MARKETING APPROACH TO ENSURE THE ECONOMIC SECURITY OF THE ENTERPRISE

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Abstract. *The article explains the concept of "competitive intelligence". The author highlights the role and importance of competitive intelligence in business management.The authors studied the scientific and theoretical foundations of economic security of enterprises, presented the stages and principles of development of competitive intelligence in enterprise marketing, developed a methodology for assessing the economic security of enterprises based on an in-depth study of best international practices.*

Keywords: *intelligence, business intelligence, financial intelligence, competitive intelligence, business intelligence, competitor.*

Introduction

The popularity of the use of chemical and petrochemical products in the world, the widespread use of mass technologies for their production, contributes to the rapid development of the chemical complex in general, and the chemical industry in particular. Due to the widespread use of chemicals and petrochemical products and new materials, the trend of chemicalization of the global economy will continue, and by 2030 the world's per capita consumption of polymer products is expected to increase to $ 128 per capita instead of $ 61 in 2013. leads to "[12]. This, in turn, will increase the number of enterprises in the chemical industry and expand the capacity of existing enterprises in this sector.

In recent years, the countries of the European Union (14.4%), the United States (12.3%) and Japan, mainly developing countries from Asia, have entered the top ten in terms of trade. In 2020, the BRICS countries (Brazil, Russia, India, China and South Africa) will account for 50.2% of global chemical trade. A quarter of global chemical trade is mainly produced by developing countries in Asia, including the Middle East, and by 2020, with 1.547 billion euros, China has become the world's largest producer of chemicals. The global landscape of the chemical industry is changing rapidly, China is taking its chemical industry to the next stage of development and moving from "leadership" to "leadership" and "big power" to the "great power" of the oil and chemical industry, chemical industry enterprises to ensure financial and economic stability selectively leading in technology, innovation and dominating trade and international markets. [1]

Literature review

Talaoui, Y. and Kohtamäki M. [1], Nyanga C., Pansiri, J. and Chatibura D. [2], Fahey L. [3], Platt W. [4], Yuldashev , N. K. [5], Zarova, E. V. [7], Tursunov B. O. [8], Burkhanov A. U. [9], Mustafakulov S. I. [10] and studied in the works of others.

Doronin A., one of the CIS scientists. I., Solomanidina T.O., Yushchuk E. L., Maltseva A.A., Yakovets Yu.V., Kuzyk B.N., Kushlin V.I., Gubernatorov A.M., Koretskaya L.K., Belova O.A., Sergeeva I.A. , Stepchenko T.S., Dovbysh V.E., and others have separately studied the organizational aspects of ensuring the economic security of enterprises as well as competitive intelligence.

Theoretical and methodological bases of ensuring economic and financial stability of enterprises in Uzbekistan are widely covered in the works of local scientists A. Burkhanov, S. Gulomov, P. Pardaev, T. Shodiev, N. Mahmudov, B. Berkinov, B. Khasanov and others.

In the scientific work of the above authors, insufficient attention has been paid to the study of the use of competitive intelligence in the economic security of power plants. Therefore, an in-depth study of the economic security of the enterprises of the electrical industry, which is one of the most promising sectors of the economy, is a topical issue.

The problem of economic security has previously attracted the attention of researchers, but they have talked and written more about general, national security, while economic security has only been studied as an integral part of the overall national security problem.

According to research, it was not until the 1970s that the term "economic security" began to be seen as a key component of national security. Later, the term became widespread enough in all developed countries. It was at that time, first and foremost, that the representatives of Western European countries, advocating a fair assessment of

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the international situation, advocated the widespread use of economic methods in ensuring national security. According to scientists of Western European countries, security is a state in which the most important vital interests of the individual, society and the state are protected from internal and external threats. Because the concept of economic security of an enterprise has not been sufficiently studied, it is distinguished by a large number of different approaches to its definition. Often the authors of scientific papers emphasize the specific practical aspects and also describe the general concept accordingly.

According to the author, competitive intelligence and industrial espionage are united only by goals - foresight and modeling of the future, minimizing risks, as well as gaining additional benefits and advantages in organizing a business. "Intelligence means learning, gaining detailed, in-depth knowledge." With regard to competitive intelligence and industrial espionage - it means gaining an in-depth knowledge of its competitive, business environment - everything that affects a business's ability to compete effectively, economically.

Analysis and results

In the study, simulation modeling was performed based on a factor model of statistical analysis. A multiple model was used to represent the ratio of all factors:

$$Z = \frac{x}{y}$$

In this case, the indicators of the financial condition of the enterprise based on the balance sheet (Forms 1-2) and the report on financial results (Figure 5) are used. This option shows the coefficient method of financial performance. It should be noted that the financial criteria reflect the real state of the enterprise, so this model reflects all the internal criteria of financial and economic activity. The model should be imitated according to financial criteria.

The model factor system is shown to have an expansion feature:

$$x_1 = x_{11} + x_{12} + x_{13} + \cdots + x_{1n}$$

In this case, the model is represented as follows:

$$Z = \frac{x_{11}}{y} + \frac{x_{12}}{y} + \frac{x_{13}}{y} + \cdots + \frac{x_{1n}}{y}$$

We then present the multiplication model in the form of a ratio of the following factors: В - cash flow of the enterprise; А - enterprise assets; $Д_а$ - business activity; П - corporate profit; ОА - current assets; $В_{на}$- non-current assets; СК - own capital of the enterprise: З - reserves; НДС - value added tax; ДС - cash; ДЗ - receivables; КЗ - creditor indebtedness; ДЛСЗС - long-term borrowed funds; ВБ - currency balance.

Then an algorithm for calculating the business activity, profitability and financial stability of the enterprise is presented.

Entrepreneurial activity reflects the level of dynamic development of an industrial enterprise. This requires the following financial indicators of the enterprise: the amount of cash flows and assets, it is possible to calculate the normative values for the overall assessment of the economic and financial performance of an individual enterprise. It should be noted that a successful enterprise is one whose net profit growth rates are higher than its asset growth.

Thus, the algorithm for calculating business activity is represented as follows:

$$Д_а = \frac{В * 100\%}{А}$$

Total capital turnover ratio:

$$К_о = \frac{П * 100\%}{В}$$

Rapid working capital turnover ratio:

$$К_{об} = \frac{В}{ОА}$$

Return coefficient:

$$К_{от} = \frac{В}{ВнА}$$

Turnover ratio of own funds:

$$К_{оск} = \frac{В}{СК}$$

Material turnover ratio:

$$К_{об.м.с.} = \frac{В}{З + НДС}$$

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Cash flow ratio:

$$K_{об.д.с.} = \frac{В}{ДС}$$

Rotation coefficient in calculations:

$$K_{об.с.р.} = \frac{В}{ДЗ}$$

Accounts payable turnover ratio:

$$K_{об.кр.з.} = \frac{В}{КЗ}$$

The sum of these coefficients reflects the general appearance of the enterprise, its general condition, which is an important criterion for assessing economic and financial performance.

The next coefficient, which is very important for the calculation of financial indicators, is the profitability of financial and economic activities of the enterprise, which indicates the level of efficiency of the total turnover of capital:

$$Р = \frac{В * 100\%}{П}$$

The next coefficient that needs to be calculated is financial stability:

$$ФУ = \frac{СК + ДЛСЗС}{ВБ}$$

Financial stability reflects the degree of financial independence of the enterprise, its solvency.

Next in line are the joint models, which consist of a combination of the above-described models, as described below.

$$\boldsymbol{Z} = \frac{\sum_i \boldsymbol{x_i}}{\sum_i \boldsymbol{y_i}}$$

As a result, a model of economic security assessment based on the integral indicator of economic efficiency is presented:

$$K_{eff.} = \sqrt[8]{K_o * K_{об} * K_{от} * K_{об.м.с.} * K_{об.д.с.} * K_{об.с.р.} * K_{об.кр.з.} * \frac{ФУ}{100}\%}$$

The advantage of the model is that it carefully examines the financial performance of the enterprise based on the factors that make up the financial condition of the enterprise. The disadvantage of the model is the complexity of its calculations.

The result of the calculation of the economic security of the enterprise is the calculation of the level of performance of the enterprise before and after the use of competitive intelligence tools. A scale of economic security based on competitive intelligence has been introduced. (Table 1)

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Table 1. Based on competitive intelligence tools economic security level scale

Levelsofeconomicsecurity	**Criteria**
Thelowestlevel	from 0 to 0,2
Lowdegree	from 0,21to 0,5
Average	from 0,51to 0,9
Highlevel	Above from 0,91

The result of the calculation of the economic security of the enterprise is the calculation of the level of performance of the enterprise before and after the use of competitive intelligence tools. A scale of economic security was developed on the basis of competitive intelligence (minimum level - from 0 to 0.2, low level - from 0.21 to 0.5, average - from 0.51 to 0.9, high level - 0.91 above).

In the dissertation, the author developed a multifactor econometric model based on the data of the enterprises of the electrical industry operating in the country from 2010 to 2021, and quantitatively assessed the economic security of these enterprises. The following factors were selected to identify exogenous factors affecting the economic security of these enterprises: output factor - production of computers, electronic and optical products, thousand soums (Y1), electrical equipment, thousand soums (Y2), electrical engineering, electrical equipment and optical production of products, thousand soums (Y3), and as influencing factors - as alternative energy, production

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of thermal energy, thousand GKa (X1), energy produced by solar power plants, million kWh (X2), by regions volume of industrial output (billion soums in current prices) (X3), index of production of electrical equipment (in percent compared to December last year) (X4), generation of electricity by region in million kWh (X5).[1]

Table 5 Calculated parameters of the multifactor econometric model according to the enterprises of the electrical engineering industry of the Republic of Uzbekistan

DependentVariable: Y1
Method: LeastSquares
Date: 05/15/22 Time: 09:48
Sample: 2010 2021
Includedobservations: 12

Variable	Coefficient	Std. Error	t-Statistic	Prob.
X1	-0.153951	0.094747	-1.624864	0.1482
X3	0.015921	0.004494	3.542561	0.0094
X4	6.749973	10.61338	0.635987	0.5450
X5	-0.146169	0.110432	-1.323610	0.2272
C	10965.02	5899.176	1.858738	0.1054

R-squared	0.930765	Meandependentvar	1397.754
Adjusted R-squared	0.891202	S.D. dependentvar	1689.755
S.E. ofregression	557.3574	Akaikeinfocriterion	15.77863
Sumsquaredresid	2174531.	Schwarzcriterion	15.98067
Loglikelihood	-89.67176	Hannan-Quinncriter.	15.70382
F-statistic	23.52627	Durbin-Watsonstat	1.371180
Prob(F-statistic)	0.000372		

According to the State Statistics Committee of the Republic of Uzbekistan, the Eviews 10 program was used to conduct descriptive statistics on factors before compiling a multifactor econometric model.

The calculated parameters of the multifactor econometric model according to the operating enterprises of the electrical industry of the Republic of Uzbekistan are given in Table 5 below.

The equation of this regression model can be given as follows:

$Y_1 = -0,226X_1 + 0,009X_3 + 6303,9$

If we interpret the calculated parameters of the multifactor econometric model according to the enterprises of the electrical industry of the Republic of Uzbekistan (Y1), in the case of ceteris paribus, as an alternative energy in the country, the increase in thermal power generation by 1 unit, computers, electronics and optical products 0 , A decrease of 22 units, an increase in the volume of industrial output by 1 unit by region, an increase in the production of computers, electronics and optical products by 0.009 units.

Table 6 Calculated parameters of the multifactor econometric model according to the enterprises of the electrical industry of the Republic of Uzbekistan (Y1)

DependentVariable: Y1
Method: LeastSquares
Date: 05/15/22 Time: 09:50
Sample: 2010 2021
Includedobservations: 12

Variable	Coefficient	Std. Error	t-Statistic	Prob.
X1	-0.226226	0.077630	-2.914152	0.0172
X3	0.009864	0.001255	7.859844	0.0000
C	6309.649	2334.633	2.702630	0.0243

R-squared	0.909748	Meandependentvar	1397.754
Adjusted R-squared	0.889692	S.D. dependentvar	1689.755
S.E. ofregression	561.2130	Akaikeinfocriterion	15.71040

[1]Here, the volume of production of computers, electronic and optical products is calculated by adding the volume of production of electrical equipment ($Y_1+Y_2=Y_3$)

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Sumsquaredresid	2834641.	Schwarzcriterion	15.83162
Loglikelihood	-91.26238	Hannan-Quinncriter.	15.66551
F-statistic	45.36030	Durbin-Watsonstat	1.464740
Prob(F-statistic)	0.000020		

We will test the autocorrelation of this model. The Breush-Godfrey test is performed.
If there is a correlation in the neighboring observations, in this equation
$e_t = p * e_{t-1} + v_t, t = 1,....,n$
(where e_t is the regression residue obtained by the least squares method) The coefficient p is zero.
According to the results of the Breuch-Godfree test, the values of both lags (resid (-1) and resid (-2)) are 0.5456 and 0.9910, respectively, and we accept the hypothesis H0 that there is no autocorrelation of random deviations . According to the results of this test, if the regression values (p) are greater than 0.05, we reject the H0 hypothesis that there is no heteroskedotasticity, the alternative hypothesis is that there is a heteroskedotasticity.

Table 7 Calculated parameters of the multifactor econometric model according to the enterprises of the electrical engineering industry (Y2) of the Republic of Uzbekistan

Dependent Variable: Y2
Method: Least Squares
Date: 05/15/22 Time: 09:50
Sample: 2010 2021
Included observations: 12

Variable	Coefficient	Std. Error	t-Statistic	Prob.
X1	-0.087360	0.098556	-0.886401	0.4048
X3	0.021057	0.004675	4.504231	0.0028
X4	-9.569144	11.04001	-0.866769	0.4148
X5	0.099341	0.114871	0.864810	0.4158
C	-1975.224	6136.307	-0.321891	0.7569

R-squared	0.983803	Meandependentvar	3737.831
Adjusted R-squared	0.974547	S.D. dependentvar	3633.994
S.E. ofregression	579.7617	Akaikeinfocriterion	15.85745
Sumsquaredresid	2352865.	Schwarzcriterion	16.05949
Loglikelihood	-90.14469	Hannan-Quinncriter.	15.78264
F-statistic	106.2944	Durbin-Watsonstat	1.816978
Prob(F-statistic)	0.000002		

If we statistically study the calculated parameters of the multifactor econometric model according to the enterprises of the electrical industry (Y2) operating in the Republic of Uzbekistan, the p-value is statistically at X1 (0.40), X4 (0.41) and X5 (0.41). found to be insignificant.

Table 8 Calculated parameters of the multifactor econometric model according to the enterprises of the electrical engineering industry (Y2) of the Republic of Uzbekistan

DependentVariable: Y2
Method: LeastSquares
Date: 05/15/22 Time: 09:52
Sample: 2010 2021
Includedobservations: 12

Variable	Coefficient	Std. Error	t-Statistic	Prob.
X1	-0.239596	0.142040	-1.686824	0.1259
X5	0.617373	0.059000	10.46404	0.0000
C	-25641.30	5802.392	-4.419092	0.0017

R-squared	0.930566	Meandependentvar	3737.831

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Adjusted R-squared	0.915137	S.D. dependentvar	3633.994
S.E. ofregression	1058.631	Akaikeinfocriterion	16.97966
Sumsquaredresid	10086297	Schwarzcriterion	17.10089
Loglikelihood	-98.87795	Hannan-Quinncriter.	16.93478
F-statistic	60.30998	Durbin-Watsonstat	1.272054
Prob(F-statistic)	0.000006		

Another way to check for the absence of multicollenearity between influencing factors is to calculate the VIF (Variance Inflation Factors) coefficients.

As an alternative energy in the country, increase in thermal power generation by 1 unit, decrease in production of computers, electronic and optical products by 0.22 units, increase in industrial output by 1 unit in the regions, production of computers, electronic and optical products by 0.009 units leads to an increase. Approval of the methodology proposed in the dissertation is carried out on the example of two enterprises of the Republic of Uzbekistan - JSC "Foton" and LLC "Zenit electronics".

To calculate economic security, we calculate and compare the indicators of business activity, profitability and financial stability of enterprises over a period of 10 years.

Based on the goals and objectives of the study, the content comments in the categories of "economic security", "economic security of the enterprise" were made. The interaction of chemical industry enterprises with economic systems of different levels to ensure economic stability has been scientifically substantiated and classified based on the specifics of ensuring economic stability.

A well-developed strategy for further development of the enterprise, forecasting and planning of financial indicators based on the data of a competing enterprise can increase the efficiency of financial and economic activities of the enterprise by 20.5%. Confirming the effectiveness of this methodology, we present the calculation of the data of the 2nd enterprise that conducted the competitive intelligence in relation to the 1st enterprise of the competitor. According to the study, as a result of competitive intelligence conducted on the model developed by the enterprise, the economic security of the 2nd enterprise is expected to be 0.074% in 2021, 0.262% in 2022 and 0.919% in 2023.

A comparative analysis of the share of industries in the structure of GDP and industrial value added in industrial production of the country shows that structural changes in the production of industrial products have directly led to shifts in the structure of gross value added in industry. The analysis shows that the growth of industrial production compared to the previous year was 105.4 percent in 2016, 105.2 percent in 2017, 110.8 percent in 2018, 105.0 percent in 2019, 100.9 percent in 2020 and in 2021. 108.7 fleet growth. The share of industry in GDP increased from 43.8% in 2016 to 61.5% by 2021. The gross value added of the industry was 26.5 per cent at the end of the analysis period, up from 26.5 per cent in 2016 and 34.5 per cent by 2020. This can be explained by the fact that other sectors of the economy are developing rapidly and gaining a place in the country's economic growth.

The electrical engineering industry of Uzbekistan has become an important sector of the economy, which is developing rapidly today and innovative developments are widely introduced compared to other sectors. In particular, the volume of electrical equipment production has almost doubled in the last 10 years.

It is necessary to introduce competitive intelligence in the enterprises of the electrical industry, optimize the production program by type of product based on the study of changing market requirements and the external environment. In this chapter, the need to introduce an organizational and economic mechanism to ensure economic security based on competitive intelligence for enterprises of the electrical industry in the country is scientifically based.

Based on the obtained regression models, the volume of production of inertial scenario electrical equipment in 2025 will reach 12582.3 billion. The volume of production of electrical engineering products in 2025 will reach 17997.5 billion soums. soums. In addition, the volume of production of inertial scenario electrical equipment in 2025 will reach 4706.8 billion. The volume of production of the electrical engineering industry in 2025 will reach 10200.4 billion soums. soums.

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