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# EVALUATION OF THE COOPERATION OF FRUIT AND VEGETABLE PRODUCERS WITH LARGE-FORMAT RETAIL CHAINS – OPPORTUNITIES AND RISKS

Key words: fruit market, vegetable market, distribution channels, commercial networks

ABSTRACT. The article outlines the importance of large-format trade in Polish FMCG retail. The principal part of the article consists of opinions of fruit and vegetable producers on the positive and negative aspects of cooperation with large-format networks. Research was conducted with 24 producers supplying fruits and vegetables to the distribution centres of retail chains. The research shows that suppliers tend to note far more positive than negative aspects in cooperation with this distribution channel. The major advantages of cooperating with networks turned out to be the stability and certainty of sales of large batches of goods, the predictability of sales and an increase in the quality and safety of offered products. The most important obstacles to cooperating with these customers are: the dominant position of networks, imposing terms and conditions and prices of sales and over frequent promotions in networks. The study showed that the aggregate of incentives to cooperate with large-format retail chains was twice as high as the aggregate of disincentives. The article also makes an attempt to analyse the bargaining power of suppliers – fruit and vegetable producers – as well as the opportunities and risks related to the cooperation of farms with retail networks.

## INTRODUCTION

The expansion of western retail corporations in Poland and Central and Eastern Europe began in the 1990s. Almost all leading international retail companies started operating in this part of the continent, within the last dozen or so years. Year by year, large-format stores increase their share in food sales. At present, they take over a 57% share in the FMCG market[1], whereas the forecasts for the upcoming years show a further increase in the importance of large-format stores in the Polish retail market.

The emergence of large-format retail in Poland evoked changes in the organization of food sales. These changes affected both consumers and food suppliers, who had to adapt to the new form of outlet. The modern-day retail facilities were relatively quickly and easily accepted by customers. Consumers increasingly choose large-format stores (hy-

[1] FMCG (Fast Moving Consumer Goods) – essential, fast-moving, non-durable goods: food, toiletries, cigarettes and alcohol.

permarkets, supermarkets and discount stores[2]) as a source of basic necessities [Lubańska 2009]. With ever growing repleteness of large-format stores on the Polish market, the fight between individual retail chains has intensified. For several years now, networks have been using activities involving copying the advantages of competition while maintaining their own ones, i.e. so-called "partial imitation" [Muller 2012]. The similarity of individual store formats (hypermarkets, supermarkets and discount stores) is manifested in expanding the assortment of own brands in super- and hypermarkets and increasing the shares of branded products in discount chains. The gradual blurring of differences between store formats with a dynamic increase in the number of discount stores caused a decrease in the sales dynamics of hypermarkets and supermarkets (Figure 1).

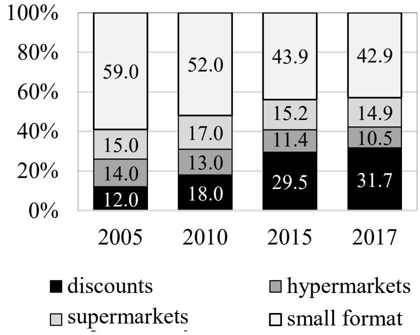


Figure 1. The structure of FMCG sales in Poland

Source: own elaboration based on [Roland Berger, 2016 Nielsen 2018]

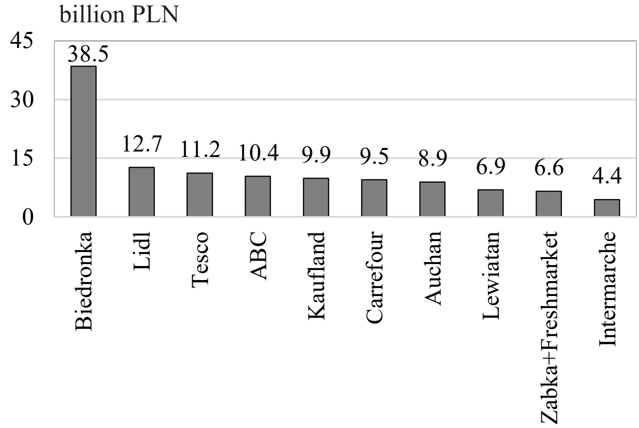


Figure 2. Sales of the largest 10 retail chains in 2018

Source: own elaboration based on [Roland Berger, 2016 Nielsen 2018]

Currently, discount stores sell almost 1/3 of FMCG products in Poland. The largest chain in Poland is Biedronka (2,267 stores) whose sales in 2018 amounted to over 38 billion PLN. The second place in terms of sales revenues is occupied by the Lidl chain (577 stores), followed by Tesco (440 stores), ABC, Kaufland and Carrefour. The largest 10 networks in Poland are shown in Figure 2.

[2] The hypermarket is an establishment with an area exceeding 2,500 m$^2$, selling in a self-service system, offering a wide and deepened assortment of food products, as well as other consumer and industrial goods, in total over 20,000 assortment items. Supermarkets are establishments with a retail space ranging from 400 m2 to 2,499 m$^2$, selling in a self-service system, offering a wide range of food and non-food products of frequent purchase [Krawczyk 2005]. A discount store is an establishment with an area of 300-1,000 m$^2$ offering mostly food and a limited range of chemical and cosmetic products, a total of 1-2 thousand articles. It is characterised by a good location, minimum costs, low prices and a reasonable choice of assortment. Discount stores are distinguished by a high speed of goods turnover, a limited scope of service and lower margins [Lubańska 2006].

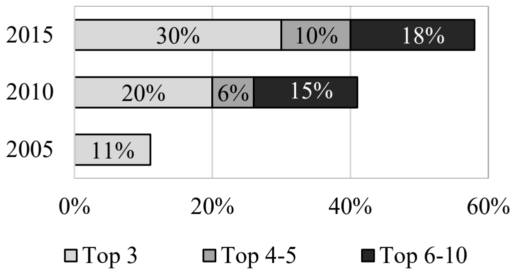


Figure 3. Shares of the largest retail chains in sales in Poland

Source: own elaboration based on [Roland Berger, 2016 Nielsen 2018]

At present, the 10 largest retail chains in Poland generate about 60% of sales revenue domestically, while in 2010 it generated about 40%. Within 10 years, the three largest retailers increased their share in sales almost threefold, achieving a result of 30% in 2015. (Figure 3).

Polish consumers also increasingly buy fresh fruits and vegetables in large-format stores. According to the GFK survey of 2015, the biggest share in fresh fruit and vegetable purchases take discount stores (30.3%), followed by supermarkets (16.4%) and hypermarkets (13.5%) [GfK 2015].

The issue of the terms and conditions of cooperation between domestic producers and large-format retail chains has aroused a lot of emotion and controversy over the past few years, often becoming the subject of many discussions. On the one hand, it is believed that foreign large-format networks have made a huge contribution to the economic sphere of the economy due to job creation as well as technological and marketing know-how and have contributed to the growth of competition in retail. Their competitive advantage is manifested, among other things, in offering modern products, other than hitherto methods of satisfying needs or providing services at a high level.

However, criticism can be heard that foreign retail chains pose a threat to domestic trade and put pressure on domestic producers and distributors to lower their purchase prices. Among the accusations against large-format networks, the following are mentioned: forcing unfavourable terms and conditions of the delivery of goods on suppliers, applying dumping prices as well as passing on the costs of promotion or merchandising to suppliers. Retail chains are also criticised for extending payment terms or carrying out audits too frequently.

The essence of modern relations between the participants of the distribution channel should be cooperation based on partnership and should rely on the synchronized management of supply (equated with the flow of physical product flow) and demand (equated with the flow of information about the return opposite to the flow of physical product flow), with the use of modern technologies supporting the flow of marketing streams in the channel in order to maximize the benefits of participants [Spyra 2007].

Do fruit and vegetable producers (suppliers) share the common views on cooperation with hypermarkets? What are the advantages and disadvantages of delivering to large-format stores?

## MATERIAL AND METHODS

Empirical research was conducted in 2019 with 24 fruit and vegetable producers co-operating with the following commercial chains: Auchan, Carrefour, Tesco, Stokrotka, Lidl, Macro Cash&Carry and Selgros. Targeted interviews were directly conducted with fruit and vegetable producers supplying at least one distribution centre of any network in the Mazowieckie Voivodship. The questionnaire consisted of 82 questions. Among the studied group of entities there were: 14 individual farms and 10 producer groups. The research included: the characteristics of entities, opinions of suppliers and selected aspects of cooperation with commercial networks.

## RESEARCH RESULTS

In the group of 13 vegetable farms, all entities in 2018 cultivated vegetables on an area of more than 30 ha. In nine of them (69%), vegetable production occupied over 50 ha. On the largest farm, vegetables were grown on an area of 80 ha. The average size of researched farms was 58 ha. The size of producer groups was also varied. The smallest group consisted of 9 members (200 ha of orchards in total), the largest consisted of 22 members (600 ha of orchards).

The fruit and vegetable producers surveyed consider retail chains to be the main outlet for their products (Table 1). For the majority of surveyed entities (67%), networks are actually the only customer (the share of sales to retail chains in total sales exceeded 90%).

(Net) revenues from the sales of fruit and vegetables to large-format retail chains in the analysed group of entities were differentiated (Figure 4).

The largest number of suppliers (46%) generated a sales revenue within the range of PLN 2 million and PLN 3 million. Lower revenue from sales to networks were recorded by individual farms, while half of the producer groups generated a revenue exceeding PLN 4 million annually.

Table 1. The share of sales of fruits and vegetables to hypermarkets in surveyed entities

| Item | Share of sales to networks [%] | | |
|---|---|---|---|
| | more than 90% | 50-90% | less than 50% |
| Number of producers | 16 | 7 | 1 |
| All producers | 67.0 | 29 | 4 |
| Fruit producers (6). including: | 23.2 | 38.4 | 38.4 |
| - fruit farms (1) | 100.0 | - | - |
| - producer groups (5) | - | 80.0 | 20.0 |
| Vegetable producers (18), including: | 66.6 | 33.4 | 0.0 |
| - farms (13) | 92.0 | 8.0 | - |
| - producer groups (5) | 20.0 | 60.0 | 20 |

Source: own research

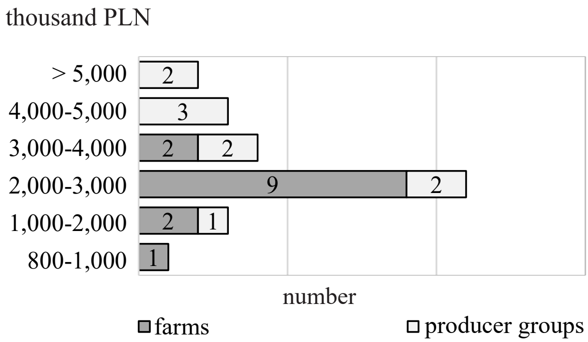


Figure 4. Annual net turnover volume with large-format retail chains

Source: own research

## SELECTED ASPECTS OF COOPERATION

Large-format networks are very demanding customers. When selecting suppliers, they pay special attention to: the possibility of ensuring large batches of goods while maintaining continuity of supply. A supplier of a hypermarket chain must also be characterized by high efficiency of order execution (frequency, punctuality and completeness of deliveries). It is also necessary to ensure repeatable and high quality products offered. Almost from the beginning of their operation in Poland, networks have imposed high quality requirements on their suppliers/producers. Large-format networks implement a quality policy based on own standards, conducting audits not only covering the quality and safety of products offered, but also increasingly ethical aspects in companies. The possession of the GLOBALGAP Certificate by a producer has become mandatory in almost all retail chains.

CONTRACT VALIDITY PERIOD: In all networks, contracts are usually signed at the beginning of the calendar year and are valid for a period of 12 months. However, the contracts only specify commercial terms and conditions and do not guarantee the supplier the quantity of ordered goods.

PRICES PAID BY LARGE-FORMAT NETWORKS: The ratio of prices paid by large-format networks to market prices, between 2017 and 2018, ranged from -20% to +20% depending on the network and product. Prices for individual products are usually set once a week.

FREQUENCY OF DELIVERIES: The frequency of deliveries varies greatly from network to network and from product to product. Deliveries made directly to stores are usually made 6 days a week. When supplying a distribution centre, the frequency varies between 3 to 6 days per week.

PAYMENT TERMS FOR DELIVERED GOODS: Payment terms range from 21 to 45 days.

CHARGES: Until recently, chains were forcing charges for the ability to deliver to a specific chain (distribution centre or store) – marketing fees, so-called “turnover fees”. Currently, networks do not charge fees. Instead, only the supplier is obliged to grant the network a discount of a few percent.

## SUPPLIER OPINIONS

The surveys carried out show that the vast majority of fruit and vegetable suppliers are satisfied with cooperation with chains. One in six producers was very satisfied and more than 79% of the surveyed suppliers were moderately satisfied with delivery to hypermarkets. Only 4% of fruit and vegetable producers showed moderate dissatisfaction with the cooperation with these partners.

The degree of satisfaction or dissatisfaction with cooperation with hypermarkets showed insignificant dependencies. The highest percentage of satisfied producers was among suppliers, who:
– offered safe, high quality and certified products,
– were characterised by a single customer – hypermarket dependence (the hypermarket's share in sales exceeds 90%),
– at least doubled their sales thanks to supplies to large-format networks versus the period before cooperation,
– who had entered into partnership with large-format networks before 2000.

## POSITIVE ASPECTS OF COOPERATION WITH LARGE-FORMAT NETWORKS

The research shows that fruit and vegetable producers (suppliers) are aware of many benefits resulting from cooperation in the distribution channel with large-format retail chains.

The surveyed producers were asked to identify up to 3 main benefits of supplies to hypermarkets (starting with the most important one). For the purpose of analysis, the benefits have been assigned weights. The benefits listed in the first place were assigned 6 points, in the second place 3 points and in the third place 1 point. On this basis, a ranking of benefits from cooperation with networks was created.

The hierarchy of benefits, by assigning appropriate scores to them, has underlined the importance of the most important benefit even more. Ensuring sales of large batches received a weighted aggregate of 120, regularity of sales 36 points and stability of sales 30 points (Table 2).

The benefits emphasized by the surveyed producers were mainly economic ones, i.e. the sale of large batches of goods, the possibility of selling all year round as well as the stability and predictability of sales. Access to new technologies, better planning of expenses or introducing own promotions at the supplier's request were further positive aspects of cooperation.

## NEGATIVE ASPECTS OF SUPPLY TO LARGE-FORMAT NETWORKS

In addition to the benefits, producers also observe inconveniences in cooperation with foreign hypermarket chains. During interviews, producers were allowed to point out up to 3 most important disadvantages of network deliveries. A total of 133 responses were received. For the purpose of analysis, the negative aspects have also been assigned weights. The disadvantages listed in the first place were assigned 6 points, in second place 3 points and in third place 1 point. On this basis, a ranking of negative aspects of cooperation with hypermarkets was created, which is presented in Table 3.

Table 2. Hierarchy of advantages of cooperation with networks in the opinion of fruits and vegetable producers

| Item | Number of "votes" cast for particular benefits | | | Number of indica-tions | Weighted aggregate | % of producers indicating the particular benefit |
|---|---|---|---|---|---|---|
| | in 1. place | in 2. place | in 3. place | | | |
| Certain sales of large batches of goods | 18 | 4 | - | 22 | 120 | 91.7 |
| Regular deliveries throughout the year | 4 | 3 | 3 | 10 | 36 | 41.7 |
| Stability of sales | 2 | 5 | 3 | 10 | 30 | 41.7 |
| Predictability of sales | | 4 | 3 | 7 | 15 | 29.2 |
| Improving product safety and quality | - | 3 | 4 | 7 | 13 | 29.2 |
| Access to new technologies | - | 2 | 3 | 5 | 9 | 20.8 |
| Possibility of planning expenses | - | 2 | 2 | 4 | 8 | 16.7 |
| Possibility of introducing own promotions | - | 1 | 2 | 3 | 5 | 12.5 |
| Certainty of payments for delivered goods | - | - | 3 | 3 | 3 | 12.5 |
| Regularity of payments | - | - | 1 | 1 | 1 | 4.2 |
| Total | 24 | 24 | 24 | 72 | 240 | X |

Source: own research

The most criticised aspect of cooperation with networks was the dominant position of the network, imposing sales terms and conditions and a lack of partnership and understanding. A large number of suppliers reckoned that the negative aspects of commercial cooperation with chains were manifested in over frequent promotions and increasingly difficult price negotiations. Suppliers also criticise the mandatory audits of safety, quality and farm ethics, the requirement for continuous availability and the excessive costs associated with network quality systems.

A ready set of 26 factors was used to investigate the positive and negative aspects of cooperation with hypermarkets in more detail[3]. The surveyed producers rated each factor

[3] The factors were selected on the basis of similar studies of the author (in 2005) with suppliers of fruit and vegetables. The suppliers evaluated the following aspects of cooperation: price levels (paid by networks), frequency of price changes, frequency of promotions, price levels during promotions, frequency of returns, frequency of deliveries, service and organisation of deliveries, centralisation of deliveries, sale of large batches of goods, certainty of sales, stability of sales, certainty of payments for delivered goods, payment terms, quality requirements, delivery-related charges, contract validity period, atmosphere during contract and price negotiations, relations with purchasing managers, network willingness to compromise, improving qualifications, improvement of commercial skills, strengthening the brand (of the producer), introducing own promotions, tightening quality and safety standards.

Table 3. Disadvantages of cooperation with networks according to fruit and vegetable producer opinions

| Item | Number of "votes" cast for particular disadvantages | | | Number of indications | Weighted aggregate | % of producers indicating a particular disadvantage |
|---|---|---|---|---|---|---|
| | in 1. place | in 2. place | in 3. place | | | |
| Dominant position of the network | 9 | 3 | - | 12 | 63 | 50.0 |
| Imposing the terms and conditions of sale | 4 | 3 | 3 | 10 | 36 | 41.7 |
| Lack of partnership and understanding | 4 | 3 | 1 | 8 | 34 | 33.3 |
| Application of overfrequent promotions | 3 | 3 | 3 | 9 | 30 | 37.5 |
| Increasingly difficult price negotiations | 4 | 2 | - | 6 | 30 | 25.0 |
| Mandatory audits | - | 4 | 1 | 5 | 13 | 20.8 |
| Full availability requirement | - | 3 | | 3 | 9 | 12.5 |
| Excessive costs associated with improving quality | - | 2 | - | 2 | 6 | 8.3 |
| Uncertainty of payment | - | | 6 | 6 | 6 | 25.0 |
| Inducement to reduce prices | - | 1 | | 1 | 3 | 4.2 |
| Total | 24 | 24 | 23 | 71 | 239 | X |

Source: own research

on a scale of -5 to +5, where a rating of -5 to -1 was a disincentive to trade with a hypermarket, and a rating of 1 to 5 was an incentive to trade with such a partner.

It can be concluded that the surveyed producers see far more positive aspects in large-format retail chains. The evaluation of different aspects of cooperation by producers (on a scale from -5 to +5) showed that the aggregate of incentives to cooperate with hypermarkets (794) was twice as high as the aggregate of disincentives (337). Figures 5 and 6 provide a detailed evaluation of the various aspects of cooperation.

The research shows that, in large-format networks, suppliers value the certainty and stability of sales of large batches of goods and the centralization of deliveries most. The following places were taken by: price levels, contract validity period and certainty of payment.

The following were qualified as the greatest forces discouraging cooperation with hypermarkets: price level during promotions, lack of willingness of chains to compromise as well as frequency of promotions. Relations with the purchasing manager and the tightening of network quality and safety standards as well as excessive quality requirements of the network were also negatively perceived.

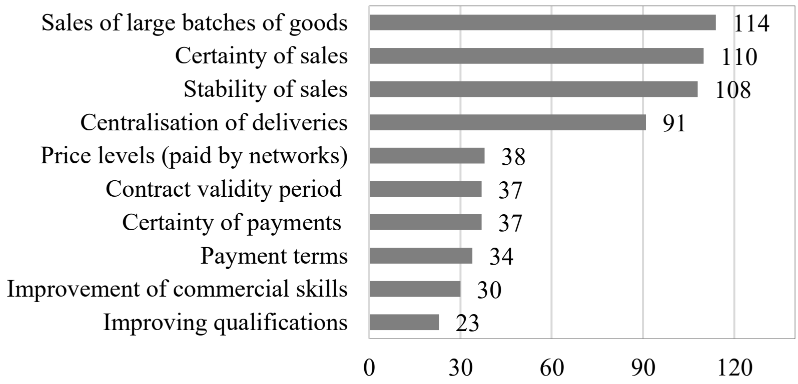


Figure 5. Main factors encouraging cooperation with a large-format network (sum of positive notes)
Source: own research

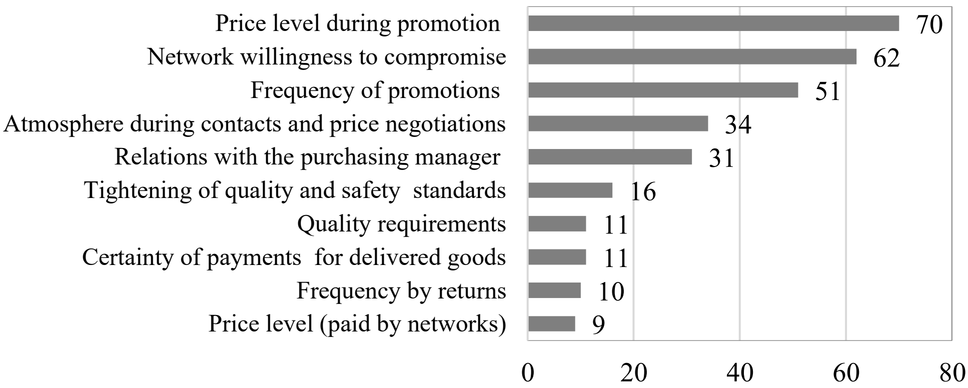


Figure 6. Main forces discouraging cooperation with large-format networks (aggregate of negative ratings)
Source: own research

## BARGAINING POWER, OPPORTUNITIES AND RISKS FOR FARMS COOPERATING WITH LARGE NETWORKS

On the basis of the carried out studies and the analysis of the sector, the following opportunities can be formulated for farms supplying large-format networks:
– increasing production (acreage cultivated, improving productivity),
– specializing production,
– creating producer groups,
– growing number of IPO, GLOBALGAP, Tesco Nature Choice, BRC certified farms,
– caring about the quality and safety of products,

– increasingly better equipment of farms and producer groups with specialized equipment for production, packaging and customizing,
– ensuring high quality of produced goods.

The following risks can be distinguished as regards cooperation between horticultural and vegetable farms as well as retail chains:

– an increase in imports of fruits and vegetables by networks,
– easy access to fruits and vegetables by broker retail companies (possibility of buying foreign vegetables during the availability of Polish vegetables at this period);
– a wide choice of products and ensuring continuity of supply of a wider range of products by retail companies,
– limitation of sales on foreign markets,
– the networks' ever-increasing demands on retail quality and ethics towards suppliers,
– low income flexibility of the demand for fruits and vegetables.

## FINAL CONSIDERATION

Retail chains are the main outlet for large farms offering large and uniform batches of goods. The conducted survey proves that the fruit and vegetable producers surveyed consider large-format retail chains to be the main outlet for their products. For the majority of surveyed entities, a network was actually the only customer. Suppliers of fruits and vegetables to large-format networks were mostly satisfied with the cooperation with these customers. They saw far more positive than negative aspects. On the benefits side, most indications concerned such aspects of cooperation as stability and possibility to sell large batches of goods, and the centralisation of deliveries. The most frequently mentioned negative aspects of cooperation were the dominant position of networks and imposing sale terms and conditions.

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## OCENA WSPÓŁPRACY PRODUCENTÓW OWOCÓW I WARZYW Z WIELKOPOWIERZCHNIOWYMI SIECIAMI HANDLOWYMI – SZANSE I ZAGROŻENIA

Słowa kluczowe: rynek owoców, rynek warzyw, kanały dystrybucji, sieci handlowe

ABSTRAKT

W artykule przedstawiono znaczenie handlu wielkopowierzchniowego w polskim handlu detalicznym artykułami FMCG. Główną część artykułu stanowią opinie producentów owoców i warzyw na temat pozytywnych i negatywnych aspektów współpracy z sieciami wielkopowierzchniowymi. W artykule zawarto także próbę analizy siły przetargowej dostawców – producentów owoców i warzyw oraz analizę szans i zagrożeń współpracy gospodarstw z sieciami handlowymi. Badania przeprowadzono z 24 producentami dostarczającymi owoce i warzywa do centrów dystrybucyjnych sieci handlowych. Z analizy danych wynika, że producenci wskazują we współpracy z tym kanałem dystrybucji zdecydowanie więcej aspektów pozytywnych niż negatywnych. Największymi zaletami współpracy z sieciami okazały się takie elementy, jak: stabilność i pewność zbytu dużych partii towaru, przewidywalność sprzedaży oraz podnoszenie jakości i bezpieczeństwa oferowanych produktów. Najistotniejszymi przeszkodami we współpracy z tym odbiorcą były dominująca pozycja sieci, dyktowanie warunków i cen sprzedaży oraz zbyt częste promocje w sieciach. Przeprowadzone badania wykazały, że suma czynników zachęcających do współpracy z wielkopowierzchniowymi sieciami handlowymi dwukrotnie przewyższała sumę czynników zniechęcających.

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