Proceedings

The role of food markets in the E.U.: A competitive analysis of organic vs conventional markets

Kiouranakis G.1, Ioannou Z.1 and Sarris D.1

¹Laboratory of Physico-Chemical and Biotechnological Valorization of Food By-Products, Department of Food Science & Nutrition, School of Environment, University of the Aegean, Leoforos Dimokratias 66, Myrina 81400, Lemnos, Greece

* Correspondence: dsarris@aegean.gr

Abstract: A food market (also called a marketplace) is a physical or virtual place where different types of food and culinary products are bought and sold. Most of the time, the atmosphere is lively and bustling, vendors engage in lively sales pitches, and customers enjoy the tactile experience of examining the goods before they buy. The history of food markets in Europe goes back thousands of years and is long, complex, and varied. They are an integral part of European societies and important centers for trade, commerce, and social interaction. The development of food markets in Europe spans many historical periods, from ancient to modern times. Today the way organic food markets work influences many areas of society including: the economy, promoting sustainability, supporting farmers and local producers, promoting loyalty between producers and consumers in society and more. Although there have been cases of fraudulent and misleading labelling, EU law makes it important that organic products go through a certification process. On the other hand, conventional markets have the advantage of being able to produce larger and more consistent yields of food products. In 2018, 13.4 million hectares of land were farmed in the EU and four countries together (Spain, France, Italy, Germany) account for 55.5% of the total EU organic area. The aim of this review is to collect and present data on the role of food markets in the EU and to conduct a competitive analysis of the organic and conventional markets. The study concludes that both conventional and organic markets have their advantages and disadvantages, but also (as mentioned above) food markets are an integral part of European societies, and a healthy, balanced society needs both suppliers that cater to the regulators respond.

Keywords: Food markets; economy; society; E.U

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Introduction

Food markets have been an integral part of trade and commerce for centuries and are characterized by face-to-face interactions between buyers and sellers. They can be in the form of physical or online venues.

Organic markets: Organic markets (also known as organic food markets or organic farmers' markets) are venues where organic food and agricultural products are bought and sold which comply with the production methods and standards of organic farming (Pesticides in organic farming, 2022). Vendors set up booths or shops to display their products, and customers can physically browse their offerings, negotiate prices, and shop locally. These markets come in various forms such as open-air markets, bazaars, street markets or permanent marketplaces.

Conventional markets: Conventional markets (also known as traditional markets) refer to physical locations where goods and services are bought and sold. They can also be a complex, global network of diverse businesses that supplies most of the food that is consumed by the world's population. They include manufacturing scales from small, traditional, family-run activities, highly labor-intensive, to large, capital-intensive, and highly mechanized industrial processes (Parmeggiani L, 2022).

The organic market is the fastest growing sector of the food industry with huge market growth rates combined with an undersupply in many regions (Aertsens, J. et. al., 2009). The rise of digital technologies and e-commerce has led to the emergence of online markets and platforms (United Nations conference on trade and development, 2021). These virtual marketplaces offer convenience and global access, challenging the dominance of conventional markets. However, conventional markets continue to play a vital role in many communities around the world as they preserve local traditions, support small businesses, and offer a unique shopping experience for both locals and tourists.

Some food markets in Europe

- Mercado de San Miguel Madrid,
 Spain
- La Boqueria Barcelona, Spain
- Borough Market London, United Kingdom
- Marché Raspail Paris, France
- Naschmarkt Vienna, Austria

- Mercat de Sant Josep de la Boqueria (Mercat de la Boqueria) - Barcelona, Spain
- Markthalle Neun Berlin, Germany
- Torvehallerne Copenhagen, Denmark
- Mercado Central Valencia, Spain





Image 1 (left): Organic market in Tuscany, source: https://www.tuscanynowandmore.com **Image 2 (right):** Organic market in Germany, source: https://www.naturalproductsglobal.com

Organic markets in E.U.

The history of organic products in the European Union (EU) goes back several decades. European Union is the second largest single organic market (20.9 billion euros) in the world after the United States (22.6 billion euros). The organic farming movement in Europe emerged in the early 20th century in response to concerns about the negative effects of conventional farming options (European commission, 2023). The organic market continues to grow in the European Union, even though some countries are still affected by the economic crisis, leading to stagnation or even decline. The organic market in Europe had increased by approximately 6 percent in 2012 (Organic data network, 2020) accounting for approximately 22.8 billion euros. Data shows that organic produce in the EU demonstrates a commitment to setting clear standards, promoting organic farming practices, and providing consumers with trusted organic options (European commission, 2023). The regulations and certification processes have helped increase consumer confidence in organic products and fueled the growth of the organic market in the EU options (European commission, 2023). The organic market in the EU has grown significantly in recent decades. According to the European Commission, total organic farmland in the EU-27 (before the UK left) reached 14.5 million hectares in 2019, representing 7.7% of total utilized agricultural area. The number of organic farms, including farmers, processors, and importers, has also increased steadily (European commission, 2005). The highest per capita consumption of organic food in 2012 was in Switzerland (189 euros), Denmark (159 euros), and Luxembourg (143 euros). However, care must be taken in interpreting these

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figures as the costs of living differ quite considerably between countries (Schaack, D. et. al. 2014).

Table 1. Top ten countries with the largest market in organic food and beverages (Golijan, 2014).

	Country	Million Euros
1	Germany	7.040
2	France	4.004
3	United Kingdom	1.950
4	Italy	1.885
5	Switzerland	1.520
6	Austria (2011)	1.065
7	Spain	998
8	Sweeden	918
9	Denmark	887
10	Netherlands	791

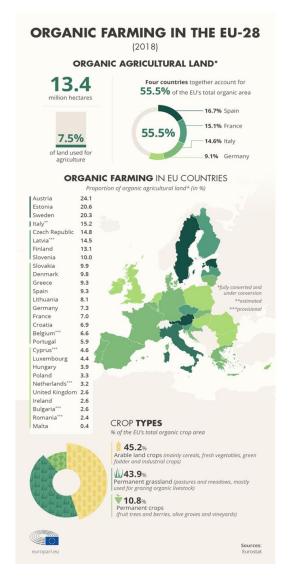


Image 3: Organic farming in the E.U. (European commission, 2023).

Certification of Organic markets in E.U.

Formal regulation and certification of organic products ends in the 1970s and 1980s. The first EU regulation for organic farming in the E.U. was implemented in 1991 by

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Council Regulation (EEC) No. 2092/91 options (European commission, 2023). This regulation sets out the basic principles and rules for organic production, labeling and certification in the EU member states. It defined standards for organic farming practices, including bans on synthetic pesticides and fertilizers, genetic modification, and ionizing radiation. Over the years, the EU has worked to harmonize organic standards and regulations across member states. In 2007, Council Regulation (EC) No. 834/2007 replaced the previous regulation with the aim of strengthening the consistency and credibility of organic farming in the EU. This regulation established the legal framework for organic production, labeling and certification, including the use of the EU organic logo options (European commission, 2023). To keep up with evolving practices and consumer demands, the EU has continued to update its organic regulations and in 2018 Council Regulation (EU) 2018/848 replaced Regulation (EC) No. 834/2007 options (European commission, 2023). This new regulation strengthened the integrity of organic production, introduced stricter import requirements, and emphasized the principles of environmental protection, animal welfare and consumer confidence. The EU has implemented various programs and initiatives to support organic farming and encourage the consumption of organic products. For example, the Common Agricultural Policy (CAP) includes measures to support organic farming through direct payments, rural development programs and research funding. In the European Union (EU), organic foods are regulated and certified according to specific standards set out in the EU Organic Regulation (Regulation (EC) No. 834/2007). The certification ensures that organic food meets defined criteria for organic production, handling, and labelling options (European commission, 2023). The EU organic certification process ensures transparency and consumer confidence in organic food products, enabling consumers to make informed choices based on the organic label and the EU organic logo. Key aspects of the organic certification process in the EU include:

1.Certification Bodies: Organic certification is carried out by authorized certification bodies or bodies, which are independent organizations accredited by EU member states that assess and verify that farmers, processors, and retailers comply with organic regulations options (European commission, 2023).

2.Organic Standards: The EU Organic Regulation sets the standards for organic production and labelling. It defines the principles, practices, and requirements for organic farming, including the use of organic seeds, banned substances, animal welfare, crop rotation, and soil and water conservation. These standards aim to promote sustainable agriculture and ensure the integrity of organic produce options (European commission, 2023).

3.Inspection and Certification Process: Farmers, processors and traders seeking organic certification go through a rigorous inspection process by the certification bodies. Inspectors evaluate the farm's compliance with organic regulations, including production methods, record keeping, and the segregation of organic and non-organic produce. Regular inspections are carried out to verify ongoing compliance options (European commission, 2023).

4.Labeling and Logo: Organic food products certified under the EU regulations can display the EU organic logo, which consists of a green leaf encircled by stars and the words "EU Organic." The use of this logo is optional but helps consumers easily identify organic products within the EU market. Additionally, organic products must be labeled with specific information, including the code of the certification body and the origin of the agricultural ingredients' options (European commission, 2023).

5.Import Requirements: For organic products imported into the EU from non-EU countries, specific rules and requirements apply. Importers must ensure that organic products meet EU organic standards, including the use of recognized organic certification bodies or authorities in the exporting country options (European commission, 2023). Third-country operators exporting organic products to the EU need to be listed and recognized by the EU as equivalent to EU organic standards.

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Image 4: Organic labeling in the E.U.

Table 2: Differences between organic markets/ conventional markets as their production characteristics

teristics				
Production characteristics				
Type of Mar- ket	Advantages	Disadvantages	Reference	
Organic mar- ket	Promotes the organic animal breeding	Limited availability	Muscăn- escu, A.,	
	Promotes sustainable agriculture	Seasonal availability	2013	
	Promotes organic farming	Restrict access for some con-		
		sumers		
		Lower yields- lower produc-		
		tivity		
		High needs for certification	-	
Conventional	Wide Variety of Products	Food Safety Concerns	Marchant,	
market	Accessibility and Convenience	Lack of Transparency	R. 2006,	
	Product Consistency and Quality	Limited Support for Small-	Rossi J. et.	
	Control	Scale Producers	al. 2017	
	Convenience and One-Stop Shop-	Reduced Seasonal and Local		
	ping	Produce		

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Table 3: Differences between organic markets/ conventional markets in regards their impact to the economy/community

Economy-Community					
Type of Mar-	Advantages	Disadvantages	Reference		
ket					
Organic mar-	Support local economies	Higher prices- lower availabil-	Jouzi, Z.		
ket		ity	et. al.		
	Promote organic packaged products	Compliance and certification	2017		
	Promotes sustainability	Misleading- fraud	-		
	Community focused approach		-		
	Promote transparency and trust	-			
	Build a closer connection between	-			
	producers and consumers				
Conventional	Competitive Pricing ⁷		Marchant,		
market			R., 2006,		
			Rossi J. et.		
			al. 2017		

Table 4: Differences between organic markets/ conventional markets towards their nutrition and the environment

Nutrition- Environmental						
Type of Mar- ket	Advantages	Disadvantages	Reference			
Organic mar- ket	Provide consumers with access to high-quality, chemical-free food options		Muscăn- escu, A., 2013			
	Consumers can make informed choices about the food they consume	-				
	Promotes environmental sustainability Prioritize biodiversity conservation	-				
	Promotes animal welfare	-				
Conventional	Flexibility	Environmental Impact	Marchant,			
markets	Information and Labels	Reduced Nutritional Value ⁴	R., 2006, Rossi J. et. al. 2017			

Fraudulent actions in Organic market (Europe)

There have been cases of fraudulent organic certifications in Europe, where conventional products have been fraudulently labeled and sold as organic. A prominent case occurred in 2017 when it was discovered that a large European food company had sold millions of euros worth of conventional eggs as organic eggs. This incident highlighted the challenges in maintaining the integrity of organic certification and the need for robust

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monitoring and enforcement mechanisms (Manning, L., 2021). In some cases, organic products have been found to contain traces of inorganic substances. For example, a 2013 study by the German consumer organization Stiftung Warentest found that certain organic eggs sold in Germany contained residues of the insecticide fipronil, which is banned in organic farming. This incident raised concerns about the possible contamination of organic products and the need for stricter control measures (Manning, L., 2021). Europe imports a significant number of organic products from non-European countries. A few incidents have been identified as non-compliant organic products being imported into Europe. For example, in 2014 the European Union identified fraudulent organic imports from Turkey, leading to tighter controls on the certification and traceability of imported organic products (Empowering organic grain farmers through cooperative marketing, 2018). There were also mislabeling where conventional products were falsely labeled as organic. In 2019, the Swedish Food Administration carried out tests on organic-labeled products and found that a significant proportion did not meet organic standards. This raised concerns about the accuracy of labeling and the need for better oversight.

Discussion – Conclusion

The aim of this study was to analyze and compare the advantages and disadvantages of organic/conventional markets. Data shows that both types of markets have desirable characteristics while others are not positive. For example, in terms of productivity, conventional markets demonstrate the ability to be more flexible to meet the needs of the world's overpopulation, while organic markets can support local communities and sustainability. Food markets have been an integral part of European societies, and a healthy, balanced society needs both suppliers to meet the demands of regulators.

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