Studies in Agricultural Economics 127 (2025) 196-210 https://doi.org/10.7896/ j.3252

SCIENTIFIC ARTICLE

Áron TÖRÖK[A]

Social embeddedness and consumer preferences for farmers' markets: Evidence from three European countries

ABSTRACT

The study aims to explore the role of social embeddedness in consumer shopping behaviour across different retail environments, with a particular focus on farmers' markets. Drawing on a sample of 1,800 European consumers from Hungary, Italy, and the United Kingdom, the study examines apple purchase preferences regarding different product attributes (e.g., price, origin, quality certification) using a discrete choice experiment. A hybrid logit model is estimated to capture the impact of social embeddedness on purchase decisions. The results show that, across the three countries, farmers' markets are the preferred outlet, more so than supermarkets or greengrocers, especially by those consumers who are most embedded in community relations. For Italian consumers, community and cultural aspects are key drivers of purchasing behaviour, while health and quality attributes are the most significant for their British counterparts. Hungarian respondents' decisions are mostly influenced by price factors, although community-driven considerations also matter. The research confirms that farmers' markets are not just places to buy food, but also community spaces where trust, personal connections, and local identity play a significant role. The findings have important theoretical, managerial, and policy implications, particularly for promoting more sustainable, community-based food systems, including short food supply chains.

ARTICLE INFO

Keywords:
social embeddedness; farmers' markets; consumer preferences; consumer behaviour; short food supply chain; sustainable consumption.

JEL classification:
Q13.

[A] *Head of Department of Agricultural Economics, Corvinus University of Budapest, Fővám tér 8 – 1093 Budapest, Hungary. E-mail: aron.torok@uni-corvinus.hu.*

Received: 22 July 2025; **Revised:** 14 October 2025; **Accepted:** 18 October 2025.

Introduction

In an era characterised by rapid globalisation, and in some cases, deglobalisation, technological advancement, pandemics, and shifting political landscapes, the interaction between social relationships and economic systems has never been more crucial (Hamid and Mir, 2021; Kornprobst and Paul, 2021; Maró *et al.,* 2025). Markets are deeply enmeshed in the social and cultural fabric of society. The concept of social embeddedness challenges the notion that economic activities are purely driven by profit-maximising motives or impersonal decisions (Granovetter, 1985; Hunt, 2007). Instead, it focuses on how cultural values, social networks, and trust influence the functioning of these systems and markets and the actors operating within them. Whether related to the informal exchanges of international supply chains or local markets, the social ties that bind individuals and communities play an important role (Heidenreich, 2012; Hunt, 2007; Kirwan, 2004).

The concept of social embeddedness has attracted increasing attention in the context of the food sector, particularly in relation to short food supply chains (SFSCs) (Chen and Scott, 2014; Sonnino, 2007). The latter support alternative and more direct sales from farmers to end-consumers, offering a more localised option than more conventional and globalised food systems. For instance, in the case of farmers' markets (FMs), the close geographical and social connection between producers and consumers not only fosters economic transactions but also strengthens and relies on social relationships and community-building (Migliore *et al.,* 2014). Social embeddedness within FMs is beneficial for several reasons, and its advantages affect multiple stakeholder groups, including consumers, vendors, market managers, and the wider community. The concept of social embeddedness, where economic actions are grounded in social relationships and trust, has been central to understanding the unique dynamics of FMs (Chen and Scott, 2014; Hunt, 2007; Kirwan, 2004). For many people, social embeddedness has come to represent the idea of social connections that shape and enrich the way people engage in economic activities such as FMs (Hinrichs, 2000).

The contribution of this paper is thus threefold. First, to the best of one's knowledge, social embeddedness has not yet been examined using a discrete choice experiment (DCE), particularly in a context involving three different countries where the role of FMs is crucial. Despite various studies on the topic (see e.g.,Chen and Scott, 2014; He and Morales, 2022), the literature either discusses FMs in general

or focuses on a specific region or social aspect. The application of DCE enables a more thorough examination of the role that social factors play in consumers' decisions (e.g., interaction with producers, the influence of values, and community relations). For the study, apples were the subject of investigation, as they are one of the most widely consumed fruits available in various retail outlets across the selected countries. Second, the analysis, conducted on a large sample of European consumers, provides a more reliable context for cross-country comparisons and permits the drawing of generalisable conclusions and policy implications. In the three examined countries (Hungary, Italy, and the UK), distinct regulatory and cultural contexts exist that may significantly impact the role of social embeddedness in FMs. Third, the trend in Europe is to place significantly more emphasis on SFSCs, including FMs. Several EU policies and support programmes, such as the Farm to Fork Strategy and rural development measures supporting short supply chains, explicitly encourage direct contact between producers and consumers. In addition, the COVID-19 pandemic has also focused attention on the resilience of local food systems, further strengthening the demand for and political support of SFSCs (Török *et al.,* 2024). Thus, the findings may be of interest to policymakers who want to strengthen and enhance local food markets and develop more sustainable food systems.

Theoretical background and literature review

Short food supply chains and the characteristics of FMs and their consumers

Since the appearance of modern and longer supply chains in the 20th century, the relationship between producers and consumers has weakened, e.g., in terms of communication and information exchange, which has often led to an increase in information asymmetry and a decrease in consumer trust (Bildtgård, 2008; Török *et al.,* 2022; Török *et al.,* 2024). Conversely, the food safety scandals at the end of the 20th century and the beginning of the 21st century, consumers' commitment to healthier, more sustainable food, and an appreciation of the value of social interaction have strengthened the role of SFSCs again (Basil, 2012; Luo *et al.,* 2022; Marsden *et al.,* 2000; Renting *et al.,* 2003), as they are perceived to be able to help solve these issues and provide an alternative to LFSCs.

Food quality (e.g., healthier and tastier food) (Byker Shanks *et al.,* 2013; Gillespie *et al.,* 2007; Larimore, 2018; Török and Tóth, 2013), food price (Baker *et al.,* 2009; Bullock, 2000; Conner *et al.,* 2010), and market atmosphere (e.g., social interaction, meeting places) (Charatsari *et al.,* 2018; Conner *et al.,* 2009; Holloway *et al.,* 2007; Zepeda and Leviten-Reid, 2004) are the main reasons why individuals purchase food through SFSCs. According to the literature, there are many types of SFSCs that may be classified based on the number of intermediaries, organisational links, and physical distance (Marsden *et al.,* 2000; Michel-Villarreal *et al.,* 2019); e.g., box schemes, community-supported agriculture (CSA), cooperatives, farm-based butchers' shops, farm shops and FMs. FMs were selected for analysis as they represent the most popular and widespread form of SFSCs, especially in the studied countries (Maró *et al.,* 2022; Michel-Villarreal *et al.,* 2019; Murphy, 2011).

Consumers of FMs have some well-defined characteristics. According to the systematic summary of Maró *et al.* (2023), the typical FM customer, with few exceptions, is a middle-aged or older, highly educated woman with 1-2 children in the household and a higher-than-average income. However, there is no consensus in the literature as to what the typical type of residence of an FM buyer is. FMs are visited mainly by residents of small and large cities, as urban people are looking for fresher, tastier, better-quality products (Youngs, 2003). Supporting local farmers and the local economy is important for FM consumers, who prioritise health, quality, and sustainability in their consumption choices (Bazzani and Canavari, 2013; He and Morales, 2022; Malak-Rawlikowska *et al.,* 2019; Shahu *et al.,* 2023)

There are other ways of interpreting the buyer segments of FMs. Classifications identify product-oriented, socially responsible, and entertainment-oriented consumers. This latter segment seeks experiences beyond purchasing and often spends the most, reflecting the attraction of social and community engagement in these spaces (Pilař *et al.,* 2019). Hughes (1992) highlights that middle- and high-income retired people and active professionals are the primary target groups at FMs, with less access for low-income individuals, inadvertently creating a customer base that aligns with the middle-class preference for embeddedness within local food systems. Manalo *et al.* (2003) reveal similar trends: customers who buy directly from farmers often express a willingness to pay a premium for local products, driven by the motivation to preserve farmland and support local agriculture.

Social embeddedness at farmers' markets: a consumer perspective

Social embeddedness in the context of FMs involves the formation of trust, personal connections, and community bonds. This embeddedness creates a shared space that emphasises community and trust, but remains grounded in commercial relations, and this dynamic contributes to social cohesion within local food systems (Hinrichs, 2000). In the case of FMs, the connection between social embeddedness and human values is particularly evident (Benedek *et al.,* 2018; Sonnino, 2007). Such markets are often sustained by support for community cooperation and collective values, rather than a motivation for profit. These factors strengthen the effect of social embeddedness, which has not only an economic but also an ethical and cultural dimension. In the case of local food systems, social embeddedness not only generates economic benefits, but also represents values such as a desire to contribute to strengthening communities (e.g., preferring community, local markets over large stores), sustainability (e.g., choosing environmentally-friendly products), or local identity (supporting local

producers) (Carson *et al.,* 2016; Maró, *et al.,* 2023; Nagy-Peto *et al.,* 2023; Sonnino, 2007). These aspects distinguish FMs from conventional retail environments by fostering direct, face-to-face interaction. Consumers frequently visit FMs not only for high-quality, locally sourced products but also to support sustainable practices and build a connection with local producers (Feagan *et al.,* 2004; Kirwan, 2004). Social embeddedness is beneficial for consumers who seek authenticity in their purchases, as well as for producers who value customer loyalty based on shared values (Chen and Scott, 2014; Feagan *et al.,* 2004; Grashuis and Su, 2023; Kirwan, 2004)

Research has identified that FMs strongly attract a significant number of retired individuals and active professionals who appreciate the community's social aspects (Hughes, 1992). By connecting directly and sharing information with vendors, consumers participate in a form of economic activity that fosters a sense of community and mutual support, thereby enhancing their satisfaction and trust. Similarly, Hunt (2007) describes how customer-vendor interactions at FMs foster mutual relationships that influence vendor practices, prompting vendors to adopt and maintain ethical and high-quality production standards in response to consumer expectations. In contrast, focusing on young adults' expectations and experiences at FMs, Oths *et al.* (2016) reveal that the latter often prefer markets with a lively, festival-like atmosphere, which may, however, risk creating exclusionary spaces. Young adults value variety, green practices, and social experiences, which support a sense of belonging and embeddedness within the community.

Further, the concept of social embeddedness takes on cultural dimensions in various global contexts. Kopczyńska (2017) discusses Polish open-air markets, emphasising how cultural familiarity and local traditions contribute to trust and continuity, while Oñederra-Aramendi *et al.* (2018) highlight similar dynamics in Spain's Gipuzkoa region. Focusing on Central and Eastern Europe, Benedek *et al.* (2018) found that FM consumers are primarily those interested in fresh, high-quality food and are supportive of local farmers. Pilař *et al.* (2019) further identifies consumer segments, noting that entertainment-oriented consumers who seek social and emotional experiences alongside their purchases are among those who spend the most.

Empirical evidence from the literature

Concerning the research area regarding the social embeddedness of FMs, most studies have focused on the United States and Latin America (Hughes, 1992; Hunt, 2007; Kaufmann *et al.,* 2023; Oths *et al.,* 2016; Schoolman *et al.,* 2021), with a growing body of work emerging from Asia (Tsai *et al.,* 2019), while the situation in Europe remains underexplored (Benedek *et al.,* 2018; Kirwan, 2004; Kopczyńska, 2017; Oñederra-Aramendi *et al.,* 2018; Pilař *et al.,* 2019). Based on the literature, Southern and Eastern Europe are underrepresented, with a limited number of cross-country studies that compare the dynamics of FMs across different cultural and regulatory environments. European studies provide some insights but often focus more on the general structure of alternative food networks, in most cases from the producers' perspective, rather than on embeddedness-specific themes (Benedek *et al.,* 2018; Kopczyńska, 2017).

The methodological approaches used in FM and social embeddedness research generally fall into the following categories: Qualitative studies, including ethnography and case studies, capture the lived experiences and social interactions within markets. For instance, Oths *et al.* (2016) employed ethnographic methods to explore young adults' preferences for lively, festival-like market environments, which, while appealing, may risk creating exclusionary spaces. Both Hunt (2007) and Oñederra-Aramendi *et al.* (2018) analysed consumer-farmer interactions and explored social embeddedness through case study analysis with interviews and observations as data sources. In addition, the ethnographic method appears to be based on qualitative interviews when exploring social dynamics in FMs (Kopczyńska, 2017). In terms of quantitative analysis, studies like Pilař *et al.* (2019) and Tsai *et al.* (2019) have used structural equation modelling (SEM) to analyse the relationship between product performance, relational capital, and consumer well-being, emphasising the economic and social impact of FM experiences on repurchase intentions and satisfaction. In addition, several studies have combined qualitative and quantitative approaches, using surveys, interviews, and statistical models (He and Morales, 2022; Hinrichs, 2000; Hughes, 1992; Kaufmann *et al.,* 2023).

Despite the valuable contributions of such research (see more details above), significant research gaps are identifiable that are related to methodology, sample size, and area of research. First, DCE, a method often used in consumer behaviour studies to quantify the impact of different factors on decision-making (see e.g., Lockshin *et al.,* 2006; Maró, Balogh, *et al.,* 2023), has not been applied in the context of social embeddedness and the consumers of FMs. Employing DCE could generate a nuanced understanding of the specific attributes and characteristics, both intrinsic and extrinsic (e.g., product origin, price, or farmer interaction) that influence consumer choices at FMs. The application of this model could clarify the relative importance of social embeddedness elements in purchasing decisions and allow for a more quantitative analysis of consumer motivations. Second, the sample size in FM studies, with some exceptions (Pilař *et al.,* 2019; Schoolman *et al.,* 2021; Tsai *et al.,* 2019), is often limited, resulting in less robust statistical power and generalisability. Conducting larger-scale surveys could improve the validity of findings and provide more statistically significant insight into the sociodemographic characteristics and preferences of FM consumers. Third, there is a lack of comparative, cross-country research in Europe. As most studies are conducted within a single country or region (Benedek *et al.,* 2018; Pilař *et al.,* 2019; Schoolman *et al.,* 2021; Tsai *et al.,* 2019), a cross-European study could address unique regulatory, cultural, and economic variations across markets in different regions. This approach would not only fill the geographic gap in the literature but also reveal how national policies and cultural values shape social embeddedness within markets.

Materials and methods

Research process, description of the sample

This study builds on Török *et al.* (2025), and examines the interaction between the point of sale and the social embeddedness of the FM. To investigate consumer preferences for apples, a discrete choice experiment was conducted with the attributes and levels presented in Table 1.

After defining the attributes (and their levels), the design of the discrete choice experiment was tested through a pilot survey. This was conducted with 120 participants ($n_{British}$=40, $n_{Hungarian}$=40, $n_{Italian}$=40) in October 2023. The design of the experiment was based on the parameter combination 16-3-7 (number of decision situations, number of alternatives included in decision situations, number of attributes characterising the alternatives) in the context of a D-efficient experimental design (Rose and Bliemer, 2009). Due to the large number of choice situations, the pilot survey was blocked, with 16 choice situations arranged in 2 blocks, so that respondents were faced with only 8 choice situations. In addition, in order to reduce the bias caused by the hypothetical situation, a *"no choice"* option was included in all decision alternatives.

Data from the pilot survey were analysed by performing conditional logit (CL) model estimations by country. Based on this, it was considered to be necessary to revise the way decision situations were presented. A kind of mixed approach was applied, often used in discrete choice experiments: i) presentation of the decision situations in tabular form without image illustration or ii) presenting decision situations with pictorial alternatives. This was achieved by presenting the alternatives to the decision situations to the participants, primarily in a tabular format (without illustrations). However, when participants approached the alternative (e.g., using the computer's cursor or its smart device equivalent), they were presented with a picture of it. An example is shown in Figure 1. The decision situations were introduced with the following text: "*Please imagine a situation in which you want to buy apples. Let's say you have to choose between three types of apples, all of which are the same size, but differ in some of their product attributes. Please decide which of the three options you would select, or mark 'no choice' if you would not buy any of them. You will be presented with eight different FICTITIOUS decision scenarios. Please consider each decision scenario to be completely independent from the others!*".

The experimental design in the final survey was also of D-efficient type, again with three apple options (with seven traits) and one 'no-choice' option. The only difference from the pilot survey design was that the number of choice situations was increased from 16 to 32 to generate more variability in the data. Accordingly, the number of blocks was doubled (4). Descriptive details of the sample are presented in Table 2. The sample is representative in all three countries in terms of gender and age distribution.

Table 1: Attributes of discrete choice experiment.

Attributes	Level of attributes	Description of attributes	Supporting literature
Point of sale	Farmers' market	Place where the product was purchased.	Maró, Maró, *et al.* (2023); Platania *et al.* (2015); Vermeir *et al.* (2023)
	Supermarket		
	Grocery store		
Aesthetic appearance	Perfect	The appearance and perfection of the product can be determined by visual inspection.	Aschemann-Witzel *et al.* (2021); Ceschi *et al.* (2018); de Hooge *et al.* (2017)
	Slightly imperfect		
	Fully imperfect		
Organic	Yes	Whether the product has an organic certified label.	Akpinar *et al.* (2009); Massaglia *et al.* (2019); Meyerding and Merz (2018)
	No		
Geographical indication	Yes	Whether the product has a Geographical Indication label.	Maró, Balogh, *et al.* (2023); Massaglia *et al.* (2019); Török and Jámbor (2013); Török *et al.* (2020)
	No		
Origin	Local	Local, domestic, or imported product.	Kim and Kim (2022); Massaglia *et al.* (2019)
	National		
	Imported		
Colour	Red	Product colour is red, green, yellow, or mixed.	Ceschi *et al.* (2018); Moser and Raffaelli (2012); Skreli and Imami (2012)
	Green		
	Yellow		
	Mixed colours		
Price	329 Ft / 1.49 € / 1.99 £	Different product price HUF, EUR, or GBP (based on the surveyed country).	Ceschi *et al.* (2018); de Hooge *et al.* (2017); Vermeir *et al.* (2023)
	659 Ft / 2.39 € / 3.39 £		
	989 Ft / 3.29 € / 4.69 £		
	1,299 Ft / 4.19 € / 5.99 £		

Source: Own composition

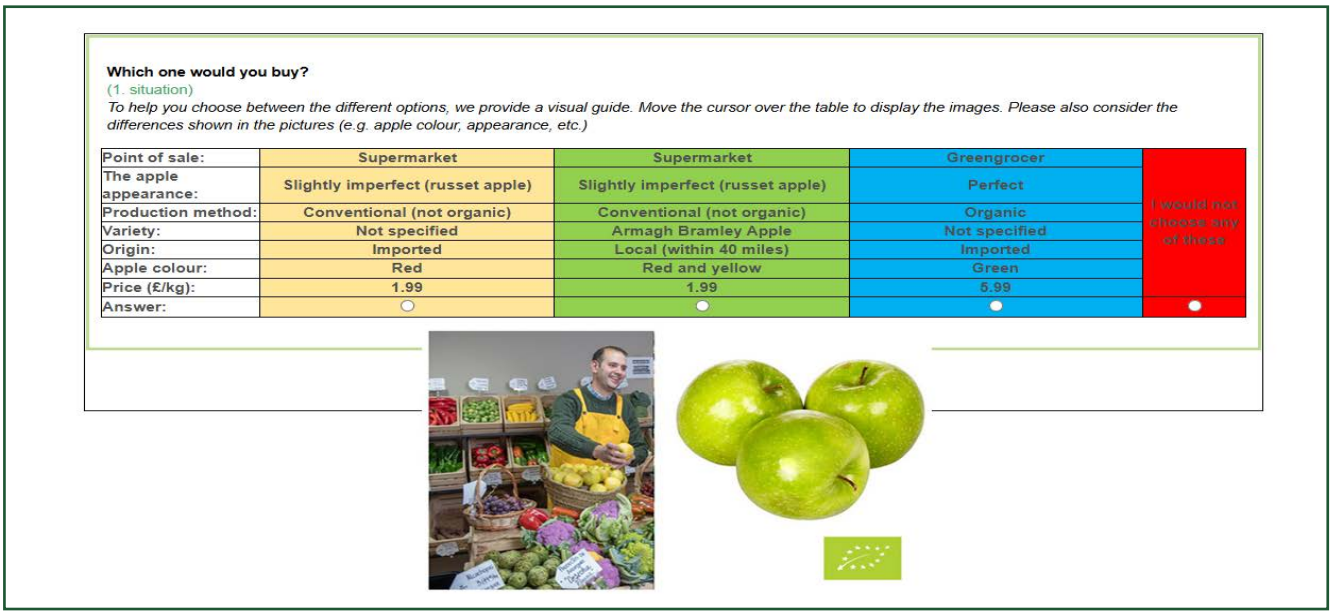

Figure 1: Example of a decision situation.

Source: Own composition

Table 2: Sample structure across the three countries.

	UK (*n*=600)	Hungary (*n*=614)	Italy (*n*=600)
Gender (%)			
Female	52.17	50.33	51.00
Male	47.50	49.51	49.00
Other/Prefer not to say	0.33	0.16	0.00
Age category (%)			
18–24	11.67	10.10	8.17
25–34	21.67	18.08	14.83
35–44	19.33	20.85	18.00
45–54	20.17	23.29	23.33
55–64	17.83	15.96	25.83
65–70	9.33	11.73	9.83
Education level (%)			
Lower secondary education or below	16.33	2.77	9.50
Upper secondary education or a college qualification below degree level	37.67	59.45	57.00
Higher education	46.00	37.79	33.50
Residence (%)			
City	39.50	41.53	36.17
Medium/Large town	44.83	39.25	52.00
Village	15.67	19.22	11.83
Household size (%)			
1 person	16.50	12.54	13.00
2 persons	32.00	39.74	25.00
3 persons	19.67	23.13	28.17
4 or more persons	31.83	24.59	33.83
Subjective income level category (%)			
Very low	38.17	32.74	39.67
Low	13.67	14.33	14.67
Medium low	14.33	14.01	16.83
Medium high	12.67	14.82	11.83
High	6.83	8.96	5.83
Very high	14.33	15.15	11.17

Note: The subjective income categories were constructed based on the five statements of the Consumer Financial Protection Bureau (2024), measured on a 7-point agreement scale (where '1' indicated strong disagreement and '7' indicated strong agreement): (1) *A large, unexpected expense would be difficult for me to handle*; (2) *I'm just getting by financially*; (3) *In a given month, a gift intended for a wedding, birthday, or other event will burden me financially*; (4) *By the end of the month, I have no money left to spend*; (5) *Sometimes I have unpaid bills.* In order to create subjective income categories from the scores given to the statements, the categorisation of the CFPB was used after converting the aggregate scores into percentages (e.g., the highest aggregate score for a respondent was 35 points, which represented the highest level of income sensitivity): (1) 0-29–very low; (2) 30-37–low; 38-49–medium-low; 50-57–medium-high; 58-67–high; 68-100–very high. It is important to note that, for ease of interpretation, the category names have been reversed (since, in this case, a high score indicated a worse income situation), so "very low" refers to the weakest income situation, while "very high" refers to the most stable income situation.

Source: Own composition

Methodology

Discrete choice modelling is based on random utility maximisation (RUM) within the framework of random utility theory (RUT). This assumes the utility maximisation of the individual and decomposes the total utility into an observable and an unobservable (random) part according to Equation (1) (Ben-Akiva and Lerman, 1985).

$$U_{n,i,t} = V_{n,i,t} + \varepsilon_{n,i,t} \quad (1)$$

where U denotes the total utility, V the observable part of utility, ε the random part of utility, n the individual, i the alternative and t the decision situation.

One of the oldest RUT-based model types that is used is the conditional logit (CL) specification (McFadden, 1972). Despite the many advantages of the CL specification, several disadvantages exist, one of the most crucial being the assumption of homogeneous preferences. To overcome this limitation, there are both simpler solutions (e.g., creating and modelling interactions) and more complex ones (e.g., creating latent classes, including random parameters) (Mariel *et al.,* 2021). Among the latter, in the case of so-called random parameter logit (RPL) modelling, the coefficients of the attributes under study are no longer treated as fixed but are defined as distributions (along which they are allowed to vary among the respondents), and then their parameters are estimated (McFadden and Train, 2000; Train, 2009). In the case of RPL modelling, the specification of the utility function could be defined (focusing on the systematic part) according to Equation (2).

$$V_{n,i,t} = \beta'_n X_{n,i,t} \quad (2)$$

where β'_n denotes the parameter vector estimated for the observed attributes for the n-th decision maker, and X indicates the vector of observed attributes.

For the modelling, the utility function in Equation (3) can be derived from Equation (2).

$$\begin{aligned} V_{n,i,t} = {} & ASC_i + \\ & + \beta_{Farmers'market,n_{Point\ of\ sale}} Farmers'\ market_{Point\ of\ sale_{n,i,t}} + \\ & + \beta_{Supermarket,n_{Point\ of\ sale}} Supermarket_{Point\ of\ sale_{n,i,t}} + \\ & + \beta_{Perfect,n_{Ugliness}} Perfect_{Ugliness_{n,i,t}} + \\ & + \beta_{Slightly\ perfect,n_{Ugliness}} Slightly\ perfect_{Ugliness_{n,i,t}} + \\ & + \beta_{Organic,n_{Label}} Organic_{Label_{n,i,t}} + \\ & + \beta_{GI,n_{GI\ indication}} GI_{GI\ indication_{n,i,t}} + \\ & + \beta_{Local,n_{Origin}} Local_{Origin_{n,i,t}} + \\ & + \beta_{National,n_{Origin}} National_{Origin_{n,i,t}} + \\ & + \beta_{Red,n_{Colour}} Red_{Colour_{n,i,t}} + \\ & + \beta_{Green,n_{Colour}} Green_{Colour_{n,i,t}} + \\ & + \beta_{Yellow,n_{Colour}} Yellow_{Colour_{n,i,t}} + \\ & + \beta_{Price,n} Price_{n,i,t}, \end{aligned} \quad (3)$$

where ASC_i denotes the alternative-specific constant estimated for the i-th alternative and β-s denotes the random parameters estimated for the attributes (except for price, where a lognormal distribution was used, a normal distribution was applied for all attributes, with 500 MLHS throws (Hess *et al.,* 2006)). In the modelling, a dummy specification for categorical attributes was used, so for these attributes, one category was always treated as a base reference: namely, grocery store (point of sale), fully imperfect (Aesthetic appearance), no organic (organic label), no GI (GI indication), imported (origin), mix of colour (colour).

To examine the interaction between the location of FM and social embeddedness, hybrid choice modelling (HCM) was employed, supplemented by the previously described random parameter approach (hereafter, the HRPL model). The empirical framework allows to incorporate factors that are not directly quantifiable through hybrid modelling – in this study, social embeddedness is approximated using 10 Likert-scale items (as outlined below) (McFadden, 1986). In addition to extending the choice model (by integrating the latent variable(s)) in the HCM, two further components are added to the standard structure. On the one hand, structural equation(s) (the latent variable(s) are described as a function of certain explanatory variables) were defined and on the other hand, measurement equation(s) (the latent variable(s) are related to certain indicator(s) measuring the attitude(s) under study) were developed (Bolduc *et al.,* 2008; Mariel *et al.,* 2015). The extended structure for the HCM is shown in Figure 2 (Walker and Ben-Akiva, 2002).

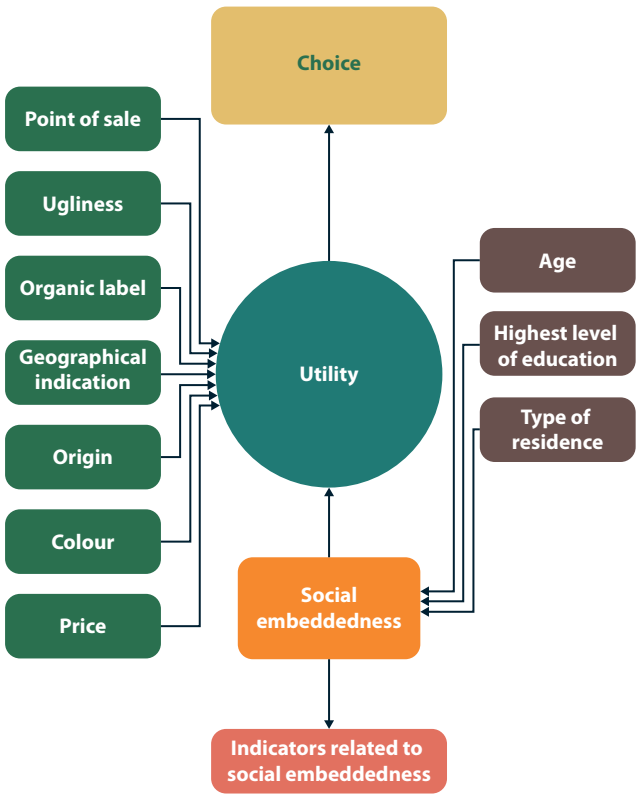

Figure 2: The study's hybrid choice modelling approach.
Source: own composition

The interaction with the latent variable (integrated in the choice model) and the structural and measurement equations are defined according to Equation (4), Equation (5), and Equation (6).

$$\beta_{Farmers'market,n_{Point\ of\ sale_{New\ term}}} = \\ = \beta_{Farmers'market,n_{Point\ of\ sale}} + \lambda LV_n \quad (4)$$

where λ denotes the coefficient representing the interaction effect of the latent variable of FM and social embeddedness.

$$LV_n = \gamma_{Age_{Level\ 1}} Age_{Level\ 1_n} + \gamma_{Age_{Level\ 2}} Age_{Level\ 2_n} + \\ + \gamma_{Age_{Level\ 3}} Age_{Level\ 3_n} + \gamma_{Age_{Level\ 4}} Age_{Level\ 4_n} + \\ + \gamma_{Age_{Level\ 5}} Age_{Level\ 5_n} + \\ + \gamma_{Education_{Lower\ secondary}} Education_{Lower\ secondary_n} + \\ + \gamma_{Education_{Upper\ secondary}} Education_{Upper\ secondary_n} + \\ + \gamma_{Residence_{Village}} Residence_{Village_n} + \\ + \gamma_{Residence_{Town}} Residence_{Town_n} + \eta_n \quad (5)$$

where γ indicates the parameter vector of the structural model explanatory variable, and η_n denotes the random term, and

$$ME_{k,n} = \zeta_k LV_n + \sigma_{k,n} \quad (6)$$

where ζ_k denotes the estimated coefficient on the latent variable for the k-th statement, while $\sigma_{k,n}$ indicates the random member of the measurement model.

The latent variable (social embeddedness) was measured by using a 7-point Likert scale (1: totally disagree to 7: totally agree) for various statements derived from previous studies (Hunt, 2007; Oths *et al.,* 2016; Tsai *et al.,* 2019):

1. The direct relationship with the producer is an important reason for me to buy at farmers' markets.
2. I like/love purchasing food at farmers' markets.
3. My purchases at farmers' markets might influence the producers' production decisions.
4. At the farmer's market, I not only buy products but also talk with the producers.
5. At the farmer's market, I can get additional information about the production methods of specific products.
6. I trust the producer from whom I buy at farmers' markets (in terms of product quality, standards, etc.).
7. The farmers' market creates a closer connection with agriculture and food for consumers.
8. Shopping at farmers' markets is more pleasant than at other grocery stores.
9. Time spent at farmers' markets is valuable to me because it means time spent with friends/family.
10. I feel that time slows down a bit when shopping at farmers' markets.

With the Likert-scale statements, the measurement equations were created based on the so-called ordered structure (Daly *et al.,* 2012); i.e., for each statement, a threshold parameter l-1 (where l is the number/level of categories of statements) was estimated. The D-efficient experimental design was generated using Ngene 1.2 software, while the model estimations were carried out using the Apollo package within the R programming environment (Daly *et al.,* 2012; Hess and Palma, 2019; Hess and Palma, 2021; Ngene, 2018). To assess the perceptions of the statements, a one-way ANOVA was conducted to evaluate significant differences across countries, with Bonferroni post-hoc tests applied for the pairwise comparisons (Field, 2005).

Results

Descriptive statistics associated with the examined statements regarding social embeddedness

Table 3 compares consumer attitudes towards FMs in Hungary, Italy, and the UK, based on the aforementioned ten statements. The statements examined consumer attitudes in terms of experience, trust, social connections, and interaction

Table 3: Descriptive statistics associated with the statements examined by country.

Statement	UK			Hungary			Italy		
	Mean	Median	S.D.	Mean	Median	S.D.	Mean	Median	S.D.
Statement 1	4.79	5.00	1.46	4.40	5.00	1.80	4.86	5.00	1.33
Statement 2	4.86	5.00	1.47	4.96	5.00	1.67	4.97	5.00	1.34
Statement 3	4.68	5.00	1.34	4.57	5.00	1.67	4.78	5.00	1.22
Statement 4	4.58	5.00	1.58	4.49	5.00	1.84	5.04	5.00	1.32
Statement 5	5.00	5.00	1.39	4.91	5.00	1.66	5.10	5.00	1.18
Statement 6	5.26	5.00	1.22	5.02	5.00	1.51	5.11	5.00	1.18
Statement 7	5.41	6.00	1.25	5.23	5.00	1.41	5.26	5.00	1.22
Statement 8	5.15	5.00	1.33	4.65	5.00	1.72	5.00	5.00	1.29
Statement 9	4.56	5.00	1.58	4.19	5.00	1.89	4.68	5.00	1.44
Statement 10	4.70	5.00	1.43	4.35	5.00	1.78	4.80	5.00	1.30

Note: S.D. denotes the standard deviations.
Source: Own composition

Table 4: Examination of differences in the strength of agreement with statements by country.

Statement	Country		UK	Hungary	Italy
	F-value	p-value	Mean	Mean	Mean
Statement 1	15.50	<0.01	4.79[a]	4.40[b]	4.86[a]
Statement 2	0.95	0.38	4.86	4.96	4.97
Statement 3	3.45	0.03	4.68[ab]	4.57[a]	4.78[b]
Statement 4	20.65	<0.01	4.58[a]	4.49[a]	5.04[b]
Statement 5	2.73	0.07	5.00[ab]	4.91[a]	5.10[b]
Statement 6	5.39	<0.01	5.26[a]	5.02[b]	5.11[ab]
Statement 7	3.48	0.03	5.41[a]	5.23[b]	5.26[ab]
Statement 8	18.68	<0.01	5.15[a]	4.65[b]	5.00[a]
Statement 9	14.64	<0.01	4.56[a]	4.19[b]	4.68[a]
Statement 10	14.50	<0.01	4.70[a]	4.35[b]	4.80[a]

Note: The Bonferroni post-hoc test was used for pairwise comparisons. Different superscripts (a, b) indicate statistically significant differences in the respondents' agreement with the statements in the respective countries. Identical superscripts indicate no differences between those countries. The lack of superscripts indicates that there is no significant difference among any of the three countries examined.
Source: Own composition

with farmers. Overall, consumers in all three countries have a positive attitude towards FMs, with Italy scoring particularly high on the areas of interaction (Statement 4), information (Statement 5), and a sense of time slowing down (Statement 10). UK respondents show particularly high levels of trust in farmers (Statement 6, mean: 5.26) and a stronger connection to agriculture (Statement 7, mean: 5.41).

In Hungary, respondents also hold a positive opinion of FMs, but the standard deviation is consistently higher, indicating greater differences among respondents. Interestingly, Hungarian respondents like these points of sale the most (Statement 2, mean: 4.96), but they award slightly lower values in terms of experiential and social values (Statements 8–10). The results clearly show that FMs are not only shopping venues but also social and cultural meeting places, especially in the case of Italian respondents, where the role of interaction and information gathering is even more pronounced. The data from these three countries suggest that, although the motivations are similar, their intensity may vary from country to country, influenced by cultural habits and shopping preferences.

Based on the ANOVA analysis and post-hoc procedure, significant differences were found between countries for nine out of the ten statements (Table 4). The largest differences apply to the statements related to interaction. Italian respondents are much more likely to talk to farmers (Statement 4) and to gather information about production methods. It is also notable that Italian consumers perceive that time 'slows down' at FMs (Statement 10), with time spent there perceived as more valuable, especially from a social perspective (Statement 9). UK respondents value shopping at FMs for providing them with a stronger connection to agriculture (Statement 7) and associate them with a high level of trust in producers (Statement 6). In contrast, Hungarian respondents' ratings are lower for several statements, especially in relation to social and emotional factors. Although their attitudes are generally positive, there is less emphasis on the social experience, the value of time, or the sense of customer influence on production. Overall, British and Italian consumers have a more intense, emotional connection with FMs, while Hungarian respondents have a more rational, moderate attitude towards them.

Consumer preferences and the impact of social embeddedness

Table 5 presents the results of the HCM model estimated with these conditions augmented with random parameters (hereafter referred to as the hybrid random parameter logit model – HRPL). The model estimates presented in Table 5 highlight interesting trends in the purchasing preferences of the three countries. "No choice", i.e., when the customer would not choose any of the product options, was significantly less preferred than making any purchase decision in all countries, suggesting that consumers are fundamentally open to making decisions and purchasing products if there is an option that suits them. The point of sale also plays an important role. In all of the countries investigated, FMs were significantly preferred by consumers over traditional grocery stores. This is likely due not only to the quality of the food but also to the shopping experience and the connection with the producers, as previously discussed. In contrast, shopping at a supermarket was not associated with a statistically significant effect, suggesting that this is perceived as a rather neutral, routine shopping location not associated with any preference. The appearance of the apple, especially its perfection, had varying effects across different countries. Among British consumers, appearance had only a limited influence on the purchase decision, with slightly imperfect apples eliciting a small positive reaction (10% significance level). In contrast, Italians and Hungarians clearly prefer perfect apples, and Hungarians even judged slightly imperfect apples more favourably than fully imperfect ones. This may indicate that Hungarian and Italian consumers place more emphasis on aesthetics, while British consumers may be more concerned with naturalness cues or food waste.

The model results further highlight interesting differences in consumer preferences. In the case of the organic attribute, British and Italian consumers clearly prefer products with a certified organic label, while for Hungarian consumers, this

Table 5: Preference-space estimates by HRPL specification.

Attributes and Model Details	UK	Hungary	Italy
	HRPL	HRPL	HRPL
	Coeff.	Coeff.	Coeff.
ASC no choice	−4.07*** (0.21)	−2.60*** (0.16)	−3.58*** (0.18)
Farmers' market	0.33*** (0.09)	0.56*** (0.10)	0.27*** (0.07)
Farmers' market (S.D.)	−0.62*** (0.11)	−0.67*** (0.10)	0.72*** (0.09)
Supermarket	−0.01 (0.08)	−0.09 (0.08)	0.01 (0.08)
Supermarket (S.D.)	−0.48** (0.21)	0.67*** (0.13)	−0.64*** (0.17)
Perfect	0.06 (0.12)	0.59*** (0.13)	0.36*** (0.11)
Perfect (S.D.)	1.42*** (0.13)	−1.47*** (0.15)	−1.24*** (0.15)
Slightly imperfect	0.10* (0.07)	0.22*** (0.07)	0.04 (0.07)
Slightly imperfect (S.D.)	<0.01 (0.13)	−0.21* (0.16)	0.12 (0.18)
Organic	0.13*** (0.05)	−0.05 (0.05)	0.33*** (0.06)
Organic (S.D.)	0.52*** (0.13)	−0.60*** (0.11)	−0.87*** (0.08)
GI	0.26*** (0.06)	0.48*** (0.06)	0.53*** (0.06)
GI (S.D.)	−0.29** (0.17)	0.54*** (0.11)	−0.60*** (0.09)
Local	0.47*** (0.09)	0.56*** (0.08)	0.59*** (0.08)
Local (S.D.)	0.44*** (0.10)	0.34*** (0.14)	−0.25** (0.12)
National	0.20** (0.11)	0.36*** (0.09)	0.39*** (0.10)
National (S.D.)	0.10 (0.22)	<0.01 (0.21)	0.03 (0.14)
Red	0.06 (0.05)	0.23*** (0.06)	−0.06 (0.05)
Red (S.D.)	−0.36** (0.16)	0.19 (0.19)	<0.01 (0.24)
Green	0.06 (0.07)	−0.06 (0.08)	0.05 (0.08)
Green (S.D.)	−0.49*** (0.18)	−0.02 (0.39)	−0.35** (0.20)
Yellow	−0.05 (0.08)	−0.16** (0.08)	0.03 (0.09)
Yellow (S.D.)	0.32 (0.42)	−0.26 (0.39)	0.78*** (0.13)
Price	−0.92*** (0.07)	−0.40*** (0.05)	−1.24*** (0.07)
Price (S.D.)	0.97*** (0.14)	0.46*** (0.15)	1.20*** (0.11)
Λ (social embeddedness – farmers' market)	0.36 (0.07)	0.37*** (0.09)	0.27 (0.06)
Observations	4,800	4,912	4,800
PsR-squared	0.24	0.22	0.23
Log-likelihood (0) (for choice model)	−6,654.21	−6,809.48	−6,654.21
Log-likelihood (final) (for choice model)	−5,023.94	−5,325.41	−5,149.65
AIC	27,946.58	29,372.77	26,676.21
BIC	28,626.60	30,055.21	27,356.23

Note: The robust standard errors are shown in parentheses below the parameter estimates; S.D. denotes the standard deviations; ASC represents the alternative-specific constant; ASC choice, Grocery store, Fully imperfect, No organic label, No Geographical Indication, Imported, Mix of colour were defined as the base levels in the estimates; ***, **, * indicate statistical significance at the 1%, 5% and 10% levels, respectively; λ denotes the effect of the latent variable in the choice model. AIC denotes the Akaike Information Criterion; BIC denotes the Bayesian Information Criterion.
Source: Own composition

label does not have a significant influence. This may indicate that in Western Europe, organic certification already enjoys strong consumer confidence, while in Hungary, it is even less seen as a guarantee of quality or healthiness. The existence of a GI label has a significant impact on decisions in all three countries. This suggests that authenticity associated with place of origin and the quality associated with a geographical region is a valued attribute everywhere. Consumers likely perceive such products as representing uniqueness, tradition, and a controlled origin. Specifically in terms of origin, similar trends exist across the three countries: consumers prefer local and national products over imported goods. The colour of the apple does not generally significantly influence choices, i.e., only red, green, or yellow apples are not significantly pre-

ferred over a colour mix (the exception is the Hungarian sample, where red apples are significantly preferred and yellow apples are significantly less preferred than the colour mix). The effect of price, on the other hand, is quite clear. There is a significant negative relationship between the price of the product and purchasing preferences. The higher the price, the weaker the preference for the product; this follows classical economic logic and clearly reflects that price remains a decisive consideration for consumers, regardless of the location of purchase or other product characteristics.

The effect of the latent variable measuring social embeddedness is positive and significant in all three countries, showing that the more embedded a consumer is in community and social networks, the more they prefer FMs over traditional grocery stores. This finding supports the idea that FMs are not just shopping venues, but also social spaces where people build relationships, experience community, and, as a result, develop stronger attachments to this form of shopping. The results, therefore, paint a complex picture. In addition to product characteristics, personal and social background have a significant impact on how and where people shop.

Understanding social embeddedness across consumer groups

The estimated coefficients for the two additional components of the model structure in Figure 2 are presented below, focusing first on the structural equation by country in Table 6. Based on the estimated coefficients in Table 6, age and education have a significant impact on the level of social embeddedness in all three countries. Certain demographic characteristics can determine the extent to which a consumer feels connected to their community and social networks, which, as previously discussed, also influence preferences related to FMs, which, as previously discussed, also influence preferences related to FMs. In the UK, younger consumers and particularly those in the 35-44 age bracket display higher social embeddedness than their older counterparts. This may be surprising at first, as it is often assumed that older people are more strongly connected to local communities. However, based on the British sample, the middle-aged generation appears to be more socially active. At the same time, compared to those with a higher level of education, respondents with a secondary education level have significantly lower social embeddedness.

In Hungary, other types of age differences can be observed. Respondents aged 45–65 and under 25 appear to be less socially embedded than those over 65. This may indicate that members of the oldest age group in the country are still more strongly connected to communities – perhaps they live in rural environments where relationships are more long-lasting and rooted in the local territory. A similar pattern can be observed in the case of Italy. The social embeddedness of the younger age group (under 25) is significantly less than that of those over 65. It should also be noted that consumers with a lower (only primary) education feel less socially connected than those with a higher education.

Table 7, which presents the structure of the hybrid model, contains the estimated ζ coefficients of the measurement equations for the latent variable (social embeddedness) broken down by country. These coefficients show the extent to which the latent variable explains the responses to the different attitude statements. Based on the results, all estimated coefficients are positive and significant, indicating that, on average, the higher the respondent's level of social embeddedness, the higher the rating they give to the attitude statements. This supports the notion that social connectedness

Table 6: Estimated coefficients associated with the structural equation regarding the hybrid model structure.

Structural equation parameters	UK	Hungary	Italy
	Coeff.	Coeff.	Coeff.
$\gamma_{Age_{Level\ 1}}$	0.27 (0.22)	–0.53* (0.35)	–0.20* (0.13)
$\gamma_{Age_{Level\ 2}}$	0.35* (0.25)	–0.26 (0.23)	0.04 (0.14)
$\gamma_{Age_{Level\ 3}}$	0.44** (0.20)	–0.28 (0.23)	–0.11 (0.15)
$\gamma_{Age_{Level\ 4}}$	0.33* (0.21)	–0.31* (0.22)	0.01 (0.18)
$\gamma_{Age_{Level\ 5}}$	0.10 (0.31)	–0.49** (0.24)	0.15 (0.15)
$\gamma_{Education_{Lower\ secondary}}$	–0.18 (0.16)	0.19 (0.39)	–0.49* (0.33)
$\gamma_{Education_{Upper\ secondary}}$	–0.23* (0.16)	0.01 (0.13)	–0.02 (0.09)
$\gamma_{Residence_{Village}}$	<0.01 (0.50)	0.14 (0.14)	0.17 (0.24)
$\gamma_{Residence_{Town}}$	–0.08 (0.11)	0.10 (0.13)	0.05 (0.13)

Note: The robust standard errors are shown in parentheses below the parameter estimates. ***, **, * indicate statistical significance at the 1%, 5% and 10% levels, respectively.
Source: Own composition

Table 7: Estimated coefficients associated with the measurement equation regarding the hybrid model structure.

Measurement equation parameters	UK	Hungary	Italy
	Coeff.	Coeff.	Coeff.
ζ_{k1}	1.07*** (0.09)	1.49*** (0.12)	1.41*** (0.13)
ζ_{k2}	1.20*** (0.09)	1.44*** (0.13)	1.58*** (0.16)
ζ_{k3}	0.82*** (0.07)	1.07*** (0.10)	0.85*** (0.10)
ζ_{k4}	1.07*** (0.09)	1.49*** (0.14)	1.41*** (0.14)
ζ_{k5}	1.06*** (0.09)	1.40*** (0.11)	1.32*** (0.12)
ζ_{k6}	1.14*** (0.10)	1.30*** (0.12)	1.24*** (0.11)
ζ_{k7}	0.98*** (0.09)	1.05*** (0.10)	1.18*** (0.12)
ζ_{k8}	1.17*** (0.11)	1.89*** (0.13)	1.47*** (0.13)
ζ_{k9}	1.00*** (0.10)	1.55*** (0.13)	1.11*** (0.11)
ζ_{k10}	0.82*** (0.09)	1.09*** (0.10)	0.73*** (0.09)

Note: The robust standard errors are shown in parentheses below the parameter estimates. ***, **, * indicate statistical significance at the 1%, 5% and 10% levels, respectively; The parameters of the three highest and most influential statements are highlighted in bold.
Source: Own composition

and attachment to the community play a significant role in fostering positive perceptions of FMs.

Country-specific differences can also be observed: in the UK and Italy, the latent variable is most strongly correlated with Statement 2 ("I like to shop at farmers' markets"), indicating that in these countries, emotional attachment and experience with markets are particularly closely related to social embeddedness. In Hungary, however, Statement 8 ("Shopping at farmers' markets is more pleasant than at other grocery stores") shows the strongest relationship with the latent variable. This means that for Hungarian respondents, perceiving the FM as a positive experience and form of recreation is the one that best reflects the level of social connections.

Discussion

The results of this research highlight that the choice of FMs is closely related to the level of social embeddedness. This means that consumers' purchasing decisions are not simply the result of isolated, impersonal preferences, but are deeply embedded in social networks. The study confirms that FMs have a function well beyond their role as mere food sources; they are social spaces where trust, personal contact, and community experience play a significant role. Several previous studies have emphasised that FMs allow for direct, personal encounters between producers and consumers. As a result, consumers visit these markets not only for local, high-quality products, but also to support sustainable practices and build relationships with local producers (Feagan *et al.,* 2004; Kirwan, 2004). The literature has suggested that economic exchanges in such markets are embedded in social networks and are not independent of cultural values, social connections, and trust (Granovetter, 1985). FMs simultaneously support community cohesion and economic transactions, connecting ethics, culture, and business in a single space (Hinrichs, 2000). In line with this, the results suggest that high levels of social embeddedness significantly increase the likelihood of purchasing at FMs; that is, consumers seeking a social experience and connections prefer FMs over other shopping venues.

The results are also consistent with Chen and Scott (2014) findings that consumers' sense of embeddedness positively influences their spending at FMs. Research by Kirwan (2004) and Feagan *et al.* (2004) has previously shown that consumers desire authentic experiences and trust-based relationships when shopping for food, while producers value customer loyalty based on shared values. The results also suggest that social embeddedness has a dual benefit. It provides consumers with a more authentic, community-based shopping experience, and producers with a more committed customer base who stick with them because of the personal connections. Based on the literature, it can be clearly established who constitutes the majority of the shoppers at FMs (Maró, *et al.,* 2023; Török *et al.,* 2025). A similar trend is identifiable from this research. In all three countries, those with higher education are more strongly connected to their community. Moreover, in Hungary and Italy, the older age group (over 65) proved to be the most embedded in local society. This explains why they prefer FMs to a greater extent, since tradition and community support play an important role in their lifestyles and value systems. Interestingly, in the UK, the middle-aged group (35-44) displayed the strongest social embeddedness. A possible explanation for this is that the new-wave, festival-like atmosphere of British markets mainly attracts the younger-middle-aged, active generation, while older individuals may feel less at home in this environment. This dynamic is also reflected in the literature. For example, Oths *et al.* (2016) have shown that young adults prefer lively, festival-like markets, which in turn involves the risk that such an atmosphere may exclude certain social groups (if a market is too focused on encouraging a youthful, festival-like experience, older or more conservative buyers may be averse to it). All this highlights that the emergence of social embeddedness is culturally and demographically context-dependent (Kopczyńska, 2017; Oñederra-Aramendi *et al.,* 2018).

In addition, the strongest social embeddedness effect was identified in Italy. This can be explained by the traditions of Southern European food culture and strong regional cohesion (Oñederra-Aramendi *et al.,* 2018; Vittersø *et al.,* 2019). In contrast, in the UK, consumer preferences were dominated by the health characteristics and general quality of products, and the impact of community aspects was relatively smaller. Perhaps due to modern consumer trends and a wider range of products, the price-value ratio is considered of particular importance in British markets (Guthrie *et al.,* 2006; McEachern *et al.,* 2010). Although Hungarian consumers also perceived some advantage in terms of community embeddedness, their decisions were more often influenced by the usual market logic, such as price sensitivity. This can be partly attributed to the fact that Hungarian markets are a relatively new and rapidly developing phenomenon, where community ties have not yet matured uniformly (Maró *et al.,* 2022). The differences between countries highlight the role of cultural and market-specificities: while in Italy, a strong local tradition enhances the importance of community ties, in the British and Hungarian cases, other factors also prevail in purchasing decisions.

It is also important to compare how social embeddedness influences the behaviour of market participants. Hunt (2007) showed that buyer–seller interactions at FMs build mutual expectations and trust, which results in practical changes on the part of producers. As a result, they place greater emphasis on ethical, high-quality production methods. The positive embeddedness effect measured (that is, consumers who are more integrated into the community are more likely to shop at FMs) also illustrates this pattern. The results, therefore, provide empirical evidence that socio-social factors indeed shape economic preferences, as suggested by previous research (e.g., Hunt, 2007; Kirwan, 2004; Oñederra-Aramendi *et al.,* 2018). Furthermore, Benedek *et al.* (2018) highlighted that buyers at FMs are primarily those who seek fresh, high-quality food and are also committed to supporting local producers. This trend can also be observed in the research. For consumers, choosing an FM is often a value-based decision, driven by solidarity with local producers,

sustainability, and local identity (e.g., a preference for local products and designations of origin). This is reflected in the fact that groups that are more open to community experiences and more embedded preferred the FM in the survey. The results of this study reinforce the primary findings of the literature, which suggest that the success and specific role of FMs are influenced by community embeddedness (Granovetter, 1985; Hinrichs, 2000; Kirwan, 2004).

Theoretical, policy, and managerial implications

The research offers theoretical insights into the link between social embeddedness and consumer decision-making. It empirically supports the theory of Granovetter (1985) that economic action is embedded in social networks, showing that consumers more active in community relations make different market choices. Thus, traditional models of consumer behaviour can be expanded to include sociological dimensions, where preferences are shaped by community values. Following Hinrichs (2000), producer markets can be seen as "hybrid" spaces combining business and social interaction. This study shows that consumer choices are influenced not only by product characteristics (e.g., price, quality, certifications) but also by social factors (e.g., community ties, trust), bridging economic and social science perspectives.

Second, the results point to the differentiated nature of social embeddedness. The comparison of the three countries, employing a novel methodology in this field, suggests that although the effect of embeddedness is universally positive regarding the perception of FMs, the social patterns (e.g., the role of local communities, the degree of urbanisation and mobility, and the tradition of markets) may differ. The context of social embeddedness varies from culture to culture (Kopczyńska, 2017; Oñederra-Aramendi *et al.,* 2018). The research deepens this idea by demonstrating that the effect of community integration on consumer behaviour is general, but its specific manifestations (e.g., which age group, according to which values) may differ from country to country. Strengthening the relationship between sustainable food consumption and social capital is an important element. The results suggest that the success of SFSCs is not only based on the mere communication of sustainability benefits (e.g., smaller ecological footprint, better quality), but also on community experience and identity. Some consumers, especially those more deeply embedded in their communities, also seek to support moral and community goals through their purchases (e.g., supporting the local economy, preserving traditions). This observation, by considering value-driven and community motivations in addition to or instead of the utility-maximising model when explaining sustainable consumption, may contribute to the theory of consumer behaviour.

Based on these findings, the research yields several policy and managerial implications. First, the results support the claim that FMs are not only economic spaces but also community institutions; thus, their support can serve economic, environmental, and social goals at the same time. In light of the results, public policy should also treat these markets as community spaces. For example, it could provide infrastructural and financial support to establish new markets or develop existing ones in a way that they also function as community meeting places (e.g., creating covered market spaces with spaces suitable for community events). Local governments and decision-makers can plan urban and rural development programmes around markets, recognising that a vibrant FM increases community cohesion and the multiplier effects of the local economy.

Second, strengthening consumer communities may be a key policy objective in supporting a sustainable food supply. As people living in closer social networks are more likely to choose sustainable, locally sourced food, public policy can focus on increasing community participation and awareness. This can be achieved through, for example, social campaigns and educational programmes that draw attention to the values of local food and FMs. In addition, by supporting local food movements and civic initiatives (e.g., community gardens or food communities), decision-makers can help more consumers establish personal contact with local producers. Third, a crucial lesson for policy is to acknowledge the differences between generations and social groups. The research has highlighted that certain groups (e.g., younger generations in some countries, or those with a lower level of education) are less connected to local communities and are therefore less likely to visit FMs. This suggests the need for targeted public policy measures. For example, launching youth programmes at FMs (FMs at universities, educational activities, volunteering) to involve young people in local food systems (see e.g.,Maró *et al.,* 2022). The current customer base of FMs tends to be skewed towards the middle class, while poorer segments have less access. Public policy can address this as an equity issue. For example, social programmes can encourage the participation of disadvantaged groups (such as how SNAP/EBT programmes were included in markets in the US). In the European context, this could involve providing discount coupons or vouchers to those in need, which they can redeem for healthy food at FMs.

The research also provides practical lessons for organisers of FMs, operators, and market participants (e.g., producers and vendors). The results confirm that the power of an FM lies in the community experience, so organisers should consciously cultivate the community function of such markets. Personal relationships between buyers and vendors can enhance the shopping experience and foster customer loyalty. Accordingly, market managers should encourage active and direct communication and trusting relationships. In practice, this could mean organising community programmes at markets (tastings, cooking, children's programmes) that encourage customers to spend time on site and talk informally with vendors and each other. The more consumers view the market as a meeting place, the stronger their attachment will be, and the more likely they are to become permanent customers. Moreover, market organisers need to know their target audience and tailor their strategies accordingly. Based on the findings and other research (Maró, Maró, *et al.,* 2023), the typical FM customer is often an older, middle-class, well-informed woman who values quality and a connection to local produc-

ers. Meeting the needs of this group is essential for success. At the same time, attracting younger generations and other underrepresented groups will be important for future growth and market sustainability. From a practical perspective, this can be achieved by alternating events with different profiles. Lastly, it is worth emphasising the benefits of social embeddedness in the marketing and communication of FMs. Since supporting local producers and a sense of belonging to the community are the main attractions for many customers, communication can highlight the stories associated with the market. For example, presenting the personal background of the vendors, the origin of the products, and the values of the market community. This storytelling approach will strengthen the emotional connection with customers.

Conclusions

Research shows that the future of farmers' markets depends greatly on their social embeddedness. Sustainable food systems succeed not only when people buy products but also when they seek community experiences. Based on empirical data from the UK, Hungary, and Italy, the study suggests ways to strengthen social embeddedness in consumer choices, public policy, and market operations. Unlike most research focused on single countries – mainly the US or Western Europe – this cross-country comparison reveals both general trends (the positive impact of social embeddedness on FM choice) and local specificities (e.g., generational differences). The findings fill a geographical and cultural research gap, confirming that FMs function as both economic spaces and community arenas, and that recognising this dual role is vital for sustainable food systems.

However, the study's limitations include its sample of only three countries, which restricts generalisability due to cultural and economic differences. The cross-sectional design also limits insights into long-term trends. Future research should include more countries to examine European-level patterns and use longitudinal and qualitative methods to explore causal links and evolving network dynamics. Extending the focus to other stakeholders – such as farmers, FM organisers, and policymakers – would also provide a more comprehensive understanding of how social embeddedness shapes market sustainability.

Acknowledgement

The research has received funding from the National Research, Development and Innovation Office project under the grant agreement FK137602 "The economics of farmers' markets - economic, environmental and social sustainability".

References

Akpinar, M.G., Aykin, S.M., Sayin, C. and Ozkan, B. (2009): The role of demographic variables in purchasing decisions on fresh fruit and vegetables. Journal of Food, Agriculture and Environment, **7** (3/4), 106–110.

Aschemann-Witzel, J., de Hooge, I.E., and Almli, V.L. (2021): My style, my food, my waste! Consumer food waste-related lifestyle segments. Journal of Retailing and Consumer Services, **59** (12), 102353. https://doi.org/10.1016/j.jretconser.2020.102353

Baker, D., Hamshaw, K. and Kolodinsky, J. (2009): Who shops at the market? Using consumer surveys to grow farmers' markets: Findings from a regional market in northwestern Vermont. Journal of Extension, **47** (6), 1–9.

Basil, M. (2012): A history of farmers' markets in Canada. Journal of Historical Research in Marketing, **4** (3), 387–407. https://doi.org/10.1108/17557501211252952

Bazzani, C. and Canavari, M. (2013): Alternative agri-food networks and short food supply chains: a review of the literature. Economia Agro-Alimentare, **15** (2), 11–34. https://doi.org/10.3280/ECAG2013-002002

Ben-Akiva, M.E. and Lerman, S.R. (1985): Discrete choice analysis: theory and application to travel demand (Vol. 9). MIT press.

Benedek, Z., Fertő, I. and Molnár, A. (2018): Off to market: but which one? Understanding the participation of small-scale farmers in short food supply chains—a Hungarian case study. Agriculture and Human Values, **35**, 383–398. https://doi.org/10.1007/s10460-017-9834-4

Bildtgård, T. (2008): Trust in food in modern and late-modern societies. Social Science Information, **47** (1), 99–128. https://doi.org/10.1177/0539018407085751

Bolduc, D., Boucher, N. and Alvarez-Daziano, R. (2008): Hybrid Choice Modeling of New Technologies for Car Choice in Canada. Transportation Research Record, **2082** (2082), 63–71. https://doi.org/10.3141/2082-08

Bullock, S. (2000): The economic benefits of farmers' markets. Friends of the Earth, London.

Byker Shanks, C., Misyak, S., Shanks, J.D. and Serrano, E.L. (2013): Do farmers' markets improve diet of participants using federal nutrition assistance programs? A literature review. Journal of Extension, **51** (6), 1–10.

Carson, R.A., Hamel, Z., Giarrocco, K., Baylor, R. and Mathews, L.G. (2016): Buying in: The influence of interactions at farmers' markets. Agriculture and Human Values, **33**, 861–875. https://doi.org/10.1007/s10460-015-9675-y

Ceschi, S., Canavari, M. and Castellini, A. (2018): Consumer's preference and willingness to pay for apple attributes: A choice experiment in large retail outlets in Bologna (Italy). Journal of International Food and Agribusiness Marketing, **30** (4), 305–322. https://doi.org/10.1080/08974438.2017.1413614

Charatsari, C., Kitsios, F., Stafyla, A., Aidonis, D. and Lioutas, E. (2018): Antecedents of farmers' willingness to participate in short food supply chains. British Food Journal, **120** (10), 2317–2333. https://doi.org/10.1108/BFJ-09-2017-0537

Chen, W. and Scott, S. (2014): Shoppers' perceived embeddedness and its impact on purchasing behavior at an organic farmers' market. Appetite, **83**, 57–62. https://doi.org/10.1016/j.appet.2014.08.010

Conner, D., Colasanti, K., Ross, R.B. and Smalley, S.B. (2010): Locally grown foods and farmers markets: Consumer attitudes and behaviors. Sustainability, **2** (3), 742–756. https://doi.org/10.3390/su2030742

Conner, D.S., Montri, A.D., Montri, D.N. and Hamm, M.W. (2009): Consumer demand for local produce at extended season farmers' markets: guiding farmer marketing strategies. Renewable Agriculture and Food Systems, **24** (4), 251–259. https://doi.org/10.1017/S1742170509990044

Consumer Financial Protection Bureau (2024): Financial well-being resources. Available at: https://www.consumerfinance.gov/consumer-tools/educator-tools/financial-well-being-resources/ (Accessed on 8 August 2025).

Daly, A., Hess, S., Patruni, B., Potoglou, D. and Rohr, C. (2012): Using ordered attitudinal indicators in a latent variable choice model: a study of the impact of security on rail travel behaviour. Transportation, **39** (2), 267–297. https://doi.org/10.1007/s11116-011-9351-z

de Hooge, I.E., Oostindjer, M., Aschemann-Witzel, J., Normann, A., Loose, S.M., and Almli, V.L. (2017): This apple is too ugly for me!: Consumer preferences for suboptimal food products in the supermarket and at home. Food Quality and Preference, **56**, 80–92. https://doi.org/10.1016/j.foodqual.2016.09.012

Feagan, R., Morris, D. and Krug, K. (2004): Niagara region farmers' markets: Local food systems and sustainability considerations. Local Environment, **9** (3), 235–254. https://doi.org/10.1080/1354983042000219351

Field, A. (2005): Discovering Statistics Using SPSS. SAGE Publications.

Gillespie, G., Hilchey, D.L., Hinrichs, C.C. and Feenstra, G. (2007): Farmers' markets as keystones in rebuilding local and regional food systems. Remaking the North American food system: Strategies for Sustainability, 65–83.

Granovetter, M. (1985): Economic action and social structure: The problem of embeddedness. American Journal of Sociology, **91** (3), 481–510. https://doi.org/10.1086/228311

Grashuis, J. and Su, Y. (2023): Farmer-owned brand purchases: The importance of label comprehension and price fairness perception. Studies in Agricultural Economics, **125** (1), 37–44. https://doi.org/10.7896/j.2390

Guthrie, J., Guthrie, A., Lawson, R. and Cameron, A. (2006): Farmers' markets: the small business counter-revolution in food production and retailing. British Food Journal, **108** (7), 560–573. https://doi.org/10.1108/00070700610676370

Hamid, S. and Mir, M.Y. (2021): Global Agri-food sector: challenges and opportunities in COVID-19 pandemic. Frontiers in Sociology, **6**, 647337. https://doi.org/10.3389/fsoc.2021.647337

He, A. and Morales, A. (2022): Social embeddedness and food justice at farmers markets: the model farmers market program. International Journal of Sociology and Social Policy, **42** (7/8), 640–655. https://doi.org/10.1108/IJSSP-09-2021-0249

Heidenreich, M. (2012): The social embeddedness of multinational companies: A literature review. Socio-Economic Review, **10** (3), 549–579. https://doi.org/10.1093/ser/mws010

Hess, S. and Palma, D. (2019): Apollo: A flexible, powerful and customisable freeware package for choice model estimation and application. Journal of Choice Modelling, **32**, 100170. https://doi.org/10.1016/j.jocm.2019.100170

Hess, S. and Palma, D. (2021): Apollo version 0.2. 4, user manual. ApolloChoice-Modelling.

Hess, S., Train, K.E. and Polak, J.W. (2006): On the use of a Modified Latin Hypercube Sampling (MLHS) method in the estimation of a Mixed Logit Model for vehicle choice. Transportation Research Part B-Methodological, **40** (2), 147–163. https://doi.org/10.1016/j.trb.2004.10.005

Hinrichs, C.C. (2000): Embeddedness and local food systems: notes on two types of direct agricultural market. Journal of Rural Studies, **16** (3), 295–303. https://doi.org/10.1016/S0743-0167(99)00063-7

Holloway, L., Kneafsey, M., Venn, L., Cox, R., Dowler, E. and Tuomainen, H. (2007): Possible food economies: a methodological framework for exploring food production–consumption relationships. Sociologia Ruralis, **47** (1), 1–19. https://doi.org/10.1111/j.1467-9523.2007.00427.x

Hughes, M.E. (1992): Farmers' markets in Kansas: A profile of vendors and market organization. Kansas State University, Agricultural Experiment Station.

Hunt, A.R. (2007): Consumer interactions and influences on farmers' market vendors. Renewable Agriculture and Food Systems, **22** (1), 54–66. https://doi.org/10.1017/S1742170507001597

Kaufmann, S., Hruschka, N., Vildozo, L. and Vogl, C.R. (2023): Alternative Food Networks in Latin America—exploring PGS (Participatory Guarantee Systems) markets and their consumers: a cross-country comparison. Agriculture and Human Values, **40** (1), 193–216. https://doi.org/10.1007/s10460-022-10347-w

Kim, H. and Kim, S. (2022): The Region-of-Origin Effect of Apple and Apple Juice on Consumer Purchase Intention. Korean Agricultural Economics Association, **63** (2), 43–66. https://doi.org/10.24997/KJAE.2022.63.2.43

Kirwan, J. (2004): Alternative strategies in the UK agro-food system: interrogating the alterity of farmers' markets. Sociologia Ruralis, **44** (4), 395–415. https://doi.org/10.1111/j.1467-9523.2004.00283.x

Kopczyńska, E. (2017): Economies of Acquaintances: Social Relations during Shopping at Food Markets and in Consumers' Food Cooperatives. East European Politics and Societies, **31** (3), 637–658. https://doi.org/10.1177/0888325417710079

Kornprobst, M. and Paul, T.V. (2021): Globalization, deglobalization and the liberal international order. International Affairs, **97** (5), 1305–1316. https://doi.org/10.1093/ia/iiab120

Larimore, S. (2018): Cultural boundaries to access in farmers markets accepting Supplemental Nutrition Assistance Program (SNAP). Qualitative Sociology, **41** (1), 63–87. https://doi.org/10.1007/s11133-017-9370-y

Lockshin, L., Jarvis, W., d'Hauteville, F. and Perrouty, J.-P. (2006): Using simulations from discrete choice experiments to measure consumer sensitivity to brand, region, price, and awards in wine choice. Food Quality and Preference, **17** (3), 166–178. https://doi.org/10.1016/j.foodqual.2005.03.009

Luo, J., Liang, Y. and Bai, Y. (2022): Mapping the intellectual structure of short food supply chains research: A bibliometric analysis. British Food Journal, **124** (9), 2833–2856. https://doi.org/10.1108/BFJ-05-2021-0465

Malak-Rawlikowska, A., Majewski, E., Wąs, A., Borgen, S.O., Csillag, P., Donati, M., Freeman, R., Hoàng, V., Lecoeur, J.-L. and Mancini, M.C. (2019): Measuring the economic, environmental, and social sustainability of short food supply chains. Sustainability, **11** (15), 4004. https://doi.org/10.3390/su11154004

Manalo, A., Sciabarrasi, M., Haddad, N. and Jellie, G.M. (2003): Buying products directly from farmers and valuing agriculture: behavior and attitudes of New Hampshire food shoppers. Durham, NH: University of New Hampshire Cooperative Extension.

Mariel, P., Hoyos, D., Meyerhoff, J., Czajkowski, M., Dekker, T., Glenk, K., Jacobsen, J.B., Liebe, U., Olsen, S.B. and Sagebiel, J. (2021): Environmental valuation with discrete choice experiments: Guidance on design, implementation and data analysis. Springer.

Mariel, P., Meyerhoff, J. and Hess, S. (2015): Heterogeneous preferences toward landscape externalities of wind turbines – combining choices and attitudes in a hybrid model. Renewable and Sustainable Energy Reviews, **41**, 647–657. https://doi.org/10.1016/j.rser.2014.08.074

Maró, G., Czine, P., Maró, Z.M. and Török, Á. (2022): Eliciting university students' attitudes towards farmers' markets: The Hungarian case. Sustainability, **14** (24), 16757. https://doi.org/10.3390/su142416757

Maró, Z.M., Balogh, P., Czine, P. and Török, Á. (2023): The roles of geographic indication and ethnocentrism in the preferences of Central European spirit consumers: the case of palinka. Food Quality and Preference, **108**, 104878. https://doi.org/10.1016/j.foodqual.2023.104878

Maró, Z.M., Maró, G., Jámbor, Z., Czine, P. and Török, Á. (2023): Profiling the consumers of farmers' markets. Renewable Agriculture and Food Systems, **38**, e53. https://doi.org/10.1017/S1742170523000467

Maró, Z.M., Török, Á. and Czine, P. (2025): Examining consumer preferences for basic foodstuffs in a highly inflationary eco-

nomic environment: The case of price-capped chicken breast fillet in Hungary. Heliyon, **11** (1), e41279. https://doi.org/10.1016/j.heliyon.2024.e41279

Marsden, T., Banks, J. and Bristow, G. (2000): Food supply chain approaches: exploring their role in rural development. Sociologia Ruralis, **40** (4), 424–438. https://doi.org/10.1111/1467-9523.00158

Massaglia, S., Borra, D., Peano, C., Sottile, F. and Merlino, V.M. (2019): Consumer preference heterogeneity evaluation in fruit and vegetable purchasing decisions using the best–worst approach. Foods, **8** (7), 266. https://doi.org/10.3390/foods8070266

McEachern, M.G., Warnaby, G., Carrigan, M. and Szmigin, I. (2010): Thinking locally, acting locally? Conscious consumers and farmers' markets. Journal of Marketing Management, **26** (5-6), 395-412. https://doi.org/10.1080/02672570903512494

McFadden, D. (1972): Conditional logit analysis of qualitative choice behavior. UC Berkeley IURD Working Paper Series.

McFadden, D. (1986): The choice theory approach to market research. Marketing Science, **5** (4), 275–297. https://doi.org/10.1287/mksc.5.4.275

McFadden, D. and Train, K. (2000): Mixed MNL models for discrete response. Journal of applied Econometrics, **15** (5), 447–470. https://doi.org/10.1002/1099-1255(200009/10)

Meyerding, S.G. and Merz, N. (2018): Consumer preferences for organic labels in Germany using the example of apples–Combining choice-based conjoint analysis and eye-tracking measurements. Journal of Cleaner Production, **181**, 772–783. https://doi.org/10.1016/j.jclepro.2018.01.235

Michel-Villarreal, R., Hingley, M., Canavari, M. and Bregoli, I. (2019): Sustainability in alternative food networks: A systematic literature review. Sustainability, **11** (3), 859. https://doi.org/10.3390/su11030859

Migliore, G., Caracciolo, F., Lombardi, A., Schifani, G. and Cembalo, L. (2014): Farmers' participation in civic agriculture: the effect of social embeddedness. Culture, Agriculture, Food and Environment, **36** (2), 105–117. https://doi.org/10.1111/cuag.12038

Moser, R. and Raffaelli, R. (2012): Consumer preferences for sustainable production methods in apple purchasing behaviour: a non-hypothetical choice experiment. International Journal of Consumer Studies, **36** (2), 141–148. https://doi.org/10.1111/j.1470-6431.2011.01083.x

Murphy, A.J. (2011): Farmers' markets as retail spaces. International Journal of Retail and Distribution Management, **39** (8), 582–597. https://doi.org/10.1108/09590551111148668

Nagy-Peto, D.T., Kovács, B., Kiss, M., Szakály, Z. and Kiss, V.A. (2023): Consumer segmentation based on commitment to local products in Hungary. Studies in Agricultural Economics, **125** (3), 143–153. https://doi.org/10.7896/j.2506

Ngene, C. (2018): 1.2 User Manual and Reference Guide. ChoiceMetrics Pty Ltd.: Sydney, Australia.

Oñederra-Aramendi, A., Begiristain-Zubillaga, M. and Malagón-Zaldua, E. (2018): Who is feeding embeddedness in farmers' markets? A cluster study of farmers' markets in Gipuzkoa. Journal of Rural Studies, **61**, 22–33. https://doi.org/10.1016/j.jrurstud.2018.05.008

Oths, K.S., Manzella, F.J., Sheldon, B. and Groves, K.M. (2016): Who will be served? Farmers market variability and the expectations of young adults. Human Organization, **75** (4), 346–357. https://doi.org/10.17730/1938-3525-75.4.346

Pilař, L., Kvasničková Stanislavská, L., Moulis, P., Kvasnička, R., Rojík, S. and Tichá, I. (2019): Who spends the most money at farmers' markets? Agricultural Economics/Zemedelska Ekonomika, **65** (11), 491–498. https://doi.org/10.17221/69/2019-AGRICECON

Platania, M., Rizzo, M. and Vecchio, D. (2015): Consumer preferences for traditional products and place of purchase. Results of a survey on direct sales in Italy. Quality - Access to Success, **16**, 158–164.

Renting, H., Marsden, T.K. and Banks, J. (2003): Understanding alternative food networks: exploring the role of short food supply chains in rural development. Environment and Planning A, **35** (3), 393–411. https://doi.org/10.1068/a3510

Rose, J.M. and Bliemer, M.C.J. (2009): Constructing Efficient Stated Choice Experimental Designs. Transport Reviews, **29** (5), 587–617. https://doi.org/10.1080/01441640902827623

Schoolman, E.D., Morton, L.W., Arbuckle Jr., J.G. and Han, G. (2021): Marketing to the foodshed: Why do farmers participate in local food systems? Journal of Rural Studies, **84**, 240–253. https://doi.org/10.1016/j.jrurstud.2020.08.055

Shahu, E., Hoxha, A., Zhllima, E., Imami, D. and Gjika, I. (2023): Factors influencing farmers? willingness to participate in Farm to School programmes-The case of Albania. Studies in Agricultural Economics, **125** (1), 24–36. https://doi.org/10.7896/j.2396

Skreli, E. and Imami, D. (2012): Analyzing consumers' preferences for apple attributes in Tirana, Albania. International Food and Agribusiness Management Review, **15** (4), 137–157. https://doi.org/10.22004/ag.econ.138323

Sonnino, R. (2007): Embeddedness in action: Saffron and the making of the local in southern Tuscany. Agriculture and Human Values, **24**, 61–74. https://doi.org/10.1007/s10460-006-9036-y

Török, Á., Agárdi, I., Maró, G. and Maró, Z.M. (2022): Business opportunities in short food supply chains: the economic sustainability of three Hungarian para-gastro restaurants. Studies in Agricultural Economics, **124** (1), 22–29. https://doi.org/10.7896/j.2253

Török, Á. and Jámbor, A. (2013): Competitiveness and Geographical Indications: the case of fruit spirits in Central and Eastern European countries. Studies in Agricultural Economics, **115** (1), 25–32. https://doi.org/10.7896/j.1223

Török, Á., Jantyik, L., Maró, Z.M. and Moir, H. V. (2020): Understanding the real-world impact of geographical indications: A critical review of the empirical economic literature. Sustainability, **12** (22), 9434. https://doi.org/10.3390/su12229434

Török, Á., Kovács, S., Maró, G. and Maró, Z.M. (2024): Understanding the relevance of farmers' markets from 1955 to 2022: A bibliometric review. Journal of Agriculture and Food Research, **16**, 101108. https://doi.org/10.1016/j.jafr.2024.101108

Török, Á., Maró, G., Jámbor, Z., Maró, Z.M., Tocco, B., Balogh, P. and Czine, P. (2025): Who Are the Consumers of European Farmers' Markets? A Cross-Country Analysis. Agribusiness (Early View), https://doi.org/10.1002/agr.22058

Török, Á. and Tóth, J. (2013): Open characters of innovation management in the Hungarian wine industry. Agricultural Economics (Czech), **59** (9), 430–438. https://doi.org/10.17221/24/2013-AGRICECON

Train, K.E. (2009): Discrete choice methods with simulation. Cambridge University Press.

Tsai, B.K., Lee, K.Y., Hsieh, C.M. and Somsong, P. (2019): Determinants of actual purchase behavior in farmers' markets. Sustainability, **11** (19), 5480. https://doi.org/10.3390/su11195480

Vermeir, I., Petrescu, D.C. and Petrescu-Mag, R.M. (2023): What are the 'shape friendly' locations to sell misshapen tomatoes? The effect of point of purchase on consumers' abnormality perception and probability to buy. Food Quality and Preference, **106** (11), 104809. https://doi.org/10.1016/j.foodqual.2023.104809

Vittersø, G., Torjusen, H., Laitala, K., Tocco, B., Biasini, B., Csillag, P., de Labarre, M.D., Lecoeur, J.-L., Maj, A. and Majewski, E. (2019): Short food supply chains and their contributions to sustainability: Participants' views and perceptions from 12 European cases. Sustainability, **11** (17), 4800. https://doi.org/10.3390/su11174800

Walker, J. and Ben-Akiva, M. (2002): Generalized random utility model. Mathematical Social Sciences, **43** (3), 303–343. https://doi.org/10.1016/S0165-4896(02)00023-9

Youngs, J. (2003): Consumer direct initiatives in North West England farmers' markets. British Food Journal, **105** (8), 498–530. https://doi.org/10.1108/00070700310497273

Zepeda, L. and Leviten-Reid, C. (2004): Consumers' views on local food. Journal of Food Distribution Research, **35** (3), 1–6. https://doi.org/10.22004/ag.econ.27554