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INDICATORS OF THE UKRAINIAN CONFECTIONERY MARKET

ІНДИКАТОРИ РИНКУ КОНДИТЕРСЬКИХ ВИРОБІВ УКРАЇНИ

Introduction. The Ukrainian confectionery market is a complex and multi-level system of business relations between various Ukrainian business entities. During the last two years, in connection with the armed aggression of the Russian Federation against Ukraine, the Ukrainian confectionery market faced certain difficulties, which negatively affected its development.

Materials and methods. The article was prepared using open and publicly available sources of information, data from the State Statistics Service of Ukraine and the State Customs Service of Ukraine, as well as expert assumptions and calculations were used to analyze general market trends.

Results and discussion. The start of active hostilities in some regions of Ukraine became the main factor in the significant reduction in the volume of confectionery production by almost all national manufacturers (production decreased by 18.8%). At the same time, the main type of confectionery products remains flour products (59.9% in the production structure), while the share of cocoa-rich/chocolate and sugary products is 20.2% and 19.9%, respectively.

The full-scale war led to certain adjustments in the export-oriented commercial plans of Ukrainian confectioners. During 2022, a decrease in the export of sweets by 34.9% in physical terms is noted, despite the fact that the receipts of foreign exchange revenue have halved. The commodity structure of exports in 2022 was as follows: sugar confectionery – 32.0%, flour – 41.1% and cocoa-rich/chocolate – 27.0%.

Despite the presence of developed domestic production of confectionery products in Ukraine, the volume of imported supplies has traditionally been high. In 2022, there is a decrease in imported supplies of confectionery products of all categories by 3.6%, while foreign exchange costs decreased by 12.6%. The main suppliers were the EU and Eastern European countries. During 2022, the total consumption of confectionery in Ukraine decreased by 10.3%. At the same time, the apparent consumption of flour confectionery decreased by 4.3%, cocoa-rich and chocolate confectionery - by 21.7%, and sugar confectionery - by 14.6%.

Conclusion. In recent years, despite the military operations in certain territories of Ukraine, destruction and constant shelling, interruptions in the supply of energy carriers and raw materials, the national confectionery industry as a whole managed to maintain its production potential. The study made it possible to evaluate the main indicators of the Ukrainian confectionery market of all categories, as well as its volumes and trends. There is a fairly high level of competition in the Ukrainian domestic flour, chocolate and sugar confectionery market. A fairly developed level of the production infrastructure of the confectionery market as well as raw materials for their production is also maintained, despite the fact that currently some of the enterprises are destroyed, damaged or under occupation. The transport infrastructure serving the industry is also quite developed, but limited due to the state of war in the country.

Keywords: modeling, forecasting, market, confectionery, indicators, potential, war

Вступ. Український ринок кондитерських виробів представляє собою складну та багаторівневу систему ділових відносин між різними українськими суб'єктами господарювання. Протягом останніх двох років у зв'язку із збройною агресією РФ проти України український ринок кондитерських виробів зіткнувся з певними труднощами, які будуть предметом розгляду в даній статті.

Матеріали та методи. Стаття підготовлена з використанням відкритих та загальнодоступних джерел інформації, даних Державної служби статистики України та Державної митної службою України, а також для аналізу загальних тенденцій ринку використано експертні припущення та розрахунки.

Результати і обговорення. Початок активних бойових дій в частині регіонів України, став основним фактором суттєвого скорочення обсягів виготовлення кондитерської продукції практично всіма національними виробниками (виробництво скоротилося на 18,8%). При цьому основним видом кондитерської продукції залишаються борошняні вироби (59,9% в структурі виробництва), в той час як на частку какао-містких/шоколадних та цукристих припадає, відповідно 20,2% та 19,9%.

Повномасштабна війна зумовила певні корективи в комерційних планах українських кондитерів, орієнтованих на експорт. Протягом 2022 року відзначається скорочення експорту солодоців на 34,9% в фізичному вимірі при тому, що надходження валютної виручки скоротилися вдвічі. Товарна структура експорту у 2022 році була наступна: цукристі кондитерські вироби – 32,0%, борошняні – 41,1% та какао-місткі/шоколадні – 27,0%.

Незважаючи на наявність розвинутого внутрішнього виробництва кондитерської продукції в Україні, обсяги імпорتنих постачань традиційно були високими. В 2022 році відзначається скорочення імпорتنих постачань кондитерських виробів всіх категорій на 3,6%,

в той час як валютні витрати скоротилися на 12,6%. Основними постачальниками були країни ЄС та Східної Європи. Протягом 2022 року загальне споживання кондитерських виробів в Україні скоротилося на 10,3%. При цьому видиме споживання борошняних кондитерських виробів скоротилося на 4,3%, какао-містких та шоколадних – на 21,7% та цукристих – на 14,6%.

Висновки. Протягом останніх років, незважаючи на військові дії на окремих територіях України, руйнування та постійні обстріли, перебої з постачанням енергоносіїв та сировини, національній кондитерській галузі в цілому вдалося зберегти виробничий потенціал. Дослідження дозволило оцінити основні індикатори українського ринку кондитерських виробів всіх категорій, а також його обсяги та тенденції. Так, на українському внутрішньому ринку борошняних, шоколадних та цукристих кондитерських виробів зберігається досить високий рівень конкуренції. Також зберігається досить розвинений рівень виробничої інфраструктури ринку кондитерських виробів а також сировинних матеріалів для їх виробництва, незважаючи на те, що наразі частина підприємств знищена, ушкоджена або знаходиться в окупації. Транспортна інфраструктура, що обслуговує галузь також досить розвинена, але обмежена через воєнний стан в країні.

Ключові слова: моделювання, прогнозування, ринок, кондитерські вироби, індикатори, внутрішній ринок, зовнішній ринок

JEL Classification: E21, E23.

Introduction. Traditionally, the Ukrainian confectionery market is one of the most developed and dynamic, despite the dependence on the political, economic and social turbulence of recent years, the COVID19 pandemic and the full-scale russian invasion (Ivanov, 2019; Melnyk, 2022; Rybalchenko S., et al., 2022; Zhou, et al., 2023). The market is dominated by domestic manufacturers of almost all categories of confectionery, which are able to fully meet the needs of the market. Such enterprises are active consumers of domestic agricultural raw materials - sugar, flour, starch, molasses, milk, etc., as well as major global importers of components necessary for the production of confectionery products - cocoa, palm oil, spices, etc.

The assortment of the Ukrainian confectionery industry offered on the domestic market covers almost all groups of confectionery products. At the same time, confectionary products of Ukrainian production are in constant demand in export markets as well. Annually, the export of caramel, chocolate and other food products with cocoa content, bakery and flour confectionery products, etc. grows ¹.

The segmentation of the confectionery market of Ukraine can be tentatively shown as follows: the segment of sugary confectionery, the segment of flour confectionery and the segment of products containing cocoa. Traditionally, flour confectionery makes up 45-47% of the total volume of the confectionery market in Ukraine. The segment of products containing cocoa with all its diversity covers about 30-32% of the market, while the smallest market share is the segment of sugar confectionery (about 20-25%) (Kronikovskiy, 2019).

Studies of changes in the market are always under the watchful eye of scientists, in particular the confectionery market (Bochko et al., 2022; Kosteniuk, et al., 2020; Smahliuk, et al., 2020; Trofymenko, et al., 2019; Voronin, 2019; Zagrychanska et al., 2021). In the scientific literature, various models of the output of products to export markets are analyzed (Arkolakis, 2010; Baldwin et al., 2011; Bernard, et al., 2011; Eckel, et al., 2010; Hallak, et al., 2013; Johnson, 2012; Melitz, et al., 2008), and the possibilities of further integration of the country into global value chains (Venger, et al., 2022).

The Ukrainian confectionery market is a complex and multi-level system of business relations between various Ukrainian business entities, which depends on a number of factors of a

¹ URL: <http://ukrkondprom.com.ua/> (accessed 10.02.2024)

conjunctural, economic and social nature, taking into account which allows for a correct understanding of the processes and connections in this market. We will focus our attention on the indicators of the Ukrainian confectionery market.

Materials and methods. The article contains information describing the situation and conjunctural features of the Ukrainian market for confectionery products made of sugar, without cocoa content (sugary), corresponding to the group of UCT ZED (Ukrainian classification of foreign economics goods) codes 1704 and NIP (nomenclature of industrial products) code 10.82.23, chocolate on other finished products with cocoa content, which correspond to the group of UCT ZED (Ukrainian classification of foreign economics goods) codes 1804 and NIP (nomenclature of industrial products) code 10.82.22 and bakery (flour) confectionery products corresponding to the UCT ZED (Ukrainian classification of foreign economics goods) 1905 code group and NIP (nomenclature of industrial products) codes 10.71.12, 10.72.11 and 10.72.12.

Units of measurement used by the State Statistics Service of Ukraine and the State Customs Service of Ukraine, the information materials of which are used in this article (kilograms, tons, pieces, etc.), expert assumptions and calculations are used to analyze general market trends. The article was prepared using open and publicly available sources of information.

Results and discussion

Market structure. The confectionery market of Ukraine is represented by a fairly large number of manufacturers targeting consumers with different income levels. Competition between manufacturers remains at a high level - both in terms of price and non-price (quality, packaging, etc.) parameters².

Competition is also intensifying from the side of confectionery enterprises and companies at chain stores. The emergence of new companies and confectioneries at such stores forces existing sweet production enterprises to increase capacity, expand their assortment and actively advertise their products. Conventionally, the Ukrainian chocolate and sugar confectionery market is divided into the following categories:

- *large manufacturing companies (holding companies).* Such companies usually have powerful factories producing a wide range of confectionery products, developed warehouse and transport infrastructure, sometimes they own affiliated agricultural or processing enterprises. In the bakery, chocolate and confectionery segment, such enterprises occupy leading positions on the market, and their share is about 70-75%. Such companies include: enterprises of the "ROSHEN" corporation, "AVK" companies, "Conti" and others;

- *small and craft producers.* In recent years, this segment of the Ukrainian confectionery industry began to develop. Products made in local confectionery enterprises or workshops are designed for local consumers and are in high demand among them. Flexible response to the tastes and wishes of consumers allows this type of business to grow, regardless of the negative factors of macroeconomic and "military" influence. Among the latest trends is the expansion of the range of chocolate and sugary confectionery products in the shops of chain food chains ("Silpo", "NOVUS", etc.). At the same time, the share of this market segment is estimated at only 5-7%;

- *private sector.* Statistical monitoring of this segment of the confectionery market is not carried out. According to expert assessments, the volumes of this market segment in physical terms, taking into account the complexity of the technological process and provision of raw materials, are somewhat lower compared to large enterprises. Therefore, the market share of this segment is not significant.

Factors influencing the market situation

Before the beginning of the war, the Ukrainian domestic market of confectionery products of all categories was characterized by seasonality - more products are consumed in autumn and winter, less in summer. Also, the demand for confectionery products of almost all categories increased during the New Year and other holidays. Some types of confectionery were characterized by constant

² URL: <https://bpl.in.ua>, <http://ukrkondprom.com.ua/>, <http://agravery.com/> (accessed 10.02.2024)

demand, regardless of the season. After the start of military aggression, the market changed to a great extent, but the main consumer preferences remained (Voronin, 2019).

According to the results of 2022, a significant decrease in the consumption of confectionery products of all categories was observed in Ukraine. This trend is explained by the influence of "military" factors, when part of the regions of the country were under occupation, in other regions - active hostilities are being conducted. Also, the sharp rise in prices for confectionery products due to the high share of imported ingredients, especially in the segment of cocoa-rich products, influenced the reduction in consumption. For sugar and flour products, almost all components are produced in Ukraine, but due to a number of economic factors, prices for these types of confectionery products are also increasing.

The following factors influenced the conjuncture of the Ukrainian confectionery market of all categories during 2022:

- active military operations in a number of regions of Ukraine and nationwide martial law;
- transport and logistics difficulties of manufacturers of confectionery products, as well as interruptions in the supply of energy carriers and the outflow of labor resources;
- popularization of the trend for healthy food, which excludes the use of sweet products;
- consolidation of large players in the market due to the joining of small baking or confectionery companies;
- development and expansion by retailers of their own confectionery production, as well as the craft and "family" segment;
- a decrease in the demand for confectionery products, primarily due to a decrease in the purchasing power of the population in 2022 (before that, an increase in the purchasing power of Ukrainian citizens was observed);
- a significant increase in the cost of raw materials necessary for the production of chocolate confectionery: cocoa, palm oil, sugar, flavorings, etc.

Ukraine's signing of the Association Agreement with the EU and the certification of products in accordance with the international quality management system ISO 9000 and ISO 22000, as well as the international standard IFS, had a significant impact on Ukraine's entry into the international confectionery markets. These measures provided an opportunity for domestic enterprises to export their products to the markets of EU countries and other international markets and thereby increase the volume of production of confectionery products and conquer new sales channels. During the martial law, the EU countries removed any restrictions on the supply of Ukrainian confectionery products (Bochko, 2022).

Production

The full-scale invasion of Russian troops and the start of active hostilities in a number of regions of Ukraine during 2022 became the main factors of a significant reduction in the volume of confectionery production by almost all national manufacturers. In 2022, the total volume of production of sweets of all categories amounted to 654.3 thousand tons, which is 18.8% lower than the previous year (Table 1).

Table 1

Production of confectionery products in Ukraine in 2021/2022, thousand tons

Product	Years		Deviation, +/-, %
	2021	2022	
Bakery and flour products	443,9	391,7	-11,8
Chocolate and cocoa-rich products	171,1	132,2	-22,7
Sugar and similar products	190,6	130,4	-31,6
TOTAL	805,6	654,3	-18,8

Source: according to the State Statistics Service of Ukraine. URL: <https://www.ukrstat.gov.ua/>

At the same time, the main type of confectionery products remains flour products (59.9% in the production structure), while the share of cocoa-rich/chocolate and sugary products is 20.2% and 19.9%, respectively (Fig. 1).

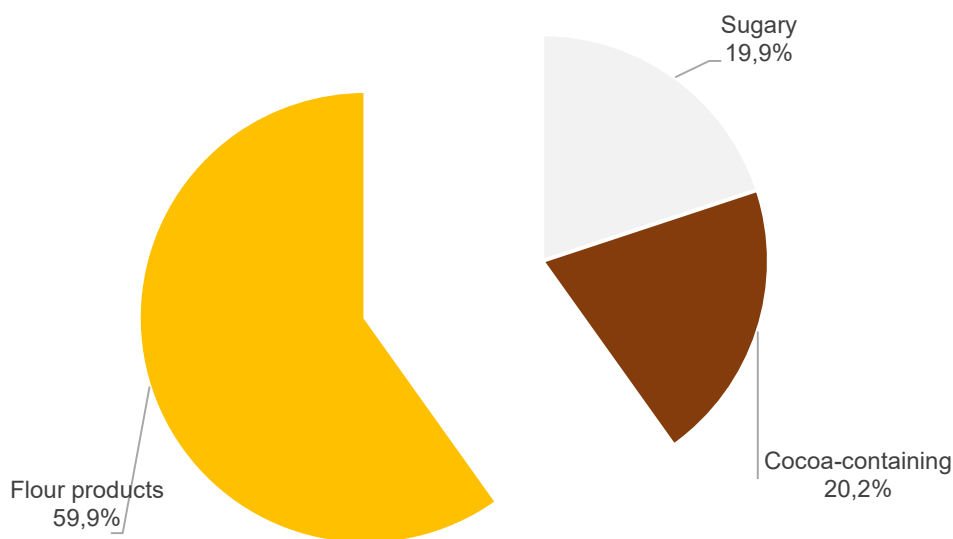


Fig. 1. The structure of confectionery production in Ukraine in 2022.

Source: according to the State Statistics Service of Ukraine. URL: <https://www.ukrstat.gov.ua/>

TOP-5 manufacturers of confectionery products (summarized): GC "Roshen", CF "AVK", VO "Conti", GC "Biscuit-chocolate", CF "Zhytomyrski lasoshchi".

According to experts, in the conditions of the active phase of the war, constant shelling and energy blackouts, the specified rate of reduction of confectionery production could have been much greater. However, steady demand on the domestic and foreign markets, as well as a significant increase in the cost of imported finished products and raw materials necessary for their production, allowed Ukrainian confectioners to minimize production losses.

In this sense, the segment of confectionery flour products has become indicative. According to the results of 2022, the production of such products decreased due to a decrease in the production of cookies and gingerbread (by 12.9%) and wafers (by 25.3%), while the production of crackers and croutons increased by 7.4%. The last commodity item was actively produced to meet both military needs and for free sale on the domestic market.

In the segment of production of chocolate confectionery, not a single product position that would demonstrate positive dynamics was noted. In 2022, the production of filled chocolate decreased by 14.4%, whole chocolate - by 30.0%, candies - by 15.6%, and other cocoa-rich products - by 41.4%. This trend is due to the deterioration of transport and logistics conditions for the import of cocoa beans due to the blockade of Ukrainian ports by the aggressor, as well as a significant increase in the cost of manufacturing this type of confectionery in Ukraine.

Sugary confectionery products are traditionally in high demand on the Ukrainian market. Despite this, during 2022 there is an expected reduction in the production of this type of sweet products due to a decrease in the production of dragee (by 8.9%), toffee (by 43.0%), caramel (by 18.5%), white chocolate (by 57.3%) and marmalade/jelly - by 37.2%. The reasons for the reduction in production are similar to other categories of confectionery products manufactured in Ukraine.

It should also be noted that private production of simple confectionery products is quite developed in Ukraine. Such production is not the subject of statistical observations. According to various estimates, the physical volumes of such activities can be up to 20-60% of the official indicators, depending on the product category.

Export

According to the State Statistics Service of Ukraine and the State Customs Service of Ukraine, Ukrainian manufacturers of all categories of confectionery products have always been oriented towards foreign markets, because about 20-30% of manufactured products are exported. The priority of the export direction of the sale of sweet products is primarily determined by the price factor - prices on the European or Middle Eastern markets often exceed the price indicators that have developed on the domestic market. Therefore, Ukrainian confectionery companies try to increase the volume of external supplies every year. The beginning of Russian aggression, which turned into a full-scale war during 2022, led to certain adjustments in the commercial plans of Ukrainian confectioners, who were forced to significantly reduce export shipments.

In general, during 2022, about 167.3 thousand tons of confectionery products of all categories were exported from Ukraine, which is 34.9% lower than the similar figures of the previous period (Table 2). At the same time, the total currency revenue from the sale of these commodity items during 2022 amounted to about 434.0 million USD, halving compared to the previous year. The commodity structure of exports in 2022 was as follows: sugar confectionery – 32.0%, flour – 41.1% and cocoa-rich/chocolate – 27.0%.

Table 2

Export of confectionery products from Ukraine during 2021/2022, thousand tons

Product	Years		Deviation, +/-, %
	2021	2022	
Bakery and flour products	96,6	68,7	-28,9
Chocolate and cocoa-rich products	58,6	45,1	-23,0
Sugar and similar products	101,6	53,5	-47,4
TOTAL	256,8	167,3	-34,9

Source: according to the State Statistics Service of Ukraine. URL: <https://www.ukrstat.gov.ua/>

The geographical structure of the export of confectionery products of all categories (general) from Ukraine in 2022 is presented in fig. 2.

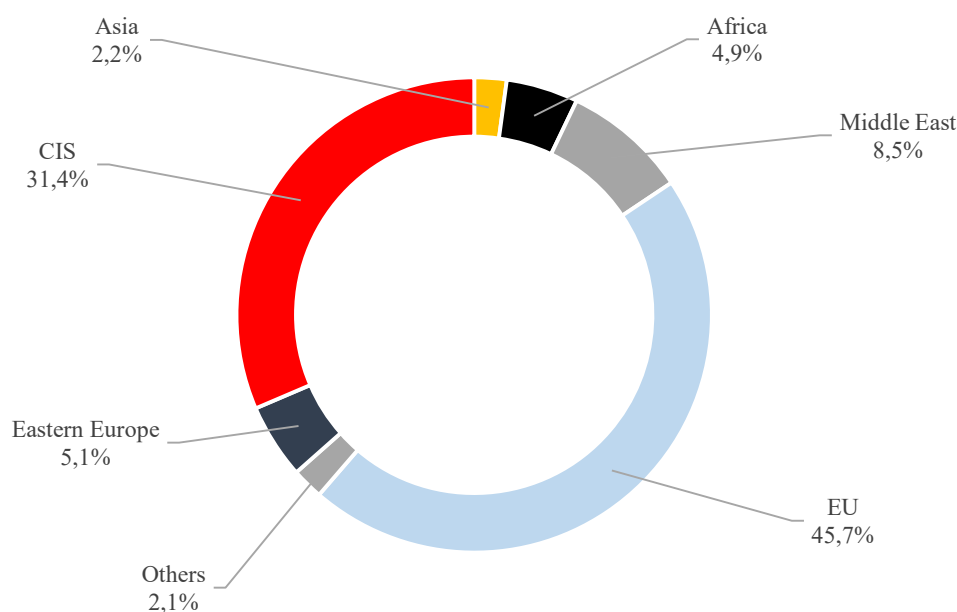


Fig. 2. Geographical structure of exports from Ukraine of confectionery products of all categories (general) in 2022., %

Source: according to the State Statistics Service of Ukraine. URL: <https://www.ukrstat.gov.ua/>

1. Sugar confectionery. The export of this category of confectionery products made in Ukraine during 2022 was halved and amounted to 53.5 thousand tons. At the same time, a significant reduction in export supplies of white chocolate (by 53.9%), jelly and marmalade (by 42.9%), caramel (by 35.1%) and toffee (by 59.3%) was noted.

Ukrainian sugar confectionery products are known all over the world. EU countries ($\approx 40.4\%$), CIS countries ($\approx 32.9\%$), as well as Middle East countries ($\approx 8.3\%$), African countries ($\approx 6.7\%$) and other countries ($\approx 11.7\%$) traditionally remained the largest sales markets. It should be noted that in recent years, Ukrainian confectioners have radically changed the structure of the export of sugar products, refocusing on European markets.

2. Cocoa-rich/chocolate confections traditionally remain the hallmark of the Ukrainian food industry. In previous years, national manufacturers managed to establish the production of chocolate products that meet the highest global standards and taste expectations. The war and the problems caused by it affected the export expectations of enterprises. According to the results of 2022, only 45.1 thousand tons of these products were sold for export, which is 23.0% lower than the figure for 2021.

At the same time, the export of filled chocolate decreased by 29.4%, whole chocolate - by 12.6%, and candies - by 18.4%. The main export markets for Ukrainian-made chocolate confectionery during 2022 were: EU countries ($\approx 42.4\%$), CIS countries ($\approx 35.1\%$), Middle East countries ($\approx 10.6\%$), African countries ($\approx 4.7\%$) and other countries ($\approx 7.2\%$).

3. Bakery (flour) confectionery products. In 2022, about 68.7 thousand tons of flour confectionery products were exported from Ukraine, which is significantly lower than the similar indicator of the previous period (the total decrease in exports was about 28.9%). It can be argued that 2022 was quite difficult for Ukrainian exporters of this type of confectionery.

In terms of the product structure of the export of confectionery products of this category, a significant reduction in supplies was recorded for cookies and gingerbread (by 28.9%), wafer products (by 32.7%) and crackers/toasts (by 10.4%). The main export markets for Ukrainian-made bakery and confectionery products in 2022 were: EU countries - 53.3%, CIS countries - 27.5%, Middle East countries - 7.4% and other countries - 11.8%.

Imports.

According to the State Statistics Service of Ukraine and the State Customs Service of Ukraine, despite the presence of a developed domestic production of confectionery products in Ukraine, the volume of imported supplies has traditionally been high. At the same time, there was a constant tendency to increase the supply of products that differ in taste from those produced in Ukraine. The war made its adjustments, leading to a reduction in the import of sweets. In 2022, about 79.1 thousand tons of confectionery products of all categories were imported into Ukraine in the amount of 288.4 million USD (reduction compared to the previous year by 3.6% in physical terms and by 12.6% in monetary terms) (Table 3).

Table 3

Import of confectionery products to Ukraine during 2021/2022, thousand tons

Product	Years		Deviation, +/-, %
	2021	2022	
Bakery and flour products	25,1	33,2	+32,4
Chocolate and cocoa-rich products	40,0	32,3	-19,2
Sugar and similar products	17,0	13,6	-19,9
TOTAL	82,1	79,1	-3,6

Source: according to the State Statistics Service of Ukraine. URL: <https://www.ukrstat.gov.ua/>

The geographical structure of the import of confectionery products of all categories (general) to Ukraine in 2022 is presented in fig. 3.

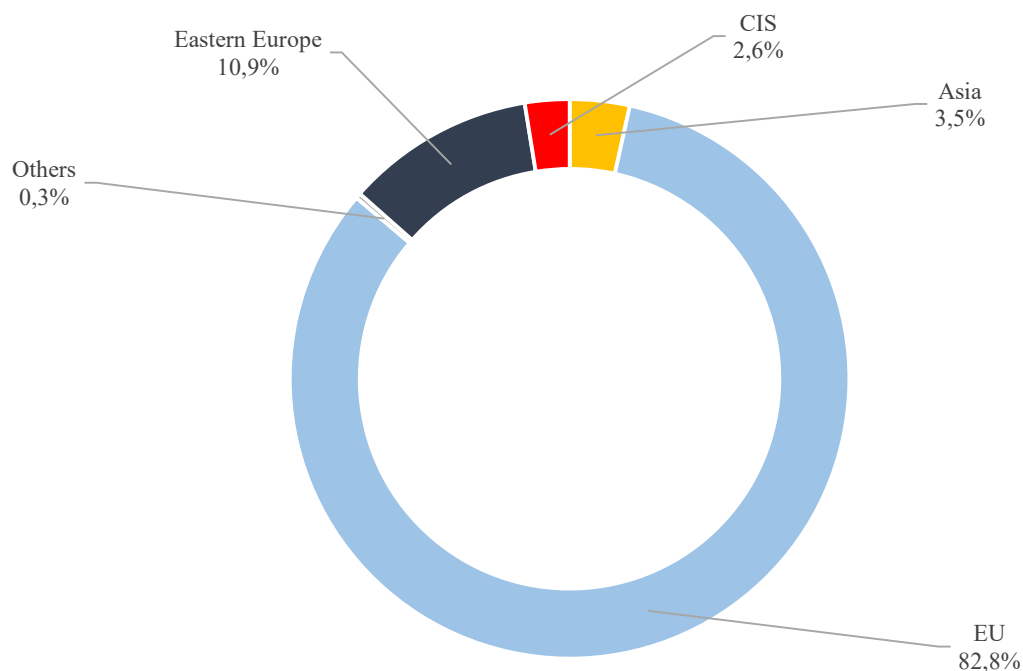


Fig. 3. Geographical structure of imports to Ukraine of confectionery products of all categories (general) in 2022., %

Source: according to the State Statistics Service of Ukraine. URL: <https://www.ukrstat.gov.ua/>

1. Sugar confectionery. In 2022, there will be a decrease in the total import of sugar confectionery to Ukraine compared to the previous period, which amounted to 19.9% (to 13.6 thousand tons). A reduction in imports was recorded for the following product items: marmalade and jelly – by 22.8%, caramel – by 10.1%, white chocolate – by 58.5%. Imports of dragee and toffee, on the contrary, increased by 31.4% and 69.8%, respectively, which is explained by the increase in supplies of these products as humanitarian aid. The main volumes of imports of sugary confectionery during 2022 fall to EU countries ($\approx 42.4\%$), other European countries ($\approx 35.3\%$), as well as Asian countries ($\approx 17.7\%$) and the CIS ($\approx 3.3\%$).

2. Cocoa-rich/chocolate confectionery. Among Ukrainian consumers, the demand for imported cocoa-rich confectionery products has always been stable. If in previous years advertising and marketing methods were used to promote products on the Ukrainian market, since the beginning of the war some companies began to ship chocolate products to Ukraine as humanitarian aid. The introduction of martial law and the deterioration of the economic situation in the country, and as a result, the reduction in the purchasing power of the population limited the consumption of "expensive" imported sweets.

The above factors were reflected in import supplies, which according to the results of 2022 decreased by 19.2%. At the same time, the import of chocolate with filling decreased by 19.1%, whole chocolate – by 38.3%, candies in various forms of production – by 2.1%. Chocolate confectionery is also quite an attractive product for smuggled supplies, the scale of which can be estimated at 15-20% of the official.

The geographic structure of imports of chocolate confectionery to Ukraine in 2022 was as follows: EU countries (Poland, the Netherlands, Germany and others) – 93.9%, other European countries (Turkey, Switzerland and others) – about 3.6%, countries CIS (Moldova, Georgia, Armenia and others) - about 1.9% and other countries - about 0.6%.

3. Bakery and confectionery products. During 2022, about 33.2 thousand tons of flour confectionery products were imported into Ukraine, which is 32.4% higher than the same figure of

the previous year. At the same time, the import of "traditional" products, such as cookies and gingerbread (by 21.5%), crackers and croutons (by 85.3%), waffle products (by 75.5%), increased, while the import of "exotic" products dropped significantly. The specified increase in imports is due to the demand for this type of product due to high humanitarian demand, the possibility of long-term storage in conditions of shelling and interruptions in the supply of electricity, as well as other factors characteristic of a warring country.

The geographic structure of imports of bakery and flour confectionery products to Ukraine in 2022 was as follows: EU countries (Poland, the Netherlands, Italy and others) - about 88.2%, other European countries (Turkey, Switzerland and others) - about 8.0 %, CIS countries (Moldova, Georgia and others) - about 2.9% and other countries - about 0.9%.

The main competitive advantages of Ukrainian confectionery products on foreign markets in 2022 were: price parameters, because the prices of Ukrainian producers/exporters are 15-30% lower than the cost of similar products of European production; high quality of Ukrainian confectionery products - mainly products are exported by high-tech enterprises or companies with foreign investments, which are oriented for supplies to "expensive" European markets and, accordingly, strictly control the quality of products; modern design developments or their applications, which have recently been implemented by Ukrainian confectionery manufacturers. In addition, since the beginning of the Russian invasion, EU countries have lifted all restrictions on the import of Ukrainian food products, including confectionery of all categories.

Consumption. During 2022, the total consumption of confectionery products in Ukraine decreased by 10.3% and at the end of the year amounted to about 566.1 thousand tons. At the same time, the apparent consumption of flour confectionery fell by 4.3%, cocoa-rich and chocolate confectionery - by 21.7%, and sugar confectionery - by 14.6%. (Table 4, Fig. 4). Real consumption, which takes into account the production of products in the private sector, may exceed official indicators by 15-20%, depending on the product category, according to the State Statistics Service of Ukraine.

Table 4

Consumption of confectionery products of all categories in Ukraine during 2021/2022, thousand tons

Product	Years		Deviation, +/-, %
	2021	2022	
Bakery and flour products	372,4	356,2	-4,3
Chocolate and cocoa-rich products	152,5	119,4	-21,7
Sugar and similar products	106,0	90,5	-14,6
TOTAL	630,8	566,1	-10,3

Source: according to the State Statistics Service of Ukraine. URL: <https://www.ukrstat.gov.ua/>

The total capacity (volume) of the Ukrainian flour, sugar and chocolate confectionery market and similar products is determined by the volume of sales on the domestic market, export sales and import deliveries. According to the results of 2022, the total capacity of the Ukrainian market in monetary terms amounted to 155.0-158.0 billion UAH (or 3.90-3.95 billion USD), which is 24.0% less than the 2021 figure.

Geographical location of the market and its volumes

According to the statistical data of the State Statistics Service of Ukraine on the retail turnover of confectionery products in 2022, the estimated distribution of the Ukrainian market was relatively even and looked as follows: Kyiv and Kyiv region (\approx 17.0%), Dnipropetrovsk region (\approx 14.0%), Kharkiv region (\approx 10.0%), Lviv region (\approx 9.5%), Odesa region (\approx 8.5%) and other regions of Ukraine (\approx 41.0%).

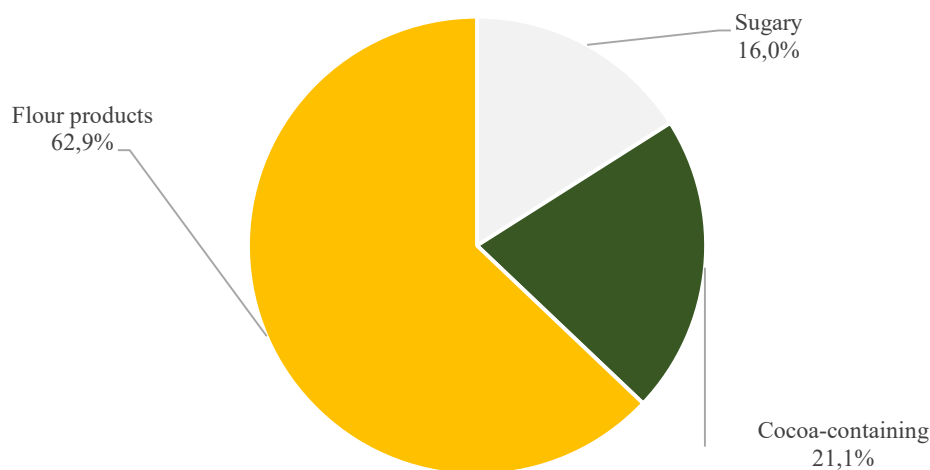


Fig. 4. The structure of the visible consumption of confectionery products in Ukraine in 2022 (by category, in %)

Source: according to the State Statistics Service of Ukraine. URL: <https://www.ukrstat.gov.ua/>

Availability of homogeneous/similar goods on the market ³

The Ukrainian market offers flour, cocoa-rich/chocolate and sugary confectionery products in a fairly wide range and price categories. In terms of consumer and taste properties, they can be considered similar or homogeneous, but different in terms of materials, recipe and manufacturing technologies, packaging variations, presentation on the market, etc.

A significant share of the market is occupied by products manufactured at Ukrainian confectionery enterprises. In recent years, these enterprises have modernized their production facilities, developed new product samples, revised the requirements for product quality and design. This made it possible to take a confident position in the domestic market and expand the directions of export supplies.

Taking into account the importance of compliance with safety requirements in the manufacture of flour, chocolate and sugary confectionery products in Ukraine, there are relevant regulatory documents that Ukrainian and imported products must comply with. The following state standards (basic) are mandatory: DSTU 3924:2014 "Chocolate. General technical conditions", DSTU 4135:2021 "Candies. General technical conditions", DSTU 4326:2016 "Iris. General technical conditions", DSTU 3893:2016 "Caramel. General technical conditions", DSTU 4333:2018 "Marmalade. General technical conditions", DSTU-P 4585:2021 "Bakery and butter products. General technical conditions", DSTU 4033-2001 "Waffles. General technical conditions", DSTU 3781-2014 "Cookies. General technical conditions", DSTU 4187-2003 "Gingerbread confectionery products. General technical conditions", DSTU 8789-2018 "Crispers-toasts. General technical conditions", DSTU 8001:2015 "Biscuits. General technical conditions" and others (about 100 more standards). Some of the confectionery products are manufactured according to the technical conditions of the enterprises.

Presence of competition in the market

The level of competition in the Ukrainian domestic market for flour, cocoa-rich/chocolate and sugar confectionery products is estimated to be high, despite the effect of martial law in the country. The main competitors are Ukrainian confectionery factories that produce more than 300 main samples of sweet products, medium and small enterprises that produce up to 30-50 samples of products, importers and private manufacturers.

In general, the level of competition is determined by the following factors.

³ URL: <https://dnaop.com> (accessed 10.02.2024)

1. Price characteristics. The price of confectionery was and remains one of the determining factors of competition. Significant fluctuations in the exchange rate of the Ukrainian hryvnia relative to the main world currencies caused an increase in the price of imported products of almost all categories, as well as some basic raw materials (cocoa butter, palm oil, etc.), which was reflected in the prices of domestic producers. Despite this, Ukrainian confectionery products offered on the market successfully compete with well-known global manufacturers in terms of price and quality characteristics.

2. Quality and taste indicators. One of the determining factors when choosing confectionery products, especially premium class or products for children, is precisely the quality and taste properties. At the same time, there is a significant share of products in the lower price range, mostly of dubious origin, on the market. Such products are mainly sold on platforms that do not require confirmation of the origin and safety of the product.

3. Quality marketing policy of companies and shopping centers. Usually, the promotion of confectionery products on the market takes place at the expense of a multi-level marketing campaign. These include advertising activities among potential consumers, conducting presentation and business events for various segments of consumers and market specialists. Such measures allow you to form a positive image of your products among end consumers.

4. Commercial connections between network sales centers and manufacturers/suppliers. Most Ukrainian chain companies selling food products, including confectionery, have long-term business relationships with suppliers and manufacturers. Such connections and communications make it possible to control the quality of products, as well as effectively bring new models to the market, keeping up with modern world trends and preferences.

5. Other factors. An important competitive advantage on the Ukrainian market of goods of this category is the promptness of the supply of the goods and the availability of warehouse stocks or the required volumes of the goods, especially during the festive periods. Confectionery manufacturers usually have an extensive warehouse infrastructure throughout Ukraine and appropriate logistics solutions that can quickly meet the needs of both consumers and retail chains. Confectionery products supplied within the framework of humanitarian and social programs are perceived quite positively, which can be attributed to the "war" trend of 2022.

The level of development of the market's production and transport infrastructure

The level of production infrastructure of the confectionery market, as well as raw materials for their production, at which the taxpayer conducts activities is assessed as developed. There are enterprises on the market that have the necessary production capacity and equipment for the production of confectionery products, companies specializing in import and export supply of goods. At the same time, part of the enterprises was destroyed, damaged or are under occupation.

The transport infrastructure serving the activities of the taxpayer is assessed as developed, but limited due to active hostilities in some regions or the threat of shelling by the Russian aggressor. Goods of this category are transported on the territory of Ukraine mainly by large and medium-sized vehicles. Imported cargo is transported in containers, as well as by road transport. If necessary, goods of this category can be transported by rail in containers.

The level of state price regulation

There is no state regulation of prices for the sale of flour, cocoa-rich/chocolate and sugar confectionery products on the domestic market and for export.

When importing into the territory of Ukraine confectionery products that correspond to UCT ZED codes 1704906500, 1704907500 and 1808901900, an import duty is imposed in the amount of 10% of the customs value of the goods, for confectionery products that correspond to UCT ZED codes 1806321000 and 1808329000 - an import duty in the amount of 5% of customs value. When importing into the territory of Ukraine confectionery products that correspond to UKT ZED codes 1905329900, 1905903000, 1905906000 and 1905909000, an import duty of 10% of the customs value of the goods is established⁴.

⁴ According to the materials of the Customs Code of Ukraine (current edition).

Conclusions. In recent years, despite the military actions in certain territories of Ukraine, destruction and constant shelling, interruptions in the supply of energy carriers and raw materials, the national confectionery industry has generally managed to maintain its production potential. The study made it possible to assess the main indicators of the development of the Ukrainian confectionery market of all categories, as well as its volumes and trends.

The main factors influencing the situation of the Ukrainian confectionery market in 2022 are highlighted: active military actions in a number of regions of Ukraine and the nationwide martial law; transport and logistics difficulties of manufacturers of confectionery products, as well as interruptions in the supply of energy carriers and the outflow of labor resources; popularization of the trend for healthy food, which excludes the use of sweet products; consolidation of large players in the market due to the joining of small baking or confectionery companies; development and expansion by retailers of their own confectionery production, as well as the craft and "family" segment; decrease in demand for confectionery products, primarily due to a decrease in the purchasing power of the population; a significant increase in the cost of raw materials necessary for the production of chocolate confectionery: cocoa, palm oil, sugar, flavorings, etc.

Ukraine's signing of the Agreement on Association with the EU and certification of products in accordance with the international quality management system ISO 9000 and ISO 22000, as well as the international IFS standard, allowed Ukrainian manufacturers to conquer new sales channels.

Ukrainian confectionery companies try to increase the volume of external supplies every year, but the full-scale war caused certain adjustments in the commercial plans of Ukrainian confectioners, who were forced to significantly reduce export shipments, as well as to reduce imports. The main competitive advantages of Ukrainian confectionery products on foreign markets in 2022 were the price parameters.

The total consumption of confectionery in Ukraine in 2022 decreased by 10%. Real consumption, which takes into account the production of products in the private sector, may exceed official indicators by 15-20%, depending on the product category.

There is a high level of competition in the Ukrainian domestic flour, chocolate and sugar confectionery market. The level of the production infrastructure of the confectionery market as well as raw materials for their production is quite developed, despite the fact that currently some of the enterprises are destroyed, damaged or under occupation. The transport infrastructure serving the industry is also quite developed, but limited due to the state of war in the country.

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