DOI 10.58423/2786-6742/2024-7-275-294
UDC 338.43

Vitalii VENGER
DSc in Economics, Senior Researcher,
Head of the Department of Sectoral Forecasts and Market Conditions,
State Organization "Institute for Economics and Forecasting, NAS of Ukraine"
Kyiv, Ukraine
ORCID ID: 0000-0003-1018-0909

Nataliia ROMANOVSKA
PhD, Associate Professor, Researcher,
Department of Sectoral Forecasts and Market Conditions,
State Organization "Institute for Economics and Forecasting, NAS of Ukraine"
Kyiv, Ukraine
ORCID ID: 0000-0002-1377-7551

Andrii RAMSKYI
DSc in Economics, Professor,
Borys Grinchenko Kyiv Metropolitan University,
Department of Finance,
Kyiv, Ukraine
ORCID ID: 0000-0001-7368-697X

Oleksandr SHEIKO
The Ukrainian Chamber of Commerce and Industry,
Kyiv, Ukraine
ORCID ID: 0009–0007–0110–1427

MARKET EVOLUTION AND CONSUMER TRENDS IN POLAND'S CONFECTIONERY INDUSTRY

Анотація. *Польський ринок кондитерських виробів відноситься до одного з найрозвиненіших та динамічних ринків в світі. Протягом останніх років польська харчова промисловість зіткнулася з різким зростанням витрат на виробництво та реалізацію продукції, порушення ланцюгів поставок сировини, витратних матеріалів та упаковки, а також втратою традиційних ринків збуту через війну в Україні. Дослідження особливості польського ринку кондитерських виробів дозволило оцінити основні індикатори польського ринку кондитерських виробів всіх категорій, а також його обсяги та тенденції. У статті проаналізовано ситуацію на польському ринку кондитерських виробів, зокрема виробництво, експорт, імпорт, споживання, географічне розташування ринку, рівень конкуренції, рівень розвитку виробничої й транспортної інфраструктури ринку. Зроблено висновки, що протягом 2022 року відбулось зростання на 12% обсягів виробництва кондитерської продукції всіх категорій, а також виробництво польських борошняних кондитерських виробів також зросло на 19,3%. В той же час темпи зростання виготовлення какао-містких та цукристих солодощів становили відповідно 3,8% та 6,8%. Польськими виробниками близько 50-70% виготовленої продукції експортується, а протягом 2022 року з Польщі було експортовано рекордну кількість продукції, що перевищило аналогічний показних попереднього року на 13,8%.*

Водночас, незважаючи на наявність розвиненого внутрішнього виробництва кондитерської продукції в Польщі, обсяги імпортних постачань традиційно залишаються високими й у 2022 році зріс на 7,8%. Водночас рівень конкуренції на польському внутрішньому ринку борошняних, какао-містких/шоколадних та цукристих кондитерських виробів оцінено як високий. Рівень виробничої інфраструктури ринку та транспортна інфраструктура, оцінено як розвинена.

Ключові слова: *ринок кондитерських виробів, кон'юнктура ринку, розвиток, стан, інфраструктура, споживання, експорт, імпорт.*

JEL Classification: F14, L10, M21, Q02

Absztrakt. *A lengyel édesipari piac a világ egyik legfejlettebb és legdinamikusabb piaca. Az elmúlt években a lengyel élelmiszeripar a termelési és marketing költségek meredek növekedésével, az alapanyagok, fogyóeszközök és csomagolások ellátási láncának zavaraival, valamint a hagyományos értékesítési piacok elvesztésével szembesült az ukrajnai háború miatt. A lengyel édesipari piac sajátosságainak vizsgálata lehetővé tette a lengyel édesipari piac valamennyi főbb mutatóinak és trendjeinek értékelését. A cikk elemzi a lengyel édesipari piac helyzetét, különös tekintettel a termelésre, exportra, importra, fogyasztásra, a piac földrajzi elhelyezkedésére, a verseny szintjére, a piac termelési és szállítási infrastruktúrájának fejlettségére. Megállapították, hogy 2022-ben 12%-kal nőtt az összes kategória édesipari termékeinek gyártási volumene, valamint a lengyel lisztből készült édesipari termékek gyártása is 19,3%-kal nőtt. A kakaóban gazdag és cukros édességek termelésének növekedési üteme ugyanakkor 3,8%, illetve 6,8% volt. Az előállított termékek mintegy 50-70%-át lengyel gyártók exportálják, 2022 folyamán pedig rekordszámú terméket exportáltak Lengyelországból, ami 13,8%-kal haladta meg az előző évi hasonló adatokat. Ugyanakkor annak ellenére, hogy Lengyelországban fejlett hazai édesipari termékek gyártása van jelen, az importált termékek mennyisége hagyományosan magas marad, és 2022-ben 7,8%-kal fog növekedni. Ugyanakkor a liszt-, kakaóban gazdag/csokoládé- és cukrászati édesipari termékek lengyel belföldi piacán magas verseny jellemző. A piac termelési infrastruktúrája és közlekedési infrastruktúrája fejlettnek mondható.*

Kulcsszavak: *édesipari piac, piaci helyzet, fejlődés, állapot, infrastruktúra, fogyasztás, export, import.*

Abstract. *The Polish confectionery market is considered to be one of the most developed and dynamic markets in the world. But in recent years, the Polish food industry has faced a sharp increase in production and marketing costs, disruptions in the supply chains of raw materials, consumables and packaging, as well as the loss of traditional sales markets due to the war in Ukraine. The study of the peculiarities of the Polish confectionery market made it possible to assess the main indicators of the Polish market of confectionery goods of all categories, as well as its volume and trends. The article analyzes the situation on the Polish confectionery market, including production, export, import, consumption, geographic location of the market, levels of competition and development of the market's production and transport infrastructure. It was concluded that during 2022 there was a 12% increase in the volume of production of confectionery goods of all categories. At the same time the manufacture of Polish flour confectionery products increased by 19.3%. The growth rates of production of cocoa–rich and sugar sweets were 3.8% and 6.8%, respectively. About 50–70% of manufactured products are exported by Polish manufacturers. It is necessary to mention that during 2022 a record number of products were exported from Poland, exceeding the similar figures of the previous year by 13.8%. Meanwhile, despite the presence of developed domestic production of confectionery goods in Poland, the volume of imported supplies traditionally remains high and increased by 7.8% in 2022. At the same time, the level of competition in the Polish domestic market for flour, cocoa–rich/chocolate and sugar confectionery products is estimated as high. The level of the market's production and transport infrastructure is rated as developed.*

Keywords*: confectionery market, market conditions, development, status, infrastructure, consumption, exports, imports.*

Problem description. The Polish confectionery market is one of the most developed and dynamic markets in the world. Poland is the fourth largest supplier of confectionery products to the EU market, as well as the largest European exporter of sweets to the markets of third countries. 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 locally produced 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. According to estimates, there are more than 700 confectionery manufacturers working on the Polish domestic market, employing more than 30,000 people.

During 2022, the Polish food industry, especially the confectionery manufacture, faced quite complex challenges – a sharp increase in the costs of production and sale of products, disruption of the supply chains of raw materials, consumables and packaging, as well as the loss of traditional sales markets due to the war in Ukraine.

Despite this, the confectionery market in Poland kept its balance, maintained high business activity and was successfully reformatted in accordance with the new conditions.As the experts state, the Polish confectionery industry held its position on the market during the reporting year of 2022 due to its export opportunities.

According to Dun&Bradstreet company specialists, the biggest challenge for Polish candy manufacturers in 2022 was the rise in prices of raw materials. During the year, milk prices increased by 40–60%, sugar – by 100–120%, cocoa – by 30–50%. To this should be added the increase in the cost of electricity as well as rising costs of transport and logistics services and labor resources. In addition, experts claim that 60% of Polish entrepreneurs said that the increase in energy prices is the biggest threat to their company's survival.

A significant part of the market operators point to structural and social changes in the Polish confectionery market tracked during 2022. The "sweet" industry has firm intentions to meet new requirements and, above all, to respond to new trends, fashion and growing consumer awareness of Poles. Making a decision to buy sweets is accompanied by a careful analysis of the composition of the product. This is due to the change in eating habits of Poles and the growing role of ecology in their lives. In addition, Poles began to prefer products in ecological packaging. According to research, almost one in four Poles takes into account the environmental aspect of packaging when making a purchase decision, and almost 60% directly state that they avoid environmentally harmful packaging.

The product structure of the confectionery market in Poland can be conventionally discribed as follows: the segment of sugar confectionery, the segment of flour confectionery and the segment of products containing cocoa. Traditionally, flour confectionery products account for 50–60% of the total volume of the confectionery market in Poland. The segment of products containing cocoa with all its diversity covers about 30–35% of the market, while the smallest market share is the segment of sugar confectionery (about 15–20%).

Methodological explanations. Confectionery goods made of sugar, without cocoa content, correspond to the group of TN ZED codes 1704 and PRODCOM codes 10.82.23, chocolate in other finished products with cocoa content corresponds to the group of TN ZED codes 1804 and PRODCOM codes 10.82.22 and bakery (flour) confectionery products correspond to the group of TN ZED 1905 codes and PRODCOM codes 10.71.12, 10.72.11 and 10.72.12. The article was prepared using open and publicly available sources of information as well as expert assumptions and calculations. The units of measurement used by the Main Statistical Office of Poland (Główny Urząd Statystyczny, website – https://stat.gov.pl/) became the basis for the analysis of general trends in the confectionery market.

Literature review. The study of market changes always requires constant analysis and has always been the focus of attention of scientists. The article [11] presents the position of Polish food products on foreign markets from 2004–2018 in comparison with EU countries, as the economic conditions of the functioning of Polish food producers changed fundamentally after the country's accession to the EU. The author of the publication believes that Polish food producers have achieved competitive advantages over producers from other EU countries, as they offer better and cheaper products than their competitors. Factors such as identical consumer preferences across member states, distance, price levels and product complexity contribute to incentives for manufacturers to offer different versions of seemingly identical branded food products across member states [10].

Scholars [6] concluded that endogenous qualitative innovations reduce the impact of fixed export costs on trade flows by adjusting for large margins. The most productive manufacturers invest relatively more in innovation and gain larger market shares compared to low–performing firms.

At the same time, according to Comite F. Di, Thisse J.–F., Vandenbussche H. [4], the different volume of sales in different countries is not necessarily the result of the difference in the size of the market or the difference in income, but a result of asymmetric preferences between varieties and identity of tastes in different countries. In the scientific literature, various models have been developed regarding the entry of products to export markets which are suitable for the analysis of scenarios of trade policy and regional integration in an environment with heterogeneous firms and endogenous markups, as well as general equilibrium models of firms and their analysis [1, 2, 3, 5, 7, 8, 9]. It is also relevant to study the possibilities of further integration of countries into global value chains [12]. Since, as already mentioned, the Polish confectionery market is one of the most developed and dynamic markets in the world, the consideration of the conjunctural features of the Polish confectionery market is especially relevant in modern conditions and requires a more detailed study.

Research aims and objectives. In this regard, consideration of the conjunctural features of the Polish confectionery market becomes especially relevant in modern conditions and requires constant monitoring and evaluation of factors that affect it, both positively and negatively.

Results and discussions. *Manufacturers of confectionery products in Poland.* The undisputed leaders of the Polish market in the production of confectionery products of all categories are three companies (the total market share is estimated at 50–60%):

– *Wawel S.A.* is a multinational company headquartered in Krakow, which manufactures more than 500 types of confectionery products and supplies its products to 122 countries around the world. The largest shareholder of the company is the Swiss company "Hosta International AG" (it has a stake of 52.1%). Standard products under the Wawel brand include: Danusia bar; Malaga, Tiki Taki and Kasztanki chocolates; handmade caramels Fistaszkowe, Raczki, Kukułka, Orzeźwiające and Mieszanka Krakowska;

– *Lotte Wedel Sp. z o. o. (E. Wedel)* is a confectionery factory located in Warsaw, which is part of the Japanese–Korean holding "Lotte". The oldest chocolate factory in Poland. It specializes in the production of cocoa–rich confectionery products, but also has production facilities for the manufacture of sugar and flour sweets.

– *Mieszko* is a modern confectionery company with headquarters in Warsaw and factories in various cities of Poland. The company specializes in manufacturing chocolate candies with fillings such as alcohol, as well as sugar confectionery. The company is controlled by Bisantio Investment Limited (Cyprus), which is managed by Lithuanian businessman V. Numavičius. Other confectionary companies also conduct a rather active trade and marketing policy on the domestic and export markets.

The following companies are among the most active in 2022:

– *Tago* (a well–known Polish family company, which one of the largest Polish confectionery factories. It is mainly engaged in the production of cookies, gingerbread, cakes and other flour confectionery and pastries. The owner of the brands "Rarytaski", "Szekoladowa muza" and others);

– *Milanówek Zakład Przemysłu Cukierniczy (*production of fondants of various flavors, as well as bars, chocolate with filling, caramel and other sugar products);

– *Kopernik* (producer of gingerbread and waffles, owner of the brands "Toruńskie Pierniki", "Katarzynki" and "Wafle Teatralne");

– *Śnieżka* (producer of a wide range of organic candies, the most famous of which are "Michałki" candies and "Kokosowy Raj" waffles);

– *Skawa* (specializes in the production of flour and sugar confectionery, owner of the world–famous brands "Korsarz", "B–mol", "Iglo" and others);

– *Sante* (a modern confectionary company specializing in the production of organic confectionary products, protein products for sports nutrition, etc.).

Manufacture of confectionery products in Poland. According to the data of the Main Statistical Office of Poland and expert assessments, the growth of production volumes of confectionery goods of all categories in 2022 was noted, which amounted to 12.0% (about 1644.6 thousand tons of sweets were produced). At the same time, significant growth was demonstrated by Polish manufacturers of flour confectionery – production increased by 19.3%, while the dynamics of production of cocoa–rich and sugary sweets was somewhat restrained – production rates increased by 3.8% and 6.8%, respectively.

Analysing the structure of confectionery production, the leading positions are traditionally occupied by flour sweets, the share of which in the total production based on the results of the reporting period was 49.5%. The share of cocoa–rich confectionery traditionally accounts for 28.3%, the share of sugar products – 22.2%. It should be noted that the structure of production is changing, even compared to the previous year – the share of flour products remains stable, while the share of cocoa–rich products is increasing, and the share of sugar products, on the contrary, is decreasing.

It should also be emphasized that private production of simple confectionery products is quite developed in Poland. 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.

Table 1

Production of confectionery goods in Poland in 2021/2022, thousand tons*

Products	2021 p.	2022 p.	+/–, %
Bakery and flour products	728,0	868,8	+19,3
Chocolate and cocoa–rich products	495,1	514,0	+3,8
Sugar and similar products	245,2	261,8	+6,8
TOTAL	1468,3	1644,6	+12,0

**the data of the Main Statistical Office of Poland and expert assessments*

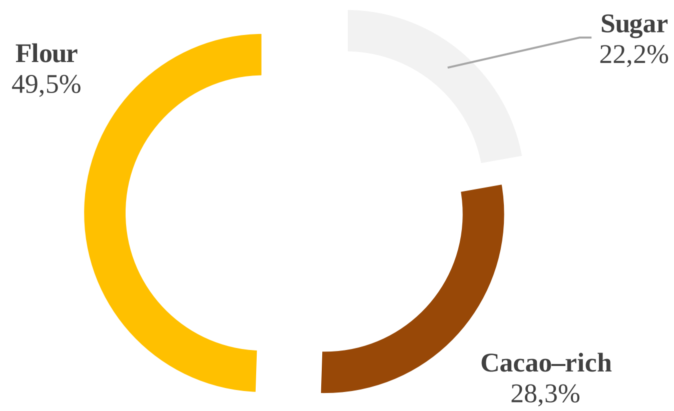

Fig. 1. Structure of confectionery production in Poland during 2022, %

***** *the data of the Main Statistical Office of Poland and expert assessments*

Export. Polish manufacturers of all categories of confectionery products have always been oriented towards foreign markets, as about 50–70% of manufactured products were exported (according to the UN Comtrade Database and TradeMap resources). The priority of the export direction of the sale of sweet products is due primarily to the price factor – prices on the European or Middle Eastern markets often exceed the price indicators that have developed on the domestic market. Therefore, Polish confectionery companies try to annually increase the volume of external supplies.

According to Eurostat, in 2022 Poland was the third exporter of chocolate in the European Union, second only to Germany and the Netherlands[1] .

The beginning of the Russian aggression against Ukraine led to the boycott by Poland of any sales of Polish–made sweets to the aggressor country and its allies. Nevertheless, the loss of these traditional and large–scale markets was very quickly compensated by increasing exports to the countries of Europe and the Middle East, expanding sales markets in South America and Africa. Such marketing efficiency is possible due to the high quality of products and a flexible approach to the recipe and design components when cultivating new markets.

In general, during 2022, about 1,131.2 thousand tons of confectionery products of all categories were exported from Poland, which is 13.8% higher than the similar figures of the previous year. At the same time, the total currency revenue from the sale of these commodity items during the reporting year amounted to about 4.55 billion USD, decreasing by 11.0% compared to the previous year. In terms of product positions, the dynamics of Polish confectionery exports based on the results of the reporting year 2022 looked as follows:

♣ The export of bakery and flour confectionery products increased by 22.6% and amounted to 625.5 thousand tons. The main regions of supply were the EU countries (≈ 78.3%), other European countries (≈ 11.3%), the CIS (≈ 4.3%), the Middle East (≈ 2.8%) and some other countries (≈ 3, 3%);

♣ The export of cocoa–rich sweets (chocolate, candies, etc.) in the reporting period increased by 2.9% amounting to 378,000 tons. The main regions of supply were traditionally the EU countries (≈ 66.3%), other European countries (≈ 18.8%), the CIS (≈ 5.5%) and some other countries (≈ 9.4%);

♣ The export of sugar and similar confectionery also showed growth by 9.7% (up to 127.7 thousand tons). The main sales markets for this type of sweets were the EU countries (≈ 68.2%), the Middle East (≈ 9.9%), other European countries (≈ 8.8%), the CIS (≈ 4.9%) and some other countries (≈3.9%)

This situation indicates a high export orientation of Polish confectioners, who are ready to develop new sales markets even at the expense of their own profits. In addition, the state export support program "Finansowe Wspieranie Eksportu", which is financed by state banks and which actively and effectively reacts to any economic risks, providing financial, fiscal and international support to exporters, gave results.

Import. Despite the presence of developed domestic production of confectionery products in Poland, the volume of imported supplies traditionally remains high. At the same time, there was a constant tendency to increase the supply of products that differ in taste from those produced in the country. Thus, in 2022, about 481.1 thousand tons of confectionery products of all categories were imported into Poland in the amount of 1.79 billion USD (an increase compared to the previous year by 7.8% in physical terms and by 7.3 % – in money).

In terms of product items, the import of confectionery products to Poland in 2022 was as follows:

[1] https://www.trade.gov.pl/en/news/export–of–polish–food–products/ (accessed: 30.01.2024)

♣ The import of bakery and flour confectionery products showed a growth of 9.7% (up to 248.8 thousand tons). The main regions of supply of this type of sweets were the EU countries (≈ 91.0%), other European countries (≈ 4.2%), the CIS (≈ 3.8%) and some other countries (≈ 0.9%). About 9.01 thousand tons of this type of confectionery products were delivered directly from Ukraine.

♣ Imports of cocoa–rich and chocolate confectionery to Poland also showed growth – by 4.3% (up to 145.6 thousand tons). The main regions of supply of this type of products were the EU countries (≈ 91.5%), other European countries (≈ 2.6%), the CIS (≈ 1.0%) and some other countries (≈ 4.7%). About 1.74 thousand tons of this type of confectionery products were delivered from Ukraine;

♣ The import of sugar sweets (caramel, toffee, jelly, marmalade, etc.) in the reporting period increased by 8.5% and amounted to 86.8 thousand tons. The main regions of supply were traditionally the EU countries (≈ 83.8%), the CIS (≈ 10.8%), other European countries (≈ 3.5%) and some other countries (≈ 1.9%). The presence of Ukrainian sugar sweets on the market is estimated at 8.7 thousand tons.

Analysis of the dynamics and structure of the import of confectionery products to Poland during 2022 indicates some change in consumer tastes and preferences of the local population, as well as an increase in domestic consumption of sweets due to the influx of a significant number of refugees from Ukraine. In addition, the Polish market is completely open to European manufacturers, who prevail in import supplies.

Table 2

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

Products	2021 p.	2022 p.	+/–, %
Bakery and flour products	510,3	625,5	+22,6
Chocolate and cocoa–rich products	367,5	378,0	+2,9
Sugar and similar products	116,4	127,7	+9,7
TOTAL	994,2	1131,2	+13,8

***the data of the Main Statistical Office of Poland and expert assessments*

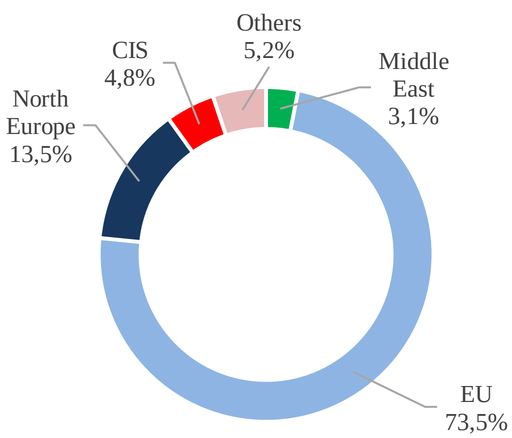

Fig. 2. Geographical structure of exports from Poland of confectionery products of all categories (general) in 2022, %

** the data of the Main Statistical Office of Poland and expert assessments*

Table 3

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

Products	2021 p.	2022 p.	+/–, %
Bakery and flour products	226,8	248,8	+9,7
Chocolate and cocoa–rich products	139,6	145,6	+4,3
Sugar and similar products	79,9	86,8	+8,5
TOTAL	446,3	481,1	+7,8

****the data of the Main Statistical Office of Poland and expert assessments***

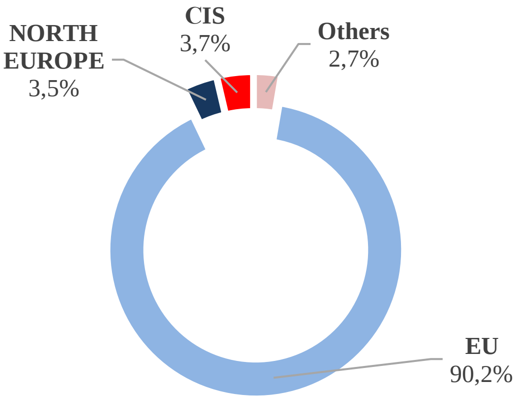

Fig.3. Geographical structure of imports to Poland of confectionery products of all categories (general) in 2022, %

****the data of the Main Statistical Office of Poland and expert assessments***

Consumption. According to estimates and available data of the Main Statistical Office of Poland and other international statistics resources, the total visible consumption of confectionery in Poland increased by 8.1% in 2022 and amounted to about 994.6 thousand tons. At the same time, the visisle consumption of flour confectionery increased by 10.7%, cocoa–rich and chocolate goods – by 5.4%, and sugar confectionery – by 5.8%. Real consumption, which takes into account the manufacture of products in the private sector, may exceed official indicators by 15–20%, depending on the product category. The given dynamics of the visible consumption of confectionery products is due to the growth of the number of active consumers in the country, mainly children and women – at the beginning of the Russian invasion, more than 2.5 million Ukrainians arrived in Poland from Ukraine.

In Poland, chocolate consumption is 5.9 kg per person, and by 2028, it is estimated to be increased to 6.4 kg per year.

The total capacity (volumes) of the Polish market for flour, sugar and chocolate confectionery 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 Polish market in monetary terms was PLN 60.0–62.0 billion (or USD 14.5–14.6 billion), which is 7.5% more than last year's figure.

Table 4

Visible consumption of confectionery products of all categories in Poland during 2021/2022, thousand tons*

Products	2021р.	2022р.	+/–, %
Bakery and flour products	444,5	492,1	+10,7
Chocolate and cocoa–rich products	267,1	281,6	+5,4
Sugar and similar products	208,7	220,9	+5,8
TOTAL	920,4	994,6	+8,1

****the data of the Main Statistical Office of Poland and expert assessments***

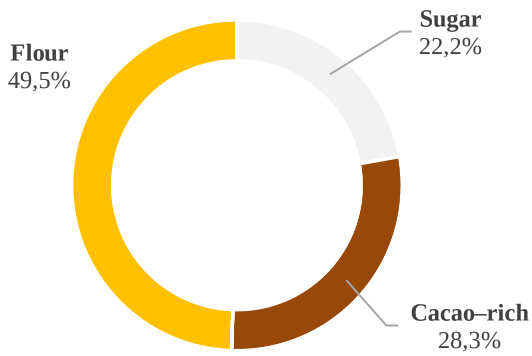

Fig. 4. The structure of visible consumption of confectionery products in Poland during 2022, %

*** the data of the Main Statistical Office of Poland and expert assessments***

Geographical location of the market and its volumes. According to the geographical location of centers for the production and sale of confectionery products of all categories, the estimated distribution of the Polish market in 2023 was as follows: – the city of Warsaw and the Masovian Voivodeship (≈ 24.0%)

– the city of Poznan and the Greater Poland Voivodeship (≈ 18.5%)

– Kraków and Lesser Poland Voivodeship (≈ 16.5%)

– the city of Gdansk and the Pomeranian Voivodeship (≈ 13.5%)

– the city of Lodz and the Lodz Voivodeship (≈ 11.0%)

– other regions of Poland (≈ 16.5%)

Availability of identical/similar goods on the market. The Polish market offers a fairly wide range of flour, cocoa–rich/chocolate and sugar confectionery products. In terms of consumer and taste properties, they can be considered similar or identical, 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 local confectionery enterprises. Polish enterprises are constantly modernizing, developing and introducing new samples into production, constantly reviewing requirements for the quality and design of confectionery products. Special attention is paid to the production of organic and environmentally friendly products. This allowed Polish confectioners to take a secure position both in the domestic market and in the markets of other countries.

Much attention is paid to quality control in the production of food products in Poland. The country operates a multi–stage system of quality control of almost all food products, approved national quality standards for almost every type of confectionery, which are mandatory for implementation. (PN–93/A–88000 «Wyroby cukiernicze trwałe», PN–A–88102:1998 «Wyroby cukiernicze – Czekolada», PN–A–88103:1998 «Wyroby cukiernicze – Kakao» etc. (about 1000 standards).

Availability of competition in the market. The level of competition in the domestic market of flour, cocoa–rich/chocolate and sugary confectionery products in Poland is estimated to be high. The main competitors are Polish confectionery factories and companies (about 700 companies) that produce more than 2,000 main samples of sweet products of the specified category, medium and small enterprises that produce up to 300–500 samples of products, importers and private manufacturers. In general, the level of competition is determined by the following factors:

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 Polish zloty in relation 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, Polish confectionery products offered on the market in terms of price and quality characteristics successfully compete with well–known global manufacturers and are exported.

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 middle and lower price range on the Polish market. But the requirements for the quality of even such products also remain high

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

4. *Commercial relations between network sales centers and manufacturers/suppliers.* Most Polish food chain companies, including confectionery, have long–term business relationships with suppliers and manufacturers. Such connections and communications make it possible to quickly respond to market challenges, as well as to effectively introduce new types of goods to the market, keeping up with modern global trends and preferences.

5. *Other factors.* An important competitive advantage on the Polish market of goods of this category is the prompt delivery of products and the availability of warehouse stocks or the required volume of goods, especially during the festive periods. Confectionery manufacturers usually have an extensive warehouse

infrastructure throughout Poland and appropriate logistics solutions that can quickly meet the needs of both end 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 trend of the war year of 2022.

There is no state regulation of prices during production, export, import and sale in the domestic market of Poland.

The level of development of production and transport infractructure of the market. The level of the production infrastructure of the Polish market in which the taxpayer operates is assessed as developed. The market includes manufacturing companies with the necessary production capacity, companies engaged in wholesale and retail sales of confectionery products, as well as companies specializing in export and import supplies. In addition, products are actively sold through network trading companies, medium and small stores, as well as through Internet resources.

The transport infrastructure serving the activity of the taxpayer is estimated as developed. Goods of this category are freely transported on the territory of Poland, mainly by large and medium–sized vehicles. Imported cargo is delivered in containers by road, rail or sea transport.

Conclusion and prospects for further research. The Polish confectionery market is one of the most developed and dynamic markets in the world. Poland is the fourth largest supplier of confectionery products of all categories to the EU market, as well as the largest European exporter of sweets to the markets of third countries.

During 2022, the Polish food industry, especially the confectionery production, faced quite complex challenges – a sharp increase in the costs of manufacture and sale of products, disruption of the supply chains of raw materials, consumables and packaging, as well as the loss of traditional sales markets due to the war in Ukraine.

According to the results of 2022, an increase in the volume of production of confectionery products of all categories was noted, which amounted to 12.0%. At the same time, significant growth was demonstrated by Polish manufacturers of flour confectionery products – production increased by 19.3%, while the dynamics of the production of cocoa–rich and sugary sweets was somewhat restrained – their growth rates were 3.8% and 6.8%, respectively.

Polish manufacturers of all categories of confectionery products have always been oriented towards foreign markets, because about 50–70% of manufactured products are sold abroad. In general, during 2022, a record number of products were exported from Poland, which exceeded the similar figures of the previous year by 13.8%.

Despite developed domestic production of confectionery goods in Poland, the volume of imported supplies traditionally remains high. In 2022, the import of sweets to Poland increased by 7.8%.

The level of competition in the domestic market of flour, cocoa–rich/chocolate and sugar confectionery products in Poland is assessed as high, and the level of production and transport infrastructure of the market – as developed.

References

1. Arkolakis, C. (2010), Market Penetration Costs and the New Consumers Margin in International Trade. *Journal of Political Economy,* Vol. 118, N. 6, Pp. 1151–1199, URL: https://doi.org/10.1086/657949
2. Baldwin, R., Harrigan J. (2011), Zeros, Quality, and Space: Trade Theory and Trade Evidence, *American Economic Journal: Microeconomics*, 3 (2), Pp. 60–88, URL: https://doi.org/10.1257/mic.3.2.60
3. Bernard, A. B., Redding, S. J., Schott, P. K. (2011), *The Quarterly Journal of Economics*, Volume 126, Issue 3, Pp. 1271–1318. URL: https://doi.org/10.1093/qje/qjr021
4. Comite, F. Di, Thisse, J.–F., Vandenbussche, H. (2014), Verti–zontal differentiation in export markets, *Journal of International Economics,* Vol. 93, Issue 1, Pp. 50–66 URL: https://doi.org/10.1016/j.jinteco.2014.01.010.
5. Eckel, C., Neary, J.P. (2010), Multi–product firms and flexible manufacturing in the global economy, *Review of Economic Studies,* Vol. 77, Issue 1, Pp. 188–217. URL: https://doi.org/10.1111/j.1467–937X.2009.00573.x
6. Flach, L., Unger, F. (2022), Quality and gravity in international trade, *Journal of International Economics*, Vol. 137, 103578. URL: https://doi.org/10.1016/j.jinteco.2022.103578
7. Hallak, J. C., Sivadasan, J. (2013), Product and process productivity: Implications for quality choice and conditional exporter premia. *Journal of International Economics*, Vol. 91, Issue 1, Pp. 53–67 URL: https://doi.org/10.1016/j.jinteco.2013.05.001
8. Johnson, R. C. (2012), Trade and prices with heterogeneous firms, *Journal of International Economics*, Vol. 86, Issue 1, Pp. 43–56 URL: https://doi.org/10.1016/j.jinteco.2011.09.004
9. Melitz, M. J., Ottaviano, G. I. P. (2008), Market Size, Trade, and Productivity *The Review of Economic Studies*, Vol. 75, Issue 1, Pp. 295–316, URL: https://doi.org/10.1111/j.1467–937X.2007.00463.x
10. Nes, K., Ciaian, P., Marcantonio, F.Di (2021), Economic determinants of differences in the composition of seemingly identical branded food products in the EU, *Food Policy,* Vol. 100, 102020 URL: https://doi.org/10.1016/j.foodpol.2020.102020
11. Tereszczuk, M. (2019). The Polish food products on the foreign markets, *Ekonomika APK*, 26(4), Pp. 89–96. URL: https://doi.org/10.32317/2221–1055.201904089
12. Venger V., Romanovska N., Chyzhevska M. (2022). Integration of Ukraine to the Global Value Chains. *Comparative Economic Research. Central and Eastern Europe Volume* 25, Number 2, 2022. P. 137–161. URL: https://doi.org/10.18778/1508–2008.25.17