

Development of Organic Food Sector

Subjects: Agriculture, Dairy & Animal Science

Submitted by:  Hanna Górska-

Warsewicz

Definition

Our study aimed to explore the factors limiting the development of the organic food sector in Poland from the perspective of processing, distributing, and retailing companies. We used a qualitative approach with in-depth semi-structured interviews with the management board representatives of 17 large- and medium-sized enterprises and the owners of 10 small and medium companies. The potential limiting factors, including legal, economic, technological, and environmental factors, were identified by reviewing the corporate and market reports of processing and retailing companies operating in the Polish organic sector.

1. Introduction

Organic farming is considered a fast-growing agricultural sector in European Union (EU). In 2019, organic agricultural land, including in-conversion areas, in EU constituted 14.6 million hectares, and the total share of the organically managed area was estimated at 8.5% of the utilized agricultural area (UAA) ^[1]. Financial support through agri-environmental and rural development programs, which were developed based on the organic farming definition of Council Regulations (EC) 2092/91, has contributed to expanding the organically managed farms and areas under organic production in the EU countries ^[2]. Organic agriculture offers many advantages from a policy perspective and could be an important part of strategies that aim to improve the sustainability and equity of the food system as reflected in, e.g., The European Green Deal ^[3] and EU Farm to Fork (F2F) Strategy ^[4] as well as EU Biodiversity Strategy ^{[5][6][7][8]}. The main tenet of the Green Deal is the need to move to a more sustainable agricultural production system that minimizes the environmental footprint of agriculture, and organic farming is one of the key positive solutions to this problem ^{[3][9][10][11]}. The Biodiversity Strategy, which is part of this Plan, set itself the target of 25% of the agricultural land area for organic farming in the EU by 2030, compared to 8% currently allocated to organic farming in the EU and 3% of organic agricultural land in Poland ^{[5][10][12][13]}. Many of the environmental concerns about conventional agriculture can already be alleviated by the current organic farming practices, which play an important role in mitigating greenhouse gas emissions ^[14].

Despite the existence of a common legal framework and support measures for the organic sector within EU Rural Development Programmes (RDP) ^[15], in some Member States, the share of the total organic area in the total UAA is well below the EU average. These Member States include Central and Eastern European countries such as Poland (3.5%), Romania (2.9%), and Bulgaria (2.3%) ^[1]. The Polish organic farming sector experienced tremendous growth after the country's accession to the EU in 2004 when the subsidies for conversion and maintaining organic farming became available ^{[16][17]}. A similar phenomenon was observed in other new Member States during the post-accession period ^{[18][19][20][21]}. The number of organic farms in Poland grew rapidly until 2013, after which the trend reversed, and the organic farming area in the country decreased by 26.1% in the years 2015–2018 ^{[21][22]}. Policy support for organic farming in Poland was primarily focused on quantitative growth rather than on stimulating supply. As the payments were easily accessible and decoupled from production, subsidy-oriented farmers were encouraged to seek political rent. This resulted in the instability of a large group of farms who discontinued their organic farming activity ^[15].

Different types of factors influence the development of the organic sector, but the following groups are most frequently indicated as impeding the growth of organic farming: (1) management-related factors, (2) national policy on organic agriculture, (3) cultural barriers, and (4) market uncertainty ^[23]. This was

also reflected in farmers' decisions to discontinue organic production due to economic reasons, concerns related to certification and production techniques, and macro-environmental issues [24][25]. Organic regulations are extremely complex and cover the entire food chain, including production, labelling, control, and import. The standards vary between regions; for instance, the EU standards differ slightly from the USA standards, while differences also exist within the EU because different national certification bodies follow different rules set by the EU [26]. Organic certification is conducted by an independent, impartial and competent certification body giving third-party assurance that all products traded as organic have been produced and processed according to the respective standards [27]. The credibility of the third-party certifier itself is backed up by accreditation, either provided by the private or by the public sector often with the consent of public authorities as in Poland, Spain, Malta, and Luxembourg [28][29]. Organic producers must comply with the legal requirements of organic production, fulfil administrative tasks, and undergo inspection to prove their conformity with organic regulations [28]. The organic control and certification system is not standardized across the EU, and different interpretations of specific requirements may exist [30]. Producers find it difficult to apply the rules concerning the labelling of organic products and meet the requirements set by certification bodies [30]. Another issue is the impact of general fiscal regulations on the financial performance of organic producers. Strategies designed for enhancing organic production should include tax reductions/exemptions for organic food producers [31]. To increase production efficiency and competitiveness, the taxation system should include significant measures and instruments for reducing the costs of organic production [32].

As in many other EU countries, the organic demand in Poland is growing faster than the organic area, thereby posing many challenges to producers and other actors of the organic supply chain [21]. Based on the analyses of the Polish organic sector, the barriers to the development of organic farming are classified into production-economic, market, and institutional-regulatory barriers [17]. Organic products, particularly organic packaged goods, are becoming more prevalent in Poland, including the mainstream channels such as discounters and hypermarkets, which was one of the key drivers of the growth value of 10% recorded in 2016 [33]. An obstacle that hinders the entry of organic products into mainstream retailers is farmers' reluctance to cooperate, as well as a lack of professional organizations dealing with organic logistics and sales, which reduces the potential for creating a common offer, especially in the case of small-sized organic farms having a significant share in the Polish organic sector [34][35][36]. A similar situation is observed in other countries struggling to develop their domestic organic markets [19]. Market barriers are strictly linked to production barriers because low yields and limited access to fertilizers and seeds are considered by farmers as primary obstacles that prevent them from converting to organic production, which is largely responsible for the low levels of supply [17]. On the other hand, despite the shortage in supply, many Polish organic farmers strive to sell their produce [37]. This can be attributed to the fact that organic farms are geographically dispersed, which results in high distribution costs [38].

Evidence also indicates an increased focus on organic products in retail sales, with private labels of foreign origin gaining share from the sales of branded organic products in Poland [34]. If the organic sector grows further and distribution costs are lowered, organic consumer prices could decrease considerably [6][39]. The development of the organic food market in the country is affected by high prices, followed by insufficient consumer awareness, low availability of organic products, short expiry dates and low visibility in shops [40]. Motivated by health and environmental concerns, Polish consumers increasingly search for organic products [40][41], but they are not convinced to pay more for products obtained through organic production [42][43].

To make organic farming a viable option, improvements should be made in several areas. These include pursuing a clear organic sector strategy, supporting a shorter organic supply chain that provides environmental and social benefits, increasing the accuracy of data collection regarding organic markets, and improving statistical processes [44].

2. Macroeconomic Situation

The macroeconomic situation is a factor that determines the gross domestic product, purchasing power,

unemployment level, and economic growth rate. A slowdown in economic growth, increasing inflation and unemployment can all negatively affect the organic food market.

Demand for organic products is related to consumer expenditure, which in turn is influenced by the economic situation of households. The managers who were interviewed in the study were very much aware that deterioration of the macroeconomic situation may lead to a decrease in the demand for organic foods. At the same time, the consumer may begin to choose products of lower quality with “green labels”. In addition, there may be changes in the purchasing behavior of potential consumers who only prefer buying organic products.

Financial market conditions are related to banking sector policies and interest rates. Liquidity is affected by interest rates on working capital and investment loans, while the level of liabilities determines the amount of debt owed by the company.

3. Financial Limitations

According to processors, distributors, and retailers, financial barriers refer to changes in the exchange rate, loss of liquidity, insolvency of cooperating companies, and increase in production costs.

Companies that purchase raw materials from foreign suppliers and importers must be aware of exchange rate fluctuations. Furthermore, companies that rent commercial space under lease agreements with rates set in euros face greater currency risk.

Fluctuations in the zloty to euro and dollar exchange rates as well as euro to dollar exchange rate have an impact on financial results as they influence the cost level. Changes in purchase and selling prices, on the other hand, make it difficult to manage margins and predict financial results. Unfavorable exchange rate fluctuations increase the cost of business and, consequently, reduce profits or exacerbate losses. This can be possibly overcome by raising prices, which may reduce demand.

Foreign exchange risk management is uncommon in companies in the organic food sector. Some stages of this process are identifying currency risk and determining currency position. The remaining steps, which include forecasting future exchange rates (or monitoring available forecasts), measuring the level of foreign exchange risk, and developing or selecting a strategy to hedge this risk, are only applicable to large retailers. During the interview, the managers of the organic food sector, stated their desire for euro settlements.

“We would like euro in Poland.”

(C19)

One of the main threats that affect the operation of producing or trading companies in the organic food sector is the loss of liquidity. Short-term liquidity problems result in reduced flexibility and modernization plans, a greater focus on day-to-day cash management, and restructuring efforts. Risk management involves cash and cash flow management, including forecasting. Additionally, while determining fixed asset investments, the levels of working capital and financial debt are monitored.

“You have to have extra cash reserves for possible slippage.”

(C14)

“We have a reserve. If we did not have our resource fund, it would be difficult; after all, we must put goods in warehouses, put goods in stores.”

(C4)

“We used to get credit before, so it gives us additional liquidity.”

(C1)

To preserve financial liquidity in organic food companies, it is essential to consider the insolvency of cooperators and the existence of overdue receivables. This includes the late payment of trade receivables and cash flow disruptions.

“We give payment terms of 21 days and want money for 21–28 days. However, suppliers are paid within 7 days after the month of delivery, and they have never been late. Large suppliers are paid after half a month.”

(C4)

“Payment to suppliers—within 14 days, for payment from customers wait approx. 40 days and they still have to remind each other.”

(C14)

“There are delays in payments sometimes affecting financial liquidity.”

(C15)

The risk of cost growth refers to the costs of basic operations. For processing companies in the organic food sector, the costs include salaries and employee benefits and those related to materials and energy consumption and purchase of third-party services. The managers pointed to the following factors as contributing to the increase in costs:

- a significant increase in employee salaries and total labor costs,
- higher prices of organic raw materials and commercial goods, including those purchased from foreign partners due to unfavorable exchange rate fluctuations,
- increased EUR-denominated rents for sales and office space as well as for renovated locations,
- domestic transportation costs (in the case of small processors),
- higher international transportation costs,
- an increase in the cost of external services, and
- an increase in the cost of goods losses due to a variety of factors, including those related to changing the assortment toward a greater share of fresh products, which naturally contributes to an increase in warehouse losses (e.g., expired, spoiled goods).

For companies conducting commercial activity in leased premises, the risk related to lease contracts gains additional significance. On the one hand, long-term lease agreements such as 5 or 10 years, affect

the stability of operations of retail outlets. On the other hand, the unfeasibility of early termination in the event of a decrease in profitability raises costs and precludes flexible management. Thus, the terms and conditions of lease agreements are an important element, but the freedom of business activity allows the interested parties to decide on them. A solution to overcome reduced profitability would be to reassign the premises to another type of business. However, this is complicated by the lack of possibility to extend the lease agreement, due to the costs of relocation of the place of business and adaptation of new premises to the needs of the given units. This kind of limitation applies to any commercial and service activity carried out in multiple locations in leased premises. Such a model of conducting business activity is widely popular due to the high costs of securing premises for ownership.

Among other operating costs, the costs of closing unprofitable retail outlets and creating provisions for this process were pointed out by retailers. The financial costs cited by them included foreign exchange differences, interest on credit, loans, and leases. In addition, they indicated the costs of issuing and maintaining bank guarantees to shopping centers as guarantees of rent payment.

Apart from the costs associated with day-to-day operations, costs resulting from new product launches were reported.

“Raw material a lot and getting more; energy; employees 20–30 people. Modernization and one shift; we don’t work on Sundays and holidays, permanent employees, operating costs are increasing.”

(C1)

“Biggest costs—transport (small batches), diesel prices.”

(C2)

“Highest costs of employees (higher minimum wage, increase in employee costs, social security).”

(C3)

“60–65% as we have the cost analysis is, however, the raw material, then their wages 20%, or their energy 10%, or their fuel.”

(C4)

“The highest is raw material cost.”

(C5)

“The most important are costs of raw material and transport.”

(C6)

“Yes, we are seeing an increase in costs. Logistics affects the cost increase the most.”

(C19)

The assessment of financial status also includes a debt analysis that considers the current level of debt and the ability to cover it. The companies in the organic food sector can be affected by the following limitations: imbalance between long- and short-term debt, interest coverage, and excessive total debt.

In this context, the limitations associated with the business activity of companies and the stability of the

cash flows achieved should also be mentioned. Those companies that have relatively low risk and stable cash flows can make greater use of the external capital.

“Credit’s too expensive, especially compared to other countries.”

References

1. Willer, H.; Trávníček, J.; Meier, C.; Schlatter, B. *The World of Organic Agriculture*; Research Institute of Organic Agriculture FiBL & IFOAM—Organics International: Bonn, Germany, 2021; ISBN 9783037362518.
2. Häring, A.M.; Vairo, D.; Dabbert, S.; Zanolli, R. Organic farming policy development in the EU: What can multi-stakeholder processes contribute? *Food Policy* 2009, 34, 265–272.
3. European Commission. *The European Green Deal*; European Commission: Brussels, Belgium, 2019.
4. European Commission. *Farm to Fork Strategy*; European Commission: Brussels, Belgium, 2020.
5. European Commission. *EU Biodiversity Strategy for 2030 Bringing Nature back into Our Lives*; European Commission: Brussels, Belgium, 2020.
6. Seufert, V.; Ramankutty, N. Many shades of gray—The context-dependent performance of organic agriculture. *Sci. Adv.* 2017, 3, e1602638.
7. Brzezina, N.; Kopainsky, B.; Mathijs, E. Can organic farming reduce vulnerabilities and enhance the resilience of the European food system? A critical assessment using system dynamics structural thinking tools. *Sustainability* 2016, 8, 971.
8. Brzezina, N.; Biely, K.; Helfgott, A.; Kopainsky, B.; Vervoort, J.; Mathijs, E. Development of organic farming in Europe at the crossroads: Looking for the way forward through system archetypes lenses. *Sustainability* 2017, 9, 821.
9. Committee and the Committee of the Regions. *A Farm to Fork Strategy for a Fair, Healthy and Environmentally-Friendly Food System Contents*. Available online: https://agridata.ec.europa.eu/Qlik_Downloads/Jobs-Growth-sources.htm (accessed on 7 September 2021).
10. Harris, J.M. *Global Development and Environment Institute Tufts University Ecological Economics of the Green New Deal*. In *Proceedings of the 2019 ESA Annual Meeting*, Louisville, KY, USA, 11–16 August 2019.
11. Peeters, A.; Lefebvre, O.; Balogh, L.; Barberi, P.; Batello, C.; Bellon, S.; Gaifami, T.; Gkisakis, V.; Lana, M.; Migliorini, P.; et al. A Green Deal for implementing agroecological systems: Reforming the Common Agricultural Policy of the European Union. *J. Sustain. Org. Agric Syst.* 2020, 70, 83–93.
12. Golik, D.; Žmija, D. Rolnictwo ekologiczne i perspektywy jego rozwoju w Polsce w świetle doświadczeń unijnych. *Zesz. Nauk. Uniw. Ekon. W Krakowie* 2017, 1, 117–129.
13. European Committee of the Regions. *Biodiversity Strategy for 2030 Bringing Nature Back into our LIVES*. Available online: <https://ec.europa.eu/research/environment/index.cfm?pg=nbs> (accessed on 7 September 2021).
14. Adewale, C.; Reganold, J.P.; Higgins, S.; Evans, R.D.; Carpenter-Boggs, L. Improving carbon footprinting of agricultural systems: Boundaries, tiers, and organic farming. *Environ. Impact Assess. Rev.* 2018, 71, 41–48.
15. Łuczka, W.; Kalinowski, S.; Shmygol, N. Organic farming support policy in a sustainable development context: A Polish case study. *Energies* 2021, 14, 4208.
16. Serwis Rzeczypospolitej Polskiej. *Raport o Stanie Rolnictwa Ekologicznego w Polsce w Latach 2017–2018*; Serwis Rzeczypospolitej Polskiej: Warszawa, Poland, 2019.
17. Łuczka, W.; Kalinowski, S. Barriers to the development of organic farming: A Polish case study. *Agriculture* 2020, 10, 536.
18. Nuutila, J.; Kurppa, S. The Finnish organic food chain—An activity theory approach. *Org. Agric.* 2016, 6, 49–56.
19. Argyropoulos, C.; Tsiafouli, M.A.; Sgardelis, S.P.; Pantis, J.D. Organic farming without organic products. *Land Use Policy* 2013, 32, 324–328.
20. Blaće, A.; Čuka, A.; Šiljković, Ž. How dynamic is organic? Spatial analysis of adopting new trends in Croatian agriculture. *Land Use Policy* 2020, 99, 105036.
21. Willer, H.; Schlatter, B.; Trávníček, J.; Kemper, L.; Lernoud, J. *The World of Organic Agriculture Statistics and Emerging Trends 2020*; FiBL: Brussels, Belgium, 2020.
22. *Agriculture, Forestry and Fishery Statistics: 2020 Edition*; Publications Office of the European Union: Luxembourg, 2020; ISBN 978-92-76-21521-9.
23. De Cock, L.; Dessein, J.; De Krom, M.P. Understanding the development of organic agriculture in Flanders (Belgium): A discourse analytical approach. *NJAS—Wagening. J. Life Sci.* 2016, 79, 1–10.
24. Sahm, H.; Sanders, J.; Nieberg, H.; Behrens, G.; Kuhnert, H.; Strohm, R.; Hamm, U. Reversion from organic to conventional agriculture: A review. *Renew. Agric. Food Syst.* 2013, 28, 263–275.
25. Serebrennikov, D.; Thorne, F.; Kallas, Z.; McCarthy, S.N. Factors influencing adoption of sustainable farming practices in Europe: A systemic review of empirical literature. *Sustainability* 2020, 12, 9719.

26. Ferreira, S.; Oliveira, F.; Gomes da Silva, F.; Teixeira, M.; Gonçalves, M.; Eugénio, R.; Damásio, H.; Gonçalves, J.M. Assessment of Factors Constraining Organic Farming Expansion in Lis Valley, Portugal. *AgriEngineering* 2020, 2, 111–127.
27. Guccione, G.D.; Pagliarino, E.; Borri, I.; Vaccaro, A.; Borsotto, P. A participatory analysis of the control and certification system in the Italian organic rice value chain. *Sustainability* 2021, 13, 2001.
28. Padel, S.; Vine, J.; Huber, B.; Stolze, M.; Jeperson, L.M.; Rüegg, E.; Meinshausen, F.F.; Compagnioni, A.; Pulga, A.; Belliere, S.R. The European Regulatory Framework and Its Implementation in Influencing Organic Inspection and Certification Systems in the EU; *Organic Eprints*: Tjele, Denmark, 2011.
29. Miśniakiewicz, M.; Łuczak, J.; Maruszewska, N. Improvement of organic farm assessment procedures on the example of organic farming in Poland—recommendations for organic farming in Poland. *Agronomy* 2021, 11, 1560.
30. Leitner, C.; Vogl, C.R. Farmers' perceptions of the organic control and certification process in Tyrol, Austria. *Sustainability* 2020, 12, 9160.
31. Symbio. *Symbio Annual Report*; Symbio: Watford, UK, 2017; pp. 1–50.
32. Milošević, G.; Kulić, M.; Durić, Z.; Durić, O. The taxation of agriculture in the Republic of Serbia as a factor of development of organic agriculture. *Sustainability* 2020, 12, 3261.
33. Euromonitor International Organic Packaged Food in Poland. *Passport Euromonitor International*. In *Organic Packaged Food in Poland*; Passport; Euromonitor International: London, UK, 2017; p. 10.
34. Górka-Warsewicz, H.; Żakowska-Biemans, S.; Czeczotko, M.; Świątkowska, M.; Stangierska, D.; Świstak, E.; Boboła, A.; Szlachciuk, J.; Krajewski, K. Organic Private Labels as Sources of Competitive Advantage—The Case of International Retailers Operating on the Polish Market. *Sustainability* 2018, 10, 2338.
35. Nuutila, J.; Kurppa, S. Two main challenges that prevent the development of an organic food chain at local and national level—An exploratory study in Finland. *Org. Agric.* 2017, 7, 379–394.
36. Kociszewski, K.; Graczyk, A.; Mazurek-Łopacińska, K.; Sobocińska, M. Social values in stimulating organic production involvement in farming—The case of Poland. *Sustainability* 2020, 12, 5945.
37. Zuba, M. Szanse i bariery w integracji łańcucha żywności ekologicznej w Polsce. *Zesz. Nauk. WSEI Ser. Ekon.* 2011, 3, 261–288.
38. Maria, Z.-C.; Aleksandra, K.; Louise, M.; Aneta, B. Organic milk supply in Poland: Market and policy developments. *Br. Food J.* 2019, 121, 3396–3412.
39. Wu, X.; Xiong, J.; Li, H.; Wu, H. The myth of retail pricing policy for developing organic vegetable markets. *J. Retail. Consum. Serv.* 2019, 51, 8–13.
40. Bryła, P. Organic food consumption in Poland: Motives and barriers. *Appetite* 2016, 105, 737–746.
41. Żakowska-Biemans, S. Polish consumer food choices and beliefs about organic food. *Br. Food J.* 2011, 113, 122–137.
42. Żakowska-Biemans, S.; Sajdakowska, M.; Issanchou, S. Impact of Innovation on Consumers Liking and Willingness to Pay for Traditional Sausages. *Pol. J. Food Nutr. Sci.* 2016, 66, 119–127.
43. Żakowska-Biemans, S.; Tekień, A. Free range, organic? Polish consumers preferences regarding information on farming system and nutritional enhancement of eggs: A discrete choice based experiment. *Sustainability* 2017, 9, 1999.
44. Popa, M.E.; Mitelut, A.C.; Popa, E.E.; Stan, A.; Popa, V.I. Organic foods contribution to nutritional quality and value. *Trends Food Sci. Technol.* 2019, 84, 15–18.

Keywords

limitation;organic food sector;legal limitations