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SECTOR OF CONCENTRATED FRUIT JUICES IN POLAND

SEKTOR ZAGĘSZCZONYCH SOKÓW OWOCOWYCH W POLSCE

Summary: In the paper, the following problems have been discussed: position of Poland in the world trade of concentrated fruit juices and in production and export of fruit products in our country as well as the tendencies in production and turnovers of foreign trade of fruit juice concentrates in the season of 2021/22. The coefficients of production variability and of export and prices have been calculated. Due to the availability of data, the main attention was focused on the market of apple juice concentrate. The data of the Main Statistical Bureau (GUS), the Ministry of Finances and the unpublished data of the Polish Association of Juices Producers, have been utilized.

Keywords: concentrated fruit juices, foreign trade, export of fruit products, apple juice concentrate

Streszczenie: W artykule przedstawiono: pozycję Polski w światowym eksporcie zagęszczonych soków owocowych i w produkcji i eksporcie przetworów owocowych w naszym kraju oraz tendencje w produkcji i obrotach handlu zagranicznego koncentratami soków owocowych w sezonach 2011/12–2020/21 i na rynku tych produktów w sezonie 2021/22. Obliczono współczynniki zmienności produkcji, eksportu i cen. Ze względu na dostępność danych główną uwagę skupiono na rynku koncentratu soku jabłkowego. Korzystano z danych GUS, Ministerstwa Finansów oraz niepublikowanych danych Krajowej Unii Producentów Soków.

Słowa kluczowe: zagęszczone soki owocowe, handel zagraniczny, eksport przetworów owocowych, koncentrat soku jabłkowego

Introduction

The concentrated fruit juices (participation of ca. 50%) are dominating in the world sales of fruit products. In the international export of concentrated juices, the concentrated orange juice plays a basic role. In the years 2018–2020, the participation of the mentioned juices in the volume of the world export of juices was equal to 37%, in average. The second place (the participation of 18%) was occupied by the apple juices and the third place – by the juices from citrus fruits (without orange juice) amounted to 7%. The participation of grape juices was equal to 6% and that of pineapple – 3%. The juices produced from other fruits (cherry, raspberry, currant, chokeberry, pears, strawberry, papaya and other south fruits constituted 29%¹.

Poland is a meaningful world exporter of the concentrated apple juice but also, the exporter of juices, produced from the remaining fruits of the temperate zone, being not so much significant in the world sales. Only China is a greater net exporter and producer of the concentrated apple juice. Poland is the greatest supplier of apple, chokeberry, currant and cherry juice to the countries of the European Union.

Besides the frozen fruits, the concentrated juices are dominating in the domestic production of fruit products. In the period

of 2019–2021, their participation in volume of fruit products' manufacture amounted to ca. 34% and 38%, respectively and in value of production to 35% and 32%, respectively. The discussed products constitute also the basis of Polish export of fruit products. In the years 2019–2021, the concentrated juices constituted ca. 24% of export volume of fruit products and 23% of value of export of the mentioned products. The participation of frozen fruits was equal to 31 and 35%, respectively.

Tendencies in production of concentrated fruit juices in Poland

In production of concentrated fruit juices in Poland, the apple juice concentrate is dominating. In seasons 2016/17–2020/2021, the participation of the mentioned juice in the total volume of the produced concentrated fruit juices was equal to 87%. The participation of currant juices was 4%, of cherry juices – 4%, of strawberry – 2%, of chokeberry 2% and of raspberry – 1%. The participation of juices, produced from the remaining fruits, mainly from black lilac and cranberry does not exceed 0.5%.

The concentrated apple juice is manufacture mainly from domestic fruits. The total production is higher as a result of import of apple juice concentrate, mixed with the juice, produced from domestic raw material. The increase import has place e seasons of relatively low production of apples for processing, i.e. in the years of small crops in the country.

¹ There is a lack of data allowing determination of the level of export of the particular juices, classified as "other"

During the recent ten seasons (2011/12–2020/21), the total production of the concentrated apple juice and of the juices produced from domestic apples did not reveal growth tendencies. In the seasons 2016/17–2020/21 the total average production of apple juice concentrate amounted to 247 thousand tonnes in relation to 298 and 255 thousand tonnes, averagely, during the previous five seasons. At the same time, the discussed production shows a strong variation, caused by fluctuation of production of apples, destined for processing. In the seasons 2011/12–2020/21, the variation of production of concentrated apple juice, produced from domestic raw material was equal to 52% and of total production – 39%. The variation of total production of concentrated apple juice lower than that of production manufactured from the domestic raw materials indicates and supports a significant impact of import on limitation of variability of apple production in the country. We should clearly emphasize that the deliveries of apples for processing, including those for production of concentrated juice in the high-crop years increase more than production of the discussed fruits due to a distinct stabilization of their consumption in Poland and lack of the increasing export tendency. In the seasons of 2018/19, after record-high production in 2018, the supplies for processing constituted as much as 70% of apple production, including production of concentrated apple juice (62%). in the seasons of average harvests, the supplies for processing constitute 52–60% of the domestic production of apples.

The total production of concentrated juices produced from berry fruits and cherries varied during the recent ten seasons from 31.5 tonnes (season 2011/12 and 2012/13) to 55 thousand tonnes in season 2018/19, including cherry juices from 4 thousand tonnes (season 2017/18) to 18 thousand tonnes (season 2018/19) and black currant juices from 9.5 thousand tonnes (season 2012/13) to 17 thousand tonnes (season 2015/16). Variation index of total production of juices produced from “soft fruits” in seasons of 2011/12–2020/21 amounted to ca. 20%; it was lower when compared to concentrated apple juice. It results from the changes in the structure of production of juices manufactured from “colour fruits”, depending on the level of the crop and prices of the particular species of fruit.

It should be added that production of juices from “soft fruits” is almost exclusively produced from domestic raw material. Import of concentrated juices takes place only in seasons with a small production of the discussed fruits in Poland.

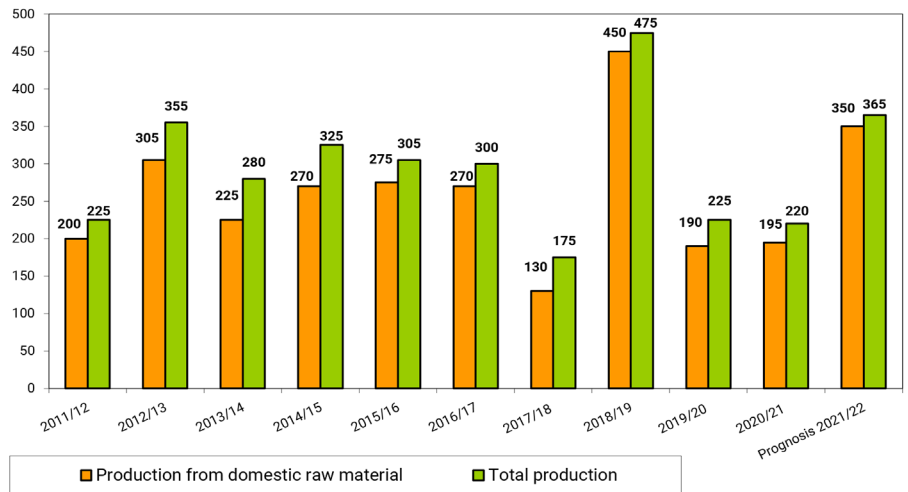


Fig 1. Production of concentrated apple juice in Poland (in thousand tonnes)
Source: Estimates on the grounds of data of Polish Association of Juices Producers (KUPS) and the Ministry of Finances (MF)

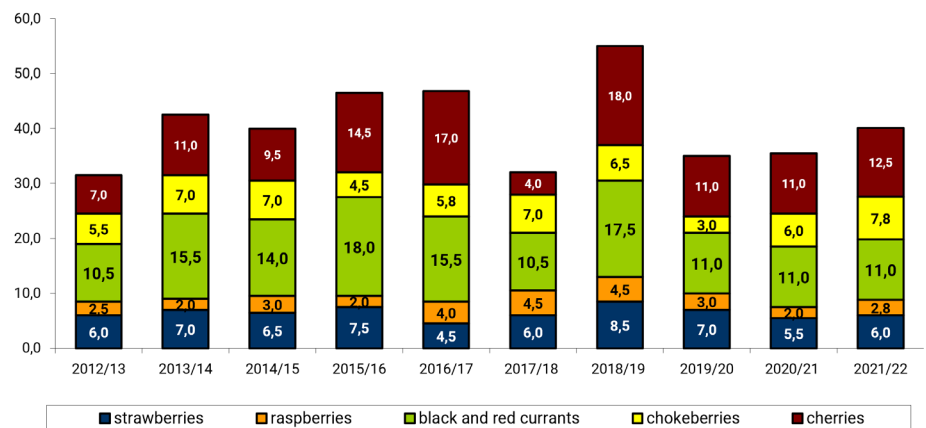


Fig 2. Production of the concentrated juiced manufactured from berry fruits and cherries (in thousand tonnes)
Source: KUPS data

Export and export prices

The participation of export in production of concentrated fruit juices exceeds 90% in majority of seasons. Hence, the level of foreign sales of the mentioned above products is almost functionally connected with the level of production. In certain seasons, the size of export exceeds the size of production due to the sale of resources from the previous season. For example, in season 2019/20, export (260 thousand tonnes exceeded the production level by 35 thousand tonnes due to the sale of the resources coming from extremely high production, obtained in season 2018/19 (475 thousand tonnes). Index of variation of foreign sale of the discussed products is similar to index of variations in production. As regards concentrated apple juice in seasons 2011/12–2020/21, export variability amounted to 33 % and was by 5 percentage points lower as compared to production fluctuations.

In seasons 2011/12–2020/21, variation of export prices of the concentrated apple juice, in average, amounted to ca. 27%, of cherry juice – 52%, of chokecherry juice – 28%, of the juice produced from black current – 54% and from raspberries – 38%.

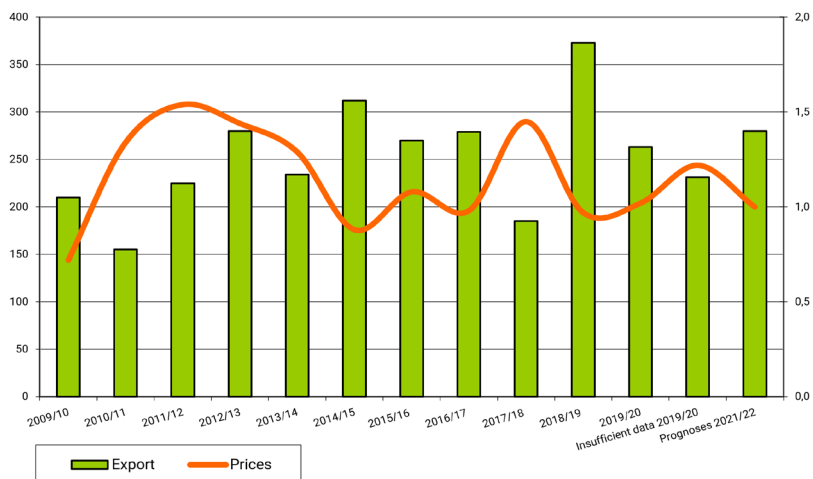


Fig 3. Export of concentrated apple juice from Poland (in thousand tonnes) and export prices (in Euro/kg)

Source : on the grounds of the data of the Ministry of Finances

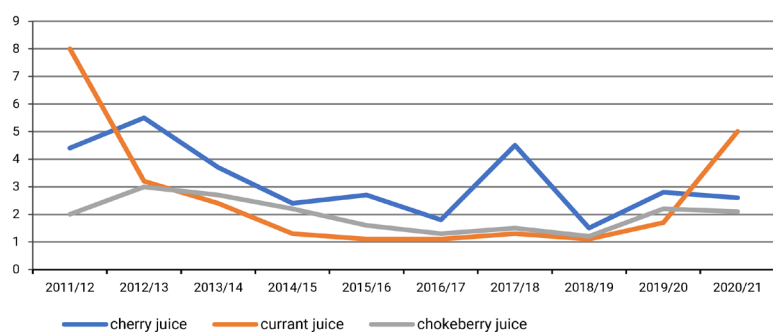


Fig 4. Export prices of the selected concentrated juices, in Euro/kg

Source: data of Polish Association of Juices Producers (KUPS)

A strong fluctuation of prices is caused by the changes in production in our country and production to the world market from other countries – exporters of the discussed products and, also, by a degree of approval of the prices of juices, nectars and drinks, produced from fruit juice concentrates by the consumers in the countries – receivers of the mentioned products (it refers to the seasons with a small production and relatively high prices at the world market). Higher fluctuation of the prices of concentrated juices, produced from “soft fruits” as compared to concentrated apple juice results, to a great degree, from relatively small meaning of juices, nectars and drinks, produced from the concentrates of the mentioned above juices. At the situation of high retail prices, their consumption decreases but it has no greater influence on the total level of consumption of juices, nectars and drinks.

In the seasons 2011/12–2020/21, export prices of the concentrated apple juice were highest in seasons 2017/18 (1.45 Euro/kg) and lowest in season 2014/15 (0.88 Euro/kg). As regards cherry juice concentrate, the discussed values amounted to 5.5 Euro/kg (season 2012/12) and 1.8 Euro/kg (season 2016/17), respectively; in the case of juice produced from black currant, the mentioned value

was equal to 8 Euro/kg (season 2011/12) and 1.1 Euro/kg (seasons 2015/16, 2016/17 and 2018/19) respectively; for chokeberry juice, the discussed values were: 1.3 Euro/kg (season 2016/17) and 3 Euro/kg (season 2012/13), respectively.

Poland is the exporter of the concentrated apple juices mainly to the EU countries, first of all, to Germany. In the seasons 2016/17–2020/21, the average participation of Germany in volume of the export of the mentioned product amounted to 42.1%. The participation of Great Britain was 12.3%, of the Netherlands 9.5% and of the USA 6.8%.

The EU countries are also basic importer of the remaining concentrated fruit juices from Poland². We should stress that the increase in the number of customers or the increase of export to the countries outside the EU has place in the seasons when the offer from Poland is relatively cheap. As regards the semi-processed products, including concentrated juices, export prices are a basic element considered by the importers in the choice of the suppliers.

Import and balance of foreign trade

Imported concentrated apple juice is destined, in 60–70%, for mixing with the juice, produced from domestic fruits. The total import of the discussed products varies in the particular seasons according to the level of domestic production. In seasons 2011/12–2020/21, the highest import was found in season 2017/18 (76.0 thousand tonnes) and the lowest one was recorded in season 2014/15 (34.8 thousand tonnes). The average import of concentrated apple juice in seasons 2016/17–2020/21 amounted to 61 thousand tonnes as compared to 54.7 thousand tonnes, averagely, in seasons 2011/12–2015/16.

² Non-consideration of CN codes concerning concentrated juices, produced from soft fruits (apart from cherry juice) in customs tariff does not allow to specify the size of geographic structure of export of the discussed products in Poland and other countries

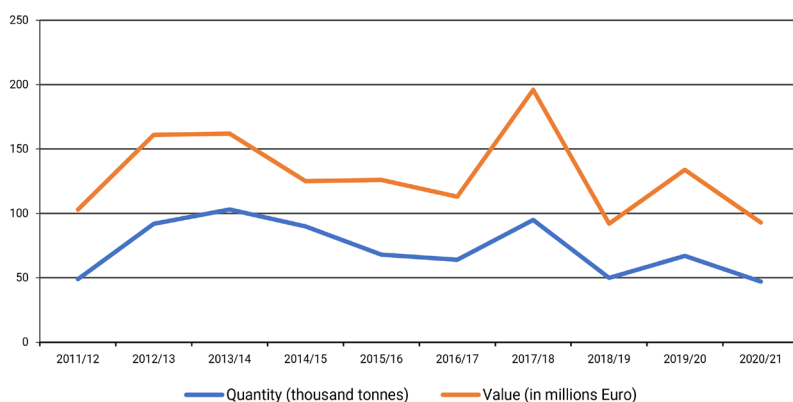


Fig. 5. Import of concentrate of apple juice to Poland

Source: on the grounds of data of the Ministry of Finances

Situation on the market of concentrated juices in season 2021/22

Ukraine and Moldova are the main suppliers of the concentrated apple juice to Poland. In the low-price seasons, the export offer of China includes also import from the mentioned country. In seasons 2016/17–2020/21, total participation of Ukraine and Moldova in volume of the imported concentrated apple juice was equal to 69%. In Moldova and Ukraine, i.e. the countries with relatively low costs of production factors there are the branch offices of the companies that produce concentrated juices in Poland.

Balance of foreign trade in respect of the concentrated apple juice is highly positive. The mean amount in seasons 2016/17–2020/21 was equal to 194.6 thousand tonnes and the value amounted to 220.2 million EUR. The balance of turnovers of foreign trade of the remaining concentrated juices, produced from berry fruits and cherries is also positive.

Producers of concentrates apple juice in Poland

In Poland, there are ca. 50 companies that produce concentrated apple juice. The number of the companies which deal with the manufacture of the remaining concentrated juices is smaller. Production is dominated by companies with German and Austrian capital. The participation of the entities with Polish capital in total production is 30–50%. The sale of concentrated juices is implemented, first of all, by the processing plants themselves.

The majority of the plants that produce concentrated fruit perform their purchase of raw material via the commercial brokers. The latter are mainly private trade companies. Also, the producer organizations and horticultural cooperatives play the role of brokers in the purchase. The dominating role of mediators (brokers) in the purchase of fruits for production of concentrated juices and, for processing in general, results from disintegration of fruit production and still low degree of the producers' organizing, i.e. small meaning of producer organization in production. It causes also a small role of cultivation contracts concerning obtaining of the raw material.

Increase of the fruit crops in 2021 as compared to the previous year has caused the rise in the raw material production for the processing plants, including those producing concentrated juices. Production of concentrated apple juice, produced from the domestic raw material exceeded considerably 300 thousand tonnes as compared to 195 thousand tonnes in seasons 2020/21. The total production of cherry juices and those produced from berry fruits increased from 35.5 to 40 thousand tonnes. The increasing tendency of non-concentrated apple juices, intended for export to a great degree, has been maintained.

The average export prices of the concentrated apple juice and cherry juice were lower compared to season 2021/22 and those of the juices, produced from berry fruits, mainly from raspberries were increased. Import decreased and the import prices of juices, including mainly the apple juice, did not differ significantly from those recorded in the previous season.

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