of professional development of the employees.

Below (Table 2), the Latvian normative branch values of quantitative ratios are given, which were calculated by the author [1, p. 257; 2, p. 5; 3, p. 51; 4, p. 67; 5, p. 200] using information of the Central Statistics Bureau of the Republic of Latvia [6] as average branch applying expert minimum standards.

Table 2 - Latvian normative branch values of quantitative ratios

Branch	Normative branch values						
	Return on sales	Return on assets	Financing ratio	Current liquidity ratio	Return on equity	Absolute liquidity ratio	Assets turnover ratio
1	2	3	4	5	6	7	8
Crop, animal production and hunting	≥10,00	≥5,00	≥0,55	≥1,44	≥10,00	≥0,21	≥0,45
Forestry and logging	≥14,07	≥8,64	≥2,30	≥1,46	≥12,72	≥0,50	≥0,74
Fishing	≥13,19	≥7,58	≥0,64	≥1,60	≥19,78	≥0,46	≥0,67
Mining and quarrying	≥10,13	≥6,35	≥0,89	≥1,47	≥13,96	≥0,25	≥0,75
Manufacture of food products	≥10,00	≥5,00	≥0,50	≥1,03	≥10,00	≥0,12	≥1,55
Manufacture of beverages	≥10,00	≥5,00	≥0,92	≥1,47	≥10,00	≥0,10	≥1,07
Manufacture of textiles	≥10,00	≥5,00	≥0,50	≥1,50	≥10,00	≥0,16	≥0,96
Manufacture of wear	≥10,00	≥5,00	≥0,50	≥1,37	≥10,00	≥0,10	≥1,35
Manufacture of leather products	≥10,00	≥11,82	≥0,50	≥1,48	≥36,10	≥0,42	≥1,42
Manufacture of wood products	≥10,00	≥6,59	≥0,58	≥1,18	≥16,15	≥0,16	≥1,11
Manufacture of paper products	≥10,00	≥5,00	≥0,50	≥1,00	≥11,61	≥0,11	≥1,26
Manufacture of chemical products	≥10,00	≥5,00	≥0,50	≥1,19	≥10,00	≥0,10	≥0,82
Manufacture of pharmaceutical preparations	≥13,92	≥9,38	≥2,61	≥2,93	≥13,33	≥0,10	≥0,82
Manufacture of rubber and plastic products	≥10,00	≥5,00	≥0,50	≥1,00	≥10,00	≥0,10	≥1,24
Manufacture of mineral products	≥10,00	≥5,00	≥0,50	≥1,01	≥10,00	≥0,11	≥0,44
Manufacture of metals	≥10,00	≥5,00	≥0,51	≥1,00	≥10,00	≥0,10	≥1,22

Manufacture of metal products	≥10,00	≥5,00	≥0,50	≥1,06	≥11,70	≥0,15	≥1,18
Manufacture of electronic products	≥19,98	≥19,66	≥1,82	≥2,97	≥30,91	≥0,66	≥1,17
Manufacture of electrical equipment	≥10,00	≥6,95	≥0,88	≥1,62	≥16,74	≥0,28	≥1,45

Table 2 Continuation

1	2	3	4	5	6	7	8
Manufacture of other equipment	≥10,00	≥5,00	≥0,76	≥1,51	≥10,00	≥0,17	≥0,96
Manufacture of cars and trailers	≥10,00	≥9,10	≥1,28	≥1,70	≥16,01	≥0,30	≥1,04
Manufacture of other transport	≥10,00	≥5,00	≥0,50	≥1,00	≥10,00	≥0,14	≥0,76
Manufacture of furniture	≥10,00	≥5,00	≥0,50	≥1,00	≥10,00	≥0,10	≥1,41
Other manufacturing	≥10,00	≥6,50	≥0,59	≥1,66	≥19,44	≥0,17	≥1,24
Repair and installation of equipment	≥10,00	≥7,00	≥0,81	≥1,46	≥16,98	≥0,24	≥1,60
Electricity, gas and steam supply	≥10,00	≥5,00	≥1,25	≥1,44	≥10,00	≥0,52	≥0,48
Water collection, treatment and supply	≥10,00	≥5,00	≥0,55	≥1,18	≥10,00	≥0,89	≥0,15
Sewerage	≥10,00	≥5,00	≥0,50	≥1,00	≥10,00	≥0,56	≥0,12
Waste collection, treatment and removal	≥10,00	≥5,00	≥0,50	≥1,00	≥10,00	≥0,32	≥0,78
Civil engineering	≥10,00	≥5,00	≥0,50	≥1,20	≥10,00	≥0,13	≥0,94
Specialised construction activities	≥10,00	≥5,00	≥0,50	≥1,06	≥10,00	≥0,21	≥1,63
Wholesale and retail trade of cars	≥10,00	≥5,00	≥0,50	≥1,14	≥10,00	≥0,12	≥1,72
Wholesale trade	≥10,00	≥5,00	≥0,50	≥1,22	≥19,01	≥0,14	≥2,58
Retail trade	≥10,00	≥5,00	≥0,50	≥1,07	≥10,00	≥0,16	≥2,41
Land transport	≥10,00	≥5,00	≥0,50	≥1,00	≥10,00	≥0,28	≥1,26
Water transport	≥10,00	≥5,00	≥0,50	≥1,46	≥10,00	≥0,41	≥0,59
Support activities for transportation	≥10,00	≥5,11	≥0,85	≥1,11	≥11,10	≥0,36	≥0,89
Accommodation and food service activities	≥10,00	≥5,00	≥0,50	≥1,00	≥10,00	≥0,20	≥0,24
Publishing activities	≥10,00	≥5,00	≥0,50	≥1,26	≥10,00	≥0,33	≥1,29
Film production and sound recording	≥10,00	≥5,64	≥0,50	≥1,08	≥19,73	≥0,46	≥1,14
Broadcasting activities	≥10,00	≥5,00	≥0,50	≥1,10	≥10,00	≥0,33	≥0,99
Telecommunications	≥13,93	≥9,07	≥1,96	≥1,08	≥13,54	≥0,32	≥0,75
Computer programming	≥10,00	≥8,92	≥0,56	≥1,51	≥24,76	≥0,54	≥1,88
Information service activities	≥10,04	≥11,75	≥0,50	≥1,22	≥52,55	≥0,41	≥1,51
Financial service activities	≥12,23	≥5,00	≥0,50	≥1,01	≥10,00	≥0,23	≥0,06
Insurance activities	≥13,15	≥5,00	≥0,59	≥1,74	≥10,00	≥0,88	≥0,38
Real estate activities	≥10,00	≥5,00	≥0,50	≥1,00	≥10,00	≥0,13	≥0,13
Legal and accounting activities	≥10,00	≥5,00	≥0,50	≥1,06	≥19,26	≥0,20	≥0,63
Management consultancy activities	≥10,00	≥5,00	≥1,79	≥1,37	≥10,00	≥0,32	≥0,16
Technical testing	≥10,00	≥5,59	≥0,54	≥1,36	≥15,67	≥0,44	≥0,99
Scientific research and development	≥10,00	≥5,00	≥0,50	≥1,45	≥10,00	≥0,57	≥0,65
Advertising and market research	≥10,00	≥5,00	≥0,50	≥1,21	≥10,00	≥0,25	≥1,93
Other professional activities	≥10,00	≥5,00	≥0,50	≥1,02	≥11,17	≥0,24	≥1,04
Rental and leasing activities	≥10,00	≥5,00	≥0,50	≥1,00	≥11,78	≥0,16	≥0,45
Travel agency activities	≥10,00	≥5,00	≥0,50	≥1,10	≥13,16	≥0,33	≥4,18
Security and investigation activities	≥10,00	≥5,00	≥0,50	≥1,15	≥10,00	≥0,23	≥2,55
Services to buildings	≥10,00	≥5,00	≥0,54	≥1,03	≥10,00	≥0,27	≥1,16
Education	≥10,00	≥5,69	≥0,65	≥1,00	≥14,76	≥0,50	≥1,01
Human health activities	≥10,00	≥5,00	≥0,58	≥1,78	≥10,00	≥1,33	≥0,84
Social work activities	≥10,00	≥5,00	≥0,97	≥1,19	≥10,00	≥0,75	≥0,73
Creative activities and art	≥10,00	≥5,00	≥0,50	≥1,06	≥10,00	≥0,39	≥1,58
Libraries, archives and museums activities	≥10,00	≥5,00	≥3,88	≥1,00	≥10,00	≥0,11	≥0,12
Gambling and betting activities	≥22,84	≥16,59	≥1,64	≥1,60	≥27,91	≥1,06	≥1,17

Sport, amusement and recreation activities	$\geq 10,00$	$\geq 5,00$	$\geq 0,97$	$\geq 1,00$	$\geq 10,00$	$\geq 0,20$	$\geq 0,29$
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Algorithm of express evaluation of the financial performance of the Latvian organization for managers includes the following stages: 1) calculation of values of quantitative ratios of the analyzed organization; 2) calculation of proportions of X_i using the Latvian normative branch values (Table 2); 3) point evaluation of components of the integral qualitative ratio basing on the selected interpretation assessment (Table 1); 4) calculation of relations of Y_i with normative point values for qualitative ratios, equal to 3; 5) value calculation N ; 6) analysis of obtained values and conclusion formation.

If $N \geq 1$, the financial situation of the company is good, and if $N < 1$, it causes concern. The stronger deviation from the value 1 towards the least, the worse the financial situation is.

Thus, the above-built model of management express evaluation allows assessing the financial performance of the Latvian organization both in complex way and looking at each component. Thus, the developed model may serve as one of the important factors for strengthening of safe vital activity of the Latvian organization.

Bibliography

1. Sergeev E.O. Latvian Norms of Absolute Liquidity Ratio // International Scientific-Practical Conference of Karaganda University "Bolashak" "Science and Education in Modern World". Karaganda, Bolashak-Baspa, 2015, volume 2, pp. 257-259.
2. Sergeev E.O. Latvian Norms of Financing Ratio // Sharing the Results of Research towards Closer Global Cooperation among Scientists: Results of the 5 International Conference: Collection of Research Papers. Montreal, Accent Graphics Communications, 2015, pp. 5-12.
3. Sergeev E.O. Latvian Norms of Return on Assets // Alfred Nobel Dnepropetrovsk University: V International scientific practical conference of young scientists and students "Development of finances in conditions of chaotically structured economy". Dnepropetrovsk, Alfred Nobel Dnepropetrovsk University, 2015, pp. 51-53.
4. Sergeev E.O. Pašu kapitāla rentabilitātes normatīvi Latvijā [The Latvian standards of return on equity] // Baltic International Academy: V International scientific and practical conference of young scientists and students "Time of Challenges and Opportunities: Problems, Solutions and Prospects". Riga, Petrovskis un Ko, 2015, pp. 67-71. (In Latvian).
5. Sergeev E.O. Tekošās likviditātes koeficienta normatīvi Latvijā [The Latvian standards of current liquidity ratio] // The University College of Economics and Culture and Albert College: collection of scientific papers of students. Riga, Ekonomikas un kultūras augstskola, pp. 200-206. (In Latvian).

6. Website of the Central Statistics Bureau of the Republic of Latvia.
Available at: www.csb.gov.lv, accessed 23.09.2015.