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RESEARCH OF MACRO AND MICRO ENVIRONMENTS ON ESSENTIAL COMMODITIES MARKET DURING THE PANDEMIC PERIOD IN UKRAINE

Abstract. The authors of the article supply calculations of the aggregate of criteria of quantitative assessment of the factors of impact of macro and microenvironment on the conjuncture of the essential commodities market. The research determines the main factors of impact of microenvironment on the conjuncture of the essential commodities market, particularly pandemic, climatic conditions, volume of export and impact of products, legal support for sales of the products, tax policy, state system of standardization, protection of consumers rights, level of income of consumers and producers, available markets for sale, range of products at the market, competitiveness of the products, inflation, increase of the number intermediaries, information supply at the market, scientific and technical progress. It is substantiated that the greatest impact among the macro-factors of permanent effect on the conjuncture of the essential commodities market is made by pandemic, inflation, competitiveness of the products. It should be noted, the COVID-19 pandemic has made its own adjustments to the functioning of the essential commodities market. In particular, at the beginning of the crisis, there was an increase in demand for essential commodities, however, consumers quickly adapted their behavior model to the new requirements. Among the microenvironment factors of impact on the conjuncture of the essential commodities market, the authors specify the following, particularly consumer characteristics of the product, available competitors, application of innovative technologies, ecological properties of goods, logistical support, quality of products, volume of consumption by population, and marketing ones. However, the greatest attention should be paid to consumer characteristics of the product, volume of consumption by population, available competitors, and quality of products. The research results are justified basing on the calculations of the concordance coefficient. Considering the conducted researches, one can notice a paradox in the current conditions of the legal support of product sales. In particular, on one hand, it is imperfect, on the other hand the essential commodities market still perform, demonstrating quite positive results.

Keywords: market of essential commodities, market conjuncture, microenvironment, microenvironment, concordance coefficient.

JEL Classification M31, D40, E20, L66

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ДОСЛІДЖЕННЯ ВПЛИВУ МАКРО- І МІКРОЧИННИКІВ НА РИНОК ТОВАРІВ ПЕРШОЇ НЕОБХІДНОСТІ В УКРАЇНІ В ПЕРІОД ПАНДЕМІЇ

Анотація. Запропоновано сукупність критеріїв кількісної оцінки впливу факторів макро- і мікросередовища на кон'юнктуру ринку товарів першої необхідності. Дослідження визначає основні чинники впливу мікросередовища на кон'юнктуру ринку товарів першої необхідності, зокрема пандемію, кліматичні умови, обсяги експорту та імпорту продукції, попит на продукцію, податкову політику, державну систему стандартизації, захист прав споживачів, рівня доходів споживачів і виробників, ринки продажу, асортимент продукції на ринку, конкурентоспроможність продукції, інфляцію, посередників, інформаційне забезпечення ринку, науково-технічний прогрес. Обґрунтовано, що серед макрочинників найбільший вплив на кон'юнктуру ринку товарів першої необхідності мають пандемія, інфляція, конкурентоспроможність продукції. Слід зазначити, що пандемія COVID-19 внесла свої корективи у функціонування ринку основних товарів. Зокрема, на початку кризи спостерігалось зростання попиту на товари першої необхідності, однак споживачі швидко адаптували свою модель поведінки до нових вимог. Серед факторів впливу мікросередовища на кон'юнктуру ринку товарів першої необхідності названо такі: споживчі характеристики товару, наявних конкурентів, застосування інноваційних технологій, екологічні властивості товарів, матеріально-технічне забезпечення, якість продукції, обсяг споживання населенням і маркетингове забезпечення. Серед виділених найбільшу питому вагу мають споживчі характеристики товару, обсяг споживання населенням, наявні конкуренти та якість продукції. Результати дослідження обґрунтовано на основі розрахунків коефіцієнта конкордації. Результати проведених досліджень доводять парадокс у нинішніх умовах правового забезпечення реалізації продукції. Зокрема, з одного боку, правові умови функціонування ринку товарів першої необхідності є недосконалими, з другого — він практично функціонує, демонструючи цілком позитивні результати.

Ключові слова: ринок товарів першої необхідності, ринкова кон'юнктура, макросередовище, мікросередовище, коефіцієнт конкордації.

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Introduction. The conditions of sales at the market are constantly changing, causing violation in the balance of demand and supply both by the volume and by the structure. Those

changes are manifested in the activity of enterprises that is characterized by the market conjuncture. The market conjuncture is determined by the economic situation at the market, which is identified by some parameters (level of demand and supply, level of salaries, currency exchange rate, etc.).

Research analysis and problem statement. The problems and prospects of development of the essential commodities market are studied by domestic and foreign scientists, particularly Demchak I. M., Zavalevska V. O., Mytchenok O. O. [1], which reveal results of analytical researches on the conditions of retail prices at food markets; Shubravska O. V., Ryndenko N. A., Sukhyi P. O. [2], who investigate the European experience and Ukrainian prospects for the markets of essential commodities. However, nowadays, there are not enough works on the impact of the factors of macro- and microenvironment. The Covid-19 pandemic has significantly affected the market for essential commodities both at the macro- and micro levels, although scientists attribute pandemics mainly to macro factors [3]. There are no clear arguments on what factors are of primary importance and what are non-essential, and how they can be graded. Study of micro and macronutrients in the market of essential commodities revealed by the authors Alboiu C. [4], Feher A, Stanciu S, Popescu G., Adamov T. [5].

The aim of the work is to investigate the influence of micro and macroenvironmental factors on the market of essential goods of Ukraine in the conditions of the COVID-19 pandemic.

Materials and methods. To make a more detailed investigation of the level of macrofactors' impact on the market conjuncture, it is necessary to make a statistical analysis of concordance of the respondents' answers. The respondents of the present research include experts, which are well informed on the market of essential commodities. In particular, to get a group estimate, it is proposed to conduct the research by the following stages, particularly:

- 1st stage — grouping and aggregating by the features;
- 2nd stage — evaluation of the degree of concordance of the experts' responses;
- 3rd stage — formation of separate groups of experts with «similar» estimates concerning a set of features in case of presence of essential differences in their responses;
- 4th stage—study of the reasons of heterogeneity of experts' opinions, determination of the experts' competences while answering the questions;
- 5th stage — determination of the level of experts' competence and grading of the experts' responses;
- 6th stage — shaping of the group decision.

It is worth noting that the concordance coefficient variates within the range from 0 to 1. However, the one can be achieved when all experts give the same estimates of each factor, whereas the zero means absence of relations between the experts' estimates. To argue, reduction of the total of grades of the estimates of each studied factor is not random, but the criterion χ^2 is used. According to the results, one can check the hypothesis about heterogeneity of distribution comparing to the alternatives of homogeneity. The concordance coefficient is calculated by the formula:

$$W = \frac{12S}{m^2(n^3 - n)}, \text{ where } S = \sum_{i=1}^n \left\{ \sum_{j=1}^m x_{ij} - \bar{x}_{ij} \right\}^2, \quad (1)$$

where \bar{x}_{ij} — stands for the average value for the total grades by each criterion of evaluation of outsourcing attractiveness. Thus, to evaluate significance of the obtained concordance coefficient, the χ^2 — coefficient is used. It confirms that for assessment W , it is necessary and considered to be adequate the estimated value

$$\chi^2 = m \cdot W \cdot (n - 1) \quad (2)$$

has χ^2 — distribution with $\nu = n - 1$ degrees of freedom.

Results and discussions. The market conjuncture is sufficiently influenced by micro- and macrofactors.

The macrofactors, influencing the market conjuncture, include:

1. Pandemic. The COVID-19 pandemic has made its own adjustments to the functioning of the essential commodities market. In particular, at the beginning of the crisis, there was an increase in demand for essential commodities, however, consumers quickly adapted their behavior model to the new requirements [6]. There has been an increase in the number of consumers actively shopping online, shopping for groceries and other goods online, and choosing from a wide variety of non-shopping alternative order fulfillment options, such as checkout windows and home.

2. Climatic conditions in Ukraine provide the opportunity to grow most of the popular kinds of vegetables, fruit and berries, and the domestic producers have all capacities to grow organic products and niche crops commercially. Moreover, one of the positive aspects for Ukraine is its neighborhood with the largest world consumers of essential commodities [7].

3. The volume of exports of essential commodities. It is necessary to stress that Ukraine is included in the List of countries, which can export definite kinds of essential commodities to Europe [8]. It is marked in the Directive of the EU Council 2019/523.

4. A particular attention should be paid to investigation of import of those essential commodities, which traditionally are not produced in Ukraine or their reserves are minimal for the country population. It is worth noting that nowadays, large volume of imported products enter the Ukrainian market looking good and attractive, having a wide range of products, and packaging of good quality. Moreover, one can observe a growth and extension of the number of retail networks, which used to buy the products of good quality from local producers, but currently they more often purchase abroad. Thus, the authors make a conclusion that adaptation of the existing standards of quality and safety of production to the EU requirements and control of quality are the important issues for the future development of the Ukrainian essential commodities market.

5. The legal support of products sale is mainly declared in the Constitution of Ukraine. Analyzing that aspect from the consumers' position, they should obtain appropriate goods and be protected by the legislation. Particularly, according to the article 42 of the Constitution of Ukraine, the government makes control for the quality and safety of products and all kinds of services and works [9]. Moreover, the article 15 of the Law of Ukraine «On protection of the consumer rights» declares that a consumer has the right to get necessary, available, relevant and appropriate information on products, securing a conscious and competent choice of them [10]. Studying the issue from the position of producers, one should note that sale of excised products is defined as any transaction at the customs territory of Ukraine, which expects shipping of excised products according to the agreements of purchase and sale, exchange, supply and other economic, civil and legal agreements with transition of the rights of ownership or without it, paid (compensation) or without payment, without reference to the terms of its supply, as well as free shipping of goods, including customer-supplied raw materials [11].

6. Tax policy at the essential commodities market is characterized by a number of job positions and support of the regulating function. In particular, in the current case, within the framework of the Association Agreement between the European Union and Ukraine, it is reasonable to get advantage of the available legal mechanisms. The example of those available instruments suggests application of a discounted rate of VAT on the shipping of definite kinds of essential commodities and increased requirements to the goods, which are exported abroad. Application of such mechanisms can significantly cease the negative effect from introduction of new rules at the essential commodities market.

7. In Ukraine, the state system of standardization has performed since the times of the Soviet Union, and it does not correlate with the requirements of the EU countries. Ukrainian producers of essential commodities should follow the standards of quality, approved by the main Institute of Standardization in Ukraine. Moreover, application of the standards, which have not been long changed in Ukraine, almost do not expect any control for the quality of essential commodities, sold at the market of such products (e.g. in supermarkets or at markets). In the European Union, the control on the compliance of essential commodities properties with standards of quality is the responsibility of power authorities or controlling organizations, which are funded by producers.

8. Consumer advocacy is regulated by the Law of Ukraine «On protection of consumer Rights». In case the consumer rights are violated, citizens can apply to the State Service of Ukraine on Food Safety and Consumer Protection for the facts of violation. Moreover, consumers have the right to return or exchange non-food goods during 14 days from the purchase date (unless the goods have not been used, damaged, available sale receipt and label). Goods of inappropriate quality should be mandatory exchanged or returned, except for the cases, when the seller can argue that the damage/defect or another loss of quality happens to the customer's fault. If the receipt is available, customers always can return the goods, or demand substitution with the same one (of the same price being at the moment of purchase, i.e. the seller should not demand extra payment even the goods price has increased). The price, mentioned on the label, should not differ from the price in the receipt. If at the cash desk, they ask to pay more than it is mentioned on the label, the consumer can refuse to pay and is totally right.

9. Level of consumers' income is the total amount of money, the consumer earns in the form of salary, lease, interest from business profit during a definite period. Purchasing capacity of each consumer directly depends on the level of his/her earning, because all goods of consumption have been exchanged for money and thus, it means that he/she is always limited by the level of his/her income. An increase of consumer income improves the purchasing capacity of citizens and contributes to a growth of demand for products, because only consumer's available funds to buy goods can fuel growth of their production. It often happens that enterprises, producing some consumer goods appear in the situation, when under equal conditions, only income of the main consumers determines the volumes of products sale and their price. It is clear that consumers, who belong to different social layers, have different income and respectively, they have different purchasing capacity.

10. Level of producers' income. For each period, income is a steady value, and thus, the larger share of income is consumed at present, the less of it can be saved and thus, there are fewer opportunities for investments.

11. Available sales market. The market conditions are determined by the changes in the correlation of demand and supply, including due to changes of priorities concerning the functional use of the objects of the estimated type. Those changes also influence the value of deviation of the price of supply from the price of agreement. The market conditions specify the changes of the prices of essential commodities during a set period.

12. The range of products at the essential commodities market. The range of essential commodities is shaped depending on the shop format. Nowadays, the principal fight is to conquer the so-called «middle class» of consumers, which is the most broadly represented. Therefore, in the «supermarkets» supply the range of products with a less share of exotic commodities.

Nevertheless, package of products shipping is also important. Goods, which are shipped in the specialized package (bushel, weight — 18.2 kg) are protected and commodities are not damaged. On the surface, it seems that such goods are more expensive than the ones, which are in the wooden boxes, in which they get damaged.

Color palette is also very important. For instance, ordering some goods, experts can agree the share of red color on the packages. Consumers like red color, and such packages suitable for merchandisers' creativity. Thus, essential commodities are advertisement by themselves. Nobody makes any specific ads of them, and thus, display of them is of great importance. Here it is worth mentioning that products of course should be fresh. If something is spoilt, it should be immediately taken away. Goods, which should be sorted, are removed from the shelf completely and substituted with new ones, and then sorted in a separate room.

13. Competitiveness of products. Competitiveness of products is the characteristic of a product (service), which identifies its difference from the competing product both by the degree of compliance with a definite need and by the costs of its satisfaction. However, market prospects of goods are related not only with the quality and costs of production. Success or failure of goods can be caused by other (non-market) factors, such as advertisement, image of company, level of services.

«The experience confirms that small companies are particularly active in production of commodities, which are at the stage of the market establishment and market exit. The point is that a large company is not willing to be the first to start production of a principally new product. Consequences of a possible failure will be felt by the company much heavier than by a small startup. If it concerns not fundamental developments in the field of technology, but fulfilment of an original idea of a new choice by bringing it to the stage of material production, it can be implemented by relatively small startup companies. Currently, such companies determine the innovative process in the developed countries. Hence, specialization of small companies on the operation with essential commodities, which stay at the definite stages of their life cycle, is forced by the company attempts to use its potential the most efficiently and secure competitiveness of the goods at the market» [12].

14. Inflation. The basic inflation in April 2020 was reduced up to 0.4% after the rise by 1.2% in March, and in the annual terms — up to 7.4% of 7.6% by the results of March, 7.8% — by the results of February, and 8.3% — by the results of January. As it is noted, increase of the consumer prices in Ukraine in 2008 slowed down up to 9.8% from 13.7% in 2018 [13].

15. Increase of the number of intermediaries is considered by the authors of the article as a positive factor, because the main volume of customer servicing is supplied by retailers. The aggregate of retailing enterprises and other trade units, located on a definite territory and engaged in selling goods and service for customers, creates a retail network. The main functions of a retail network include purchase of goods, sale of goods, transportation, storage, risk-taking, financial activity, market informing, obtaining of information about the market, under-sorting, underworking, and formation of the marketable condition. In general, it is considered that a retail network provides an opportunity to buy the needed goods and services fast, comfortable, with a minimum loss of force and time in the conditions of a free choice, choosing from a wide range of products, near the place of work and living.

Marketing has changed relations between a producer and a retail network; sale apparatus can say much about a producer, because his/her level determines commercial efficiency of activities of the last. If sellers are not interested in the goods, the retail network also has no interest to it and production of those goods will soon become unprofitable. In contrast, if the sellers are interested in the product, they will talk round the shop manager and consumers to buy it.

Knowing the deep needs of the personal sellers of goods (safety of position, feeling of their belonging to the enterprise, self-respect, wish to self-fulfillment), the enterprise will not permanently stimulate its structural subdivisions, responsible for the sales. The stimulation should be applied in specific cases and should have clearly set goals. Only in such case, it is possible to consolidate the efforts of sellers in a short period.

16. Information supply of the market is characterized by increase of the level of information about the products. Moreover, nowadays, it is necessary to work closely with population, improving their competence. A competent buyer is less dependent on different formalities and knows that in the retail network he/she can buy more expensive commodities, which can not be found at the market.

17. Scientific and technical progress. Along with the mentioned, the most important new directions in the age of STR (scientific and technical revolution), it is also important to consider those, which have become traditional ways of production improvement, particularly mechanization, electrification, chemicalization, digitalization, in particular the development of e-procurements systems. The modern stage of the STR is characterized by new requirements to management. Responding to the demand of practice, a new science on management has been established, i.e. cybernetics. It is also a science on information. We live in the age of «information explosion», when the scope of scientific knowledge and number of information sources increase very fast.

Production of different information gadgets has become one of the innovative, science-driven branches of production, and its servicing has generated new specialties, like programmers, operators, etc. Informatics provides the opportunity to use a system approach, applying economic and mathematical modeling.

The STR makes a great impact on all aspects of modern production and on the whole system of social relations, on people and environment of their living. The essential commodities market is the whole organism, essential for development of every country, without reference to its social system and economic level [14].

Investigation of the impact of macro-factors on the conjuncture of the essential commodities market.

Basing on the interviewing, the authors have identified several macro-factors, which make a particular impact on the conjuncture of the essential commodities market (*Table 1*).

Table 1

The ordered estimate of the impact of macrofactors on the conjuncture of the essential commodities market

№	Criteria	Expert 1	Expert 2	Expert 3	Expert 4	Expert 5	Total of grades	Average value.	Deviation	Square deviation	Weight, %
1	Pandemic COVID-19	4	7	8	7	4	30	2.31	-15	225	7,3
2	Climatic conditions	3	5	7	5	3	23	1.77	-22	484	5,6
3	Volume of product export	4	3		2	2	14	1.08	-31	961	3,4
4	Volume of product import	4	2	3	6	5	20	1.54	-25	625	4,9
5	Legal support for product sale	2	5	3	4	5	19	1.46	-26	676	4,6
6	Tax policy	3	5	5	5	2	20	1.54	-25	625	4,9
7	State system of standardization	3	6	4	4	3	20	1.54	-25	625	4,9
8	Consumer advocacy	2	5	9	7	1	24	1.85	-21	441	5,8
9	Level of consumers' income	4	4	2	8	5	23	1.77	-22	484	5,6
10	Level of producers' income	4	8	5	6	4	27	2.08	-18	324	6,6
11	Available sales markets	5	8	3	8	4	28	2.15	-17	289	6,8
12	Range of products at the market	3	6	3	7	4	23	1.77	-22	484	5,6
13	Competitiveness of products	5	8	5	9	6	33	2.54	-12	144	8,0
14	Inflation	4	7	5	9	9	34	2.62	-11	121	8,3
15	Increase of the number of intermediaries	6	3	2	5	2	18	1.38	-27	729	4,4
16	Information supply at the market	6	5	4	7	6	28	2.15	-17	289	6,8
17	Scientific and technical progress	4	6	5	9	3	27	2.08	-18	324	6,6
		66	93	76	108	68	411	31,62	-	7850	100

Source: developed by the authors.

Investigation of the impact of micro-factors on the conjuncture of the essential commodities market.

Among the factors of microenvironment, which influence the conjuncture of the essential commodities market, the following are specified, particularly:

1. Consumer properties of essential commodities have some characteristics. Each product contains elements, which are necessary for a human organism. Fresh vegetables and fruit for example, contain fiber, greatly needed by human body. The fiber takes harmful substances and toxins away of the organism. All fresh plants contain different mineral salts, microelements, vitamins. They have minimum calories, whereas without vegetables, the organism suffers from the deficit of amino acids, natural fatty acids and carbohydrates, ferments and hormones. Buying agricultural commodities at a shop, people should give preference to the goods, grown on the territory of their living. They are the most beneficial for the human organism. Exotic agricultural commodities are genetically different and not suitable for the regional consumers and can cause allergic reactions or the product intolerance.

2. Available competitors. In the current economic conditions, competition is a driving force of the progress, whereas it can also stagnate some processes. There are some positive aspects of that economic phenomenon.

First, competition stimulates the scientific and technical progress, as well as naturally liquidates ineffective methods of business running.

Second, it forces reduction of prices of the competing products and services. The mentioned factor should be present only in the conditions of a perfect competition.

Third, competition helps balancing the levels of profitability and salaries in different fields of economy. At that stage, the main, i.e. regulating function of competition, goes into effect.

3. Application of innovative technologies. Innovations are found in all spheres, from technologies of essential commodities production to the methods of marketing investigation. They are the main elements of development of the economy and business, as well as marketing technologies, design and production of advertising equipment. However, it is worth noting that not all innovations have become popular at the market and thus, they are not widely used. Most of them have soon lost their actuality, because of not wide application or technically difficult fulfilment. The main requirements to innovations include not only effectiveness, but also simple technical implementation and reasonable price.

4. Ecological properties of goods. In the fast changing world, ecological characteristics of production have become the main condition of the enterprise success. Ecologically clean products, grown without applied chemical fertilizers, are considered of better quality.

5. Logistical support. Historically, it has been established that logistics of Ukraine is developed by its individual route. It is influenced not only by historical, but also economic peculiarities of the country development. Ukrainian logistic market crucially differs from the European, Asian and American ones. The main reasons, which immediately influence development of the country logistics, include:

A fast rate of expenses due to the fast rates of increase of the prices of energy resources, crude oil.

A changeable focus on the logistic market.

Development of computer technologies happens very fast (processing of a huge volume of data is currently done by applying powerful computers at minimal material costs).

Specialists argue that only a modern state approach and use of innovations in the field of logistics will secure an accelerated development of the logistic market in Ukraine. To fuel the fast development, it is necessary to eliminate the negative factors, which make a damaging effect on the political sphere of the country.

First, the negative factors include absence of a complex accounting of funds spending, lack of the adequate control. That factor disables a relevant estimation of the costs of logistical activity, a reliable conclusion on the profitability of separate kinds of logistics. The fast development of logistic also needs crucial changes in the structure of enterprises. It is necessary to transform the organizational schemes, to create absolutely new transport entities with a more flexible system of operation.

6. Quality of goods. Quality is one of the main characteristics at the essential commodities market, which makes an essential impact of creation of consumer advantages and formation of competitiveness. Quality of goods is an aggregate of properties, characteristics, which determine their capability to satisfy some needs of population according to their intention. The level of the quality of goods is a relevant characteristic, which is determined by correlating active values of the indices with the basic value of the same indices. Basic indices are represented by regulated values of the standards or other normative documents, as well as standard samples, references.

7. Volume of consumption by population. The expected stabilization of the social and economic conditions in the country and reduction of the share of some products (like bread products) in the population's diet obviously contribute to the increased demand for vegetables and products of their processing. Moreover, raise of the level of Ukrainians' well-being provokes a greater interest to a healthy lifestyle, suggesting an increased share of more expensive goods in the people's diet. It will force the further growth of the consumption of such commodities in Ukraine. A low level of the healthy lifestyle in Ukraine is one of the factors, stagnating consumption of agricultural commodities and products of their processing. It is because of the lack of the national programs on promotion of the healthy lifestyle in the country. Except for the mentioned factor, there are other important ones, particularly undeveloped logistics and trading terms, as well as unattractive conditions for consumers.

8. Marketing. Each person, selling a surplus or intentionally grown agricultural commodities, faces the problem of selling them as soon as possible and obtaining a good profit. To do it is not always an easy task because of annoying trifles, even if the goods are of the best quality.

One of the obstacles of successful trade is resorting, i.e. when small, average-sized and large agricultural commodities are in the same stock. Although, sellers should display agricultural commodities of the same size and of course, they should be clean, without damages. Thus, having removed the damaged agricultural commodities, it is necessary to resort them by the size, as well as separate the standard goods from abnormal products, having small defects (samples are not smooth, thin, very long, unevenly colored, or with cracks). The abnormal products can also be somehow sold, but at a lower price. In fact, one can sell only cucumbers, cabbage or apples. However, customers like everything to be in one place and thus, it is better to supply a range of agricultural commodities. Moreover, a wide range of products can help selling each kind of goods. If vegetables, which are used to cook one dish or vegetable of bright colors, are placed nearby, they will stimulate the appetite of customers and thus, they will be better sold. It is important the colors of them be in harmony. The beneficial color combinations are white and pink, white and green, gold or orange and green, yellow and brown, deep red and green. Thus, it is visually pleasing to watch green parsley and carrot or salad and onion. It is often difficult for a private entrepreneur to enter the market. In that situation, the experienced sellers recommend to weight and package the products to sell them just-in-time. The package will also keep the products fresh, protecting from wind and sun, make them more attractive.

Package attracts regular customers, because it can be labelled with the mentioned name of the farm, phone number and name of the farmer. If the label will also include the name and sort of the agricultural commodities, as well as the weight in the pack, customers will be thankful.

The regular customers can be also proposed to gather fresh vegetables immediately on the land plot, significantly reducing their price, as compared to the market one. The mentioned factors are estimated by the experts with the following result (*Table 2*).

Table 2

The ordered estimate of the impact of microfactors on the conjuncture of the essential commodities market

№	Criteria	Expert 1	Expert 2	Expert 3	Expert 4	Expert 5	Total of grades	Average value	Deviation	Square deviation	Weight, %
1	Consumer characteristics of products	8	4	6	4	7	29	2,23	-16	256	18,0
2	Available competitors	7	3	5	3	5	23	1,77	-22	484	14,3
3	Application of innovative technologies	6	1	3	6	2	18	1,38	-27	729	11,2
4	Ecological properties of products	3	5	4	5	3	20	1,4	-25	625	12,4
5	Logistical support	2	6	5	3	4	20	1,54	-25	625	12,4
6	Quality of products	8	3	6	2	8	27	2,08	-18	324	16,8
7	Volume of consumption by population	4	7	6	3	4	24	1,85	-21	441	14,9
8	Marketing	8	4	6	4	7	29	2,23	-16	256	18,0
		38	29	35	26	33	161	12,38	-	3484	100

Source: developed by the authors.

It is traditionally established that a group estimation can be quite relevant under condition of a rather high level of concordance of the experts' responses. The evaluation of concordance of the experts' opinions is determined on the base of calculation of the concordance coefficient W . That coefficient of the grade correlation is calculated for the group, which is made by $m = 5$ experts. The

number of characteristics, which identify the impact of macrofactors on the conjuncture of the essential commodities market, is equal to $n = 17$, and thus, microfactors — 8.

Having performed the consistent calculations of the concordance coefficient, in the first case, the researchers obtain $W_{macro} = 0.77$, and in the second case — $W_{micro} = 0.342$.

Moreover, the level of the confidence coefficient P exceeds the table value χ^2 .

The confidence coefficient is mainly taken as equal to 0.95. In case the set level of significance for the factors of macroenvironment is 5% ($P = 95\%$), the table value is $\chi^2 = 26.3$ under the degree of freedom $\nu = 17 - 1 = 16$, whereas for the factors of microenvironment 5% ($P = 95\%$), the table value $\chi^2 = 14.1$ under the degree of freedom $\nu = 8 - 1 = 7$.

Respectively, the calculated actual value $\chi^2 = m \cdot W \cdot (n - 1)$ for the macrofactors of impact on the market conjuncture is equal to 61.569, and for evaluation of the impact of microfactors, it is 27.325 and exceeds the table one, confirming concordance of experts' estimates for the whole principal aggregate of the factors of impact.

Conclusions. The research results help determining the main factors of permanent and intermediary effect on the conjuncture of the market, and completing them in the form of the *Table 3*.

Table 3

Systematization of the factors of macro- and microenvironment of permanent and intermediary effect

	Factors of permanent effect	Factors of intermediary effect
Microenvironment	Consumer characteristics of products, volume of consumption by population, available competitors and product quality	Application of innovative technologies, ecological properties of products, logistical support
Macroenvironment	Pandemic, inflation, competitiveness of products	Volume of product exports, increase of the number of intermediaries, legal support of product sales

Source: developed by the authors.

Thus, having calculated the aggregates of criteria of the quantitative evaluation of the factors of impact on the conjuncture of the essential commodities market, the authors of the work determine that the greatest impact among the macrofactors of permanent effect is made by seasonality, inflation, competitiveness of products, whereas among the microfactors, they are consumer characteristics of products, volume of consumption by population, available competitors and quality of products.

Considering the conducted researches, one can notice a paradox in the current conditions of the legal support of product sales. In particular, on one hand, it is imperfect, on the other hand — the markets still perform, demonstrating quite positive results.

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