



The market for lemons from Sorrento and Gouda from Holland

Do geographical indications certify origin and quality?

Martijn Huysmans and Daniël van Noord



Utrecht University School of Economics (U.S.E.) is part of the faculty of Law, Economics and Governance at Utrecht University. The U.S.E. Research Institute focuses on high quality research in economics and business, with special attention to a multidisciplinary approach. In the working papers series the U.S.E. Research Institute publishes preliminary results of ongoing research for early dissemination, to enhance discussion with the academic community and with society at large.

The research findings reported in this paper are the result of the independent research of the author(s) and do not necessarily reflect the position of U.S.E. or Utrecht University in general.

U.S.E. Research Institute

Kriekenpitplein 21-22, 3584 EC Utrecht, The
Netherlands Tel: +31 30 253 9800, e-mail:
use.ri@uu.nl www.uu.nl/use/research

U.S.E. Research Institute
Working Paper Series 21-08
ISSN: 2666-8238

The market for lemons from Sorrento and Gouda from Holland: Do geographical indications certify origin and quality?

Martijn Huysmans
Daniël van Noord
Utrecht University School of Economics
Utrecht University

April 2021

Abstract

Geographical indications (GIs) protect regional specialty foods such as lemons from Sorrento and Gouda Holland. While the EU asserts that GIs certify and protect high quality regional specialty products, the US sees them as protectionist. This article develops a conceptual framework of different quality attributes and analyzes how GIs may certify quality on those attributes. Regional origin may count as a quality attribute per se, or only indirectly through taste. The conceptual framework is illustrated with an exploratory blind tasting of Gouda cheeses. While a majority of consumers prefers Gouda North-Holland PDO to generic Gouda, the same is not true for Gouda Holland PGI. This suggests that not all GIs guarantee better taste for all consumers. The framework and empirics clarify the possibilities and limits for GIs to collectively appropriate the brand value of regional foods.

Keywords: Geographical indications, Regional Foods, Quality, Protected Designation of Origin, Protected Geographical Indication, European Union

JEL classification: Q34, Q13, Q18, R11

Acknowledgements:

The authors would like to thank Jo Swinnen and Daniele Curzi for their comments. For research assistance related to this project, Martijn thanks Bruno Coucke and Gero Laurenz Höhn at KU Leuven, Kate Wilson at KU Leuven and Stanford University, and Rhodé Looije and Lukas Bikker at Utrecht University Weekend van de Wetenschap

Comments welcomed to: m.huysmans@uu.nl

Introduction

The market for lemons (Akerlof, 1970) is a seminal contribution on quality in the second-hand car market; a lemon is slang for a bad second-hand car. Akerlof showed how, in the presence of asymmetric information, adverse selection can drive out high quality goods. While individual producers may be able to resolve this problem by building up reputations for quality, governments and regulators have often taken additional action. Apart from a desire to increase social welfare, rent-seeking and lobbying of interest groups also shape government policy in this area (Swinnen and Vandemoortele, 2011).

Building on existing regulation in some member states, the EU has set up quality schemes to protect regional specialty foods such as lemons from Sorrento. Under these schemes the EU currently protects over 3000 geographical indications (GIs) for food and wine (Huysmans and Swinnen, 2019; Velčovská and Sadílek, 2015). The premise of these GI systems is that the origin of a product has a direct influence on the quality of the good: the notion of *terroir* (Barham, 2003). This link may arise due to geographical factors such as soil and climate, as well as human factors such as ancestral know-how or *savoir-faire*. Through the protection and certification of GIs, producers and regions home to specialty foods can anchor, embed, and durably appropriate their value, sometimes also generating tourism and wider regional development (Blancheton and Hlady-Rispal, 2021; Ilbery et al., 2005; Murdoch et al., 2000; Parrott et al., 2002; Rangnekar, 2004; Török et al., 2020; Tregear et al., 2007; Vandecandelaere et al., 2020). In order to use a protected GI name, producers have to be located in the protected region and follow the product specification, which specifies the allowed ingredients and production methods.

The World Trade Organization (WTO) allows for GI protection under Trade-Related Aspects of Intellectual Property Rights (TRIPS). It requires that the quality of a GI be “essentially attributable to its geographical origin” (WTO, 1994). TRIPS provides strong protection for wine and spirit GIs, but much more limited protection for food GIs (Addor and Grazioli, 2005; Josling, 2006; Raustiala and Munzer, 2007; Vittori, 2010).

Examples of EU GIs include Gouda Holland, Parma ham, and Champagne. In order to be WTO-compliant, the EU has also opened its system to registration by third countries. Examples include Darjeeling tea from India (Aggarwal et al., 2014) and Antep Baklava from Turkey. Conversely, the EU has successfully obtained external protection for some of its GIs through trade agreements with South Korea, Canada, Japan, and others (Huysmans, 2020). The level of protection is high: non-GI producers cannot even use the name of a GI in combination with “like” or “style” and the true origin (Engelhardt, 2015; Hughes, 2006; Prescott et al., 2020). This means that descriptors like “Parma-style ham from Germany” are not allowed.

The high level of protection for GIs in the EU seems sensible given the increasing importance of origin in EU consumer decisions: “the percentage of EU citizens who consider the origin of food as an important factor when making purchasing decisions has increased from 28% in 1998 to 77% in 2017” (Prescott et al., 2020: 3).

However, some GIs are controversial even within the EU. In 1999, producers outside of Greece of a product similar to Feta challenged the GI, but lost after multiple court cases (Evans and Blakeney, 2006; Gangjee, 2007). Within the EU and countries that agreed to protect the name, Feta now has to be produced in Greece according to the GI product specification. Recently, the Commission has announced it will take Denmark to court for exporting “Feta” cheese outside of the EU (Wax, 2019).

While EU countries generally agree and respect the overall GI system, the US and others see them as a protectionist measure. They do not buy into the EU assertion that GIs are necessary to certify and protect high quality regional specialty products. Rather than the collective regional intellectual property regime for GIs, they believe in private brands and trademarks (Barham, 2003). In the context of trade this has led to a transatlantic “war on terroir” (Josling, 2006), with the EU’s stance having been described as the “reign of terroir” (Watson, 2016).

The disagreement between the US and the EU on GIs as protectionism versus legitimate quality standards has contributed to the stalemate of the Doha round and the Transatlantic Trade and Investment Partnership (Mancini et al., 2016; Matthews, 2016). On 15 April 2019, the EU Council approved a mandate for new trade talks with the US, but agriculture and hence GIs will be excluded.

GIs are a contentious topic in international trade (Beattie, 2019; Hough, 2016; Hughes, 2006; Rickard et al., 2015; Watson, 2016). They are especially relevant right now in light of their importance in the negotiations after Brexit for future EU or UK trade agreements with Australia and potentially the US (Huysmans, 2020; Prescott et al., 2020). Historically, just like the US, Australia has not been in favor of strong GI protection for agricultural products (Van Caenegem et al., 2014).

This article contributes to the literature by separating out the role of GIs in certifying different attributes of quality in economic theory, and illustrating this with an exploratory empirical study into Gouda Holland and Gouda North-Holland. In the model, regional origin may be a direct quality attribute per se, as well as influence taste through terroir. Based on an exploratory blind tasting of Gouda cheeses and consumer research that shows that many of the quality attributes regulated by GIs are valued less by new world consumers, the article concludes that full EU GI protection on the US market may be unnecessary as well as unrealistic. All in all, the framework and empirics presented in this article clarify

the potential mechanisms, possibilities and limits for GIs to appropriate the brand value of regional foods.

The link between GIs and regions

The link between GIs and regions may seem obvious and straightforward. In the EU, there are two main GI schemes: Protected Geographical Indications (PGIs) and the stricter Protected Designations of Origin (PDOs). For a PGI, only one production step needs to happen within the protected region. Figure 1 shows the logos for these labels.

Figure 1. Product logos for PGIs and PDOs



Take the example of lemons from Sorrento PGI: they have to be grown in an area of 137 hectares around the Italian city of Sorrento. However, in many cases the link is not quite as intuitive. This section lists some examples of the limitations of the GI-origin nexus.¹

First, paradoxically, the production of some GIs is not allowed in the eponymous regions. In the cases of Gouda North-Holland and Stilton, the PDO cheeses may not actually be produced in the eponymous cities. The city of Gouda is not actually in the Dutch province of North-Holland, so Gouda North-Holland PDO may not be produced in Gouda. Historically, the name derives from the Gouda cheese market, not from the production area. Similarly, Stilton cheese PDO may not be produced in the village of Stilton (Cambridgeshire), which is outside of the production zone comprising the counties of Leicestershire, Derbyshire and Nottinghamshire (Astley, 2013).

Two related cases concern the wine Champagne and the cheese Camembert. The protection of the relevant GIs is so strong, that some producers in the Swiss village of Champagne and the French region of Normandy are no longer allowed to make factually correct claims about the origin of their products. Since 1998, Switzerland agreed to ban

¹ Unless otherwise indicated, the sources of these observations are the official GI product specifications. These can be found via the e-Ambrosia database: <https://ec.europa.eu/info/food-farming-fisheries/food-safety-and-quality/certification/quality-labels/geographical-indications-register/>

winemakers in the village of Champagne from using the village's name on wine bottles (Tagliabue, 2008). As of 1 January 2021, French authorities have banned the term "fabriqué en Normandie" (made in Normandy) for non-PDO Camembert (Legueltel, 2020). This implies that Camembert cheeses that have truly been made in Normandy can no longer state this on the package, except if they qualify for PDO status (which requires a.o. being made from raw milk and ladled into the mold).

Second, the exact geographical areas may not actually be constant over time. This may limit the sharp identification of GI names with specific regions. The areas of several French cheese GIs have been amended significantly: in 2014, the area for Livarot was increased by 146%. Other areas were decreased: Roquefort by 90% in 2008, Pont l'Évêque by 62% in 2015, Fourme d'Ambert by 58% in 2010, Camembert de Normandie by 52% in 2013. A very controversial GI in this respect is Champagne. With land selling for 1 million euros inside of the GI area and about 2 thousand euros outside, a proposed expansion has high stakes (Stevenson, 2008).

Third, some GI names have no direct link to a region – although the product specification always has to specify the allowed production zone and the link between the area and product quality. As trade policy-makers from the US and other GI-skeptic countries like to point out, Feta is not a place (Beattie, 2019). The name reportedly comes from the Italian "fetta" or "slice" (Donnelly, 2016), and the production zone covers a very large part of the Greek territory; all of the mainland plus the island of Lesbos.

Fourth, the link between the region and the product may be less strict than sometimes assumed. In spite of the fact that a PDO normally requires all production steps to take place in the PDO area, the meat for Parma ham PDO may come from a number of regions adjacent to the province of Parma (Gangjee, 2017: 18).

Fifth, while the procedure to obtain GI protection (EU Regulation 1151/2012) can be described as technical, geo-political factors may in practice also play a role – making the road to protection of regional foods as GIs long and winding. A rather clear case is the Cypriot cheese Halloumi (Χαλλούμι) or Hellim in Turkish. While an application for PDO protection was submitted in 2014 and published in 2015 (see EU Official Journal 2015/C 246/12), it was only approved in March 2021 (Andreou, 2021). The delay appears driven by the division of the island in a Greek-Cypriot and Turkish-Cypriot part (Financial Mirror, 2020; Fortuna, 2020). The final approval may be related to a Cypriot vote to not ratify the CETA trade deal between the EU and Canada over Halloumi (Huysmans, 2020; Moens et al., 2020).

Finally, sometimes producers located within a GI region prefer to use their own production methods and private brands instead. The most famous example are likely the so-called

Super Tuscan wines in the Italian Chianti region. Examples include the brands Sassicaia and Tignanello (Wine Spectator, 2018). Rather than using the collective regional Chianti GI, they market their wines under these private brand names. If enough high-quality producers prefer to use individual branding, this may undermine the collective brand value of a regional GI.

While this section has highlighted some limitations of the nexus between GIs and regional branding, GIs do of course certify origin to at least some extent. Generic Gouda may be made anywhere with ingredients from anywhere, but not Gouda Holland PGI or Gouda North-Holland PDO.

The SECPP model of quality

Economists have always had a difficult relationship with quality. Textbooks teach students about homogeneous versus differentiated goods, but little to no space is devoted to the definition and measurement of quality. A very basic empirical measure is the so-called unit value or price per unit, e.g. per kilo. More advanced empirical measures take both price and quantity into account: *ceteris paribus*, higher prices and higher market shares both indicate quality so both need to be taken into account simultaneously (Khandelwal, 2010).

The standard model of quality in economics of information is the theory of *search*, *experience* and *credence* attributes. While search attributes such as the color of food are readily apparent (Jahn et al., 2005), experience attributes such as taste only become clear upon consumption. In practice, repeat buying may transform the overall taste of a type of food from an experience into a search attribute (Desquilbet and Monier-Dilhan, 2015).

Credence attributes such as pesticide residue cannot be evaluated during normal use (Swinnen et al., 2015: 12), and require costly tests for verification. Another example of a credence attribute of a food item is its nutritional value: it can be verified in the lab, but consumers will not experience it directly.

Tietzel and Weber (1991) extend this model by introducing *Potemkin* attributes as somewhere in the middle between credence and *placebo* attributes.² This leads to the SECPP model of search, experience, credence, Potemkin, and Placebo attributes (van Noord, 2019).

² The name comes from the Russian marshal Potemkin, who was charged with developing conquered territories in the Crimea in 1780. When Catherine II visited, Potemkin build some villages to fake the success of his program. Presumably, Catherine II cared not about the villages per se, but rather about the assumed underlying process of development in the region.

While placebo attributes are nonexistent, Potemkin attributes are process attributes: real but not verifiable in the final product. Potemkin attributes can therefore not be verified after purchase (Jahn et al., 2005: 55; Tietzel and Weber, 1991: 116-117). Typical examples of Potemkin attributes are fair-trade and climate-neutral. While there is a difference between a fair-trade and normal chocolate bar this difference cannot be determined from the end product, and audits of the production process are required instead (Jahn et al., 2005: 56).

Figure 2, building on Jahn et al. (2005), gives an overview of the SECPP quality attributes. The attributes have been sorted on an axis of increased verification cost. Examples of food quality attributes are given in the second row, while the third row illustrates how GIs may affect and certify these attributes. The next section provides the underlying details.

Figure 2. Quality attributes by increasing verification cost

	Search	Experience	Credence	Potemkin	Placebo
General food Example	Color, Smell, Taste		Pesticides	Fairtrade	False health claims
Example of GI role	Rules on composition and process that affect taste		Origin per se	Sustainability	
			Authenticity		

EU GIs and SECPP quality attributes

As discussed, for a PDO all production steps need to take place in the region, while for a PGI only one localized production step is required. This sometimes leads to two variants, such as Gouda Holland PGI, and Gouda North-Holland PDO. While the former requires Dutch milk, there are no restrictions on the origin of the feed. For the latter, the cows need to graze in the region of North-Holland.

In addition to delimiting the exact geographical scope, product specifications may impose process requirements and final product characteristics. For instance, Gouda Holland PGI has to undergo natural ripening for 4 weeks; cheaper generic Gouda is often foil-ripened instead. For Gouda North-Holland PDO, in addition to natural ripening for at least 4 weeks, the milk has to be curdled between 31 and 34°C and the final product can have at most 3.6% salt content in the dry matter.

In order to obtain a GI, a producer organization has to be set up (Deconinck et al., 2015), and producers need to be audited for certification. However, while the link between

geographical origin and quality has to be verbally described, there is no requirement for blind tasting or other independent verification in order for GI protection to be granted. This means that, at least in theory, the product specifications of some GI products may not be identifiable in blind tasting. For instance, in order to obtain the PDO, the producers of Gouda North-Holland did not have to show through a blind tasting that Gouda cheese made from North-Holland milk tastes better than Gouda made from other milk.

Unfortunately, no systematic empirical research has studied to what extent product specifications actually affect taste. Theory predicts that GIs should have minimum quality standards in order to be valuable (Winfree and McCluskey, 2005). Some *prima facie* elements discussed below also suggest that some product requirements may indeed result in higher gustatory quality. The sections following this overview of *prima facie* elements will provide a basic economic model of quality attributes and the results of a small exploratory blind tasting of Gouda Holland PGI and Gouda North-Holland PDO.

Prima facie, some GI requirements seem very likely to affect taste. For instance, Mozzarella di Bufala Campana PDO can only be made using buffalo milk. Since this is on the ingredient list, it can be considered a search attribute. When consumers are less aware of how composition links to taste, it remains an experience attribute. For instance, PDO Feta has to contain at least 70% sheep milk and at most 30% goat milk. Since most consumers do not know this but the requirement probably does affect the taste, this is arguably an experience attribute. GI certification can be beneficial to consumers by collapsing this experience attribute into a search attribute: by looking for the GI logo, consumers can look for products with a taste they like – without needing to know what causes this taste.

Some other GI product requirements are more likely credence attributes. For instance, the curd temperature of Mozzarella di Bufala Campana has to be between 33 and 39°C. Since the maximum temperature used to be 36°C before it was officially changed in 2008 (see EC regulation 103/2008), one can infer that a deviation from this narrow temperature band will not be detectable by tasting, even if lab analyses might be able to detect it.

While one can debate whether a given product requirement affects the taste or not, most authors consider geographical origin *per se* to be a credence attribute (Desquilbet and Monier-Dilhan, 2015; Li et al., 2017). Indeed, given that modern science can allow the determination of geographical origin from the end product, it is not in general a Potemkin attribute. However, while all GIs have clear rules on the origin of raw materials, the rules may be more flexible than consumers think. For instance, as pointed out earlier the pork for Parma ham PDO may originate from a list of regions adjacent to the province of Parma.

A related concept to origin per se is authenticity. However, the concept of authenticity seems so flexible that it may range from a credence to a placebo attribute. Concerning the product requirements, Gangjee (2017: 19) notes: “tradition and heritage are malleable resources, being actively reconstructed during the drafting process”. For instance, larger firms involved in drafting the product specification may seek to allow more industrial methods of production or a larger geographical production area.

Finally, some GIs also regulate Potemkin or process attributes. For instance, GIs may protect rural livelihoods and ecosystems. Consumers may wish to support local production (Chilla et al., 2020; Teuber, 2011). Jobs related to GIs cannot be delocalized, and farmers whose production depends on conserving local ecosystems will produce more sustainably (Food and Agriculture Organization of the United Nations, 2019). However, as a process attribute this is not verifiable in the end product, and production audits are required.

Another, more concrete example of a Potemkin attribute is that Parmigiano Reggiano PDO cheese can only be sliced and packaged in the region. Since the place of packaging cannot be reliably determined from the end product, this is clearly a Potemkin attribute. Of course, this rule may also help in preventing fraud. Clearly, GIs need to be enforced in order to be informative and valuable (Marie-Vivien and Biénabe, 2017; Zhao et al., 2014).

To summarize, at the very minimum GIs certify origin per se, a credence attribute. The product requirements in most cases are likely to also affect taste, which is a search or experience attribute. In addition, they may guarantee the authenticity of a product, although this is a malleable concept.

For those consumers who care about attributes such as origin and authenticity, a GI label can help them easily find the product they want. The label transforms these attributes into a search attribute. A consumer who buys a certified Camembert de Normandie PDO knows better what to expect than if she buys a generic Camembert. Herein lies the value of a GI: if the system functions properly, it informs the customer of product quality attributes she cares about, before making a purchase. The next sections provide a simple economic model and some evidence on the empirical role of these attributes.

Consumers’ quality equation

This section sets up a stylized economic model to capture consumers’ quality equations. Assume quality q has three main components: taste t , origin per se o , and authenticity a . This can be written as $q = f(q_t, q_o, q_a)$. The simplest example would be a linear quality equation with parameters θ_i , summing to 1, giving the importance to the consumer of dimension i :

$$q = \theta_t q_t + \theta_o q_o + \theta_a q_a \quad (1)$$

Now assume that taste is determined by origin o and production method p : $q_t = g(q_o, q_p)$. The simplest example would again be a linear function:

$$q_t = g(q_o, q_p) = \alpha q_o + (1 - \alpha) q_p \quad (2)$$

Where $\alpha \in [0,1[$ captures the importance of origin vis-à-vis production methods. It seems natural to assume that $0 \leq \alpha < 1$ because production methods should play at least some role in taste. If terroir or origin plays no role in taste, $\alpha = 0$. Combining (1) and (2), we obtain

$$q = (\alpha \theta_t + \theta_o) q_o + (1 - \alpha) \theta_t q_p + \theta_a q_a \quad (3)$$

Disregarding prices, a consumer will prefer the GI product over a generic product if

$$(\alpha \theta_t + \theta_o)(q_o^{GI} - q_o^{Gen}) + (1 - \alpha) \theta_t (q_p^{GI} - q_p^{Gen}) + \theta_a (q_a^{GI} - q_a^{Gen}) > 0 \quad (4)$$

Equation (4) neatly summarizes the importance of consumers' quality equations and of empirical parameters linking GIs to quality. As argued above, on the whole GIs always certify origin, so one can assume $q_o^{GI} > q_o^{Gen}$. They may also certify taste – through a combination of origin and production methods – and authenticity.

If consumers only care about taste, origin per se and authenticity have no role in their quality equation: $\theta_o = \theta_a = 0$ and $\theta_t = 1$. For such consumers (4) reduces to $\alpha(q_o^{GI} - q_o^{Gen}) + (1 - \alpha)(q_p^{GI} - q_p^{Gen}) > 0$. For them, GIs are only informative if they actually affect taste – either because there is a direct effect of terroir ($\alpha > 0$ and using $q_o^{GI} > q_o^{Gen}$) or because the GI product specification ensures superior production methods ($q_p^{GI} > q_p^{Gen}$). The next section provides some exploratory evidence for the case of Gouda cheese.

Do GI product specifications affect taste?

If one defines quality narrowly as taste, then it becomes an experience attribute. Consumers and policymakers with such a narrow perception of quality will only care about GI labels to the extent that GI products taste differently. Hence a policy-relevant question is whether GIs certify quality in this narrow sense. This section reports the results of an exploratory blind tasting of generic Gouda, Gouda Holland PGI, and Gouda North Holland PDO. The results suggest that the product specifications of only some GIs affect taste.

The blind tasting was conducted in October 2019 in the Netherlands. The main sample of relevance consisted of N=82 adults, although 147 children also participated. Participants were told that they would be tasting different Gouda cheeses. Each participant was given two different slices of about 10g of cheese, selected randomly and in random order among a generic Gouda, Gouda Holland PGI, and Gouda North-Holland PDO. The tasting was blind: participants did not know which cheeses they were tasting. This removes origin per

se and authenticity from the equation, to make sure the participants would only focus on taste.³ This resulted in six potential treatments, e.g. first the PGI and then the generic Gouda, or first the generic and then the PDO.

The Gouda cheeses were bought at a large supermarket chain. For each type, the cheapest per kilo was selected. This implied that they were all young cheeses, i.e. not required to be matured longer than 4 weeks for the GI cheeses. The prices (undisclosed to participants) were €7.5/kg for the generic, €9.5 for the PGI, and €14.0 for the PDO.

If one measures quality empirically through unit values, the PDO clearly has a higher price per kilo and hence higher quality than the PGI, which in turn has a higher price per kilo and hence quality than the generic Gouda. However, arguably one needs to correct for market shares (Khandelwal, 2010). Only with identical market shares would higher unit values unambiguously show higher quality. Unfortunately, no public information is available on the volumes sold of the PDO and the PGI, though they are clearly much lower than the volume of generic Gouda sold even on the Dutch market.

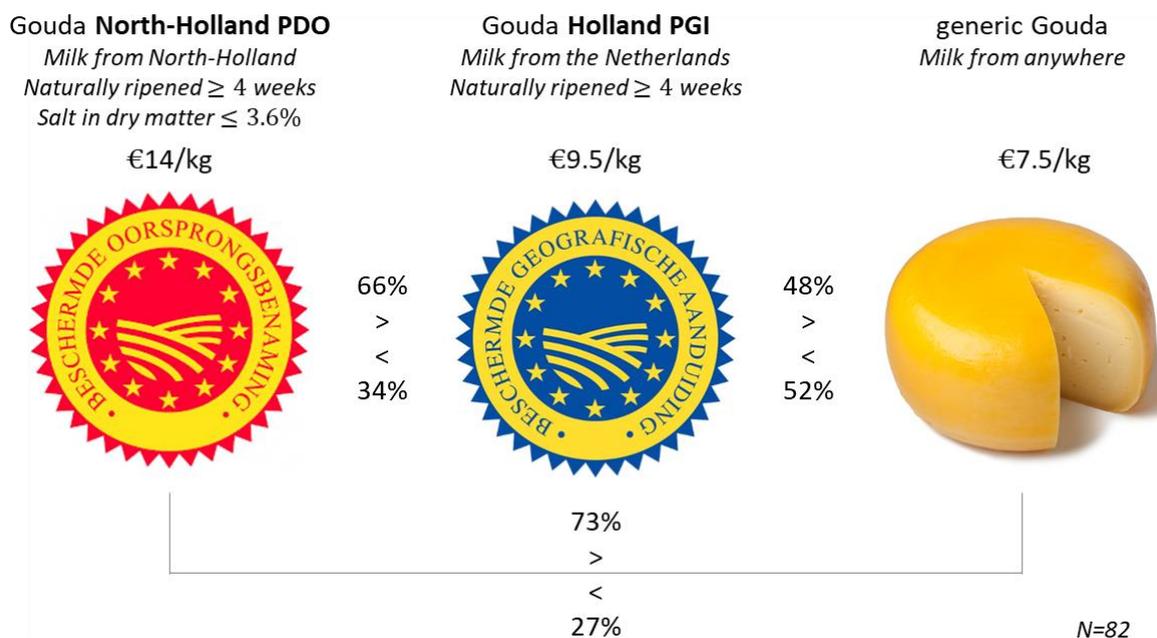
Participants in the experiment could see, smell, and taste the cheese. The tasting was blind in the sense that participants did not know which cheese they were tasting, not in the sense that they could not see it. After tasting, consumers were asked by an enumerator which cheese they preferred. In order to keep the execution of this exploratory study simple, it was single blind: enumerators knew which cheeses participants had sampled, and noted the results.

Figure 3 summarizes the results in a graph. The biggest difference was between the generic and the PDO: 73% of participants who tasted these preferred the PDO. The PDO was also preferred to the PGI by 66% of participants who tasted those two. However, there was virtually no difference in preferences between the PGI and the generic. In fact, 52% of those having tasted the generic and the PGI preferred the generic.

The results of this exploratory study are mixed: while consumers clearly prefer Gouda North-Holland PDO in a blind tasting, the same cannot be said of Gouda Holland PGI. Based on the cheeses in this experiment, it seems the product requirements for this specific PGI do not guarantee a better taste in a blind tasting, while the product requirements for this specific PDO do. These findings comport well with a meta-analysis of GI price premiums, finding large heterogeneity across GIs (Leufkens, 2018).

³ While it would have been interesting to test the role of origin per se and authenticity as well, a non-blind tasting would run the risk of biases, i.e. consumers answering the GI cheese was better because they assume this is the desired answer.

Figure 3. Results from exploratory blind tasting of Gouda cheeses



Of course, this is only a small exploratory study, and research with larger samples of cheeses and participants is necessary. In reaction to the results, a Dutch industry group shared a study they had commissioned. That study had a sample of N=200 German consumers and compared a generic Gouda with a Gouda Holland PGI bought on the German market, and found that consumers rated the taste of the Gouda PGI significantly better than the generic Gouda. However, this particular study used a young matured Gouda PGI, which has to be matured for 8 weeks instead of the 4 weeks required to get the PGI label. In contrast, the generic Gouda was a young Gouda.

The findings of the exploratory blind tasting are in line with a recent EU-commissioned study finding low consumer association between the PGI and PDO schemes and taste. Less than 10% of 1,116 reported respondents perceived the PGI and PDO schemes as associated with a “tasty product” (AND-International et al., 2020: 76). In contrast, over half of respondents associated them with “guarantees on the area of production” (Ibid.).

Concluding this section, it appears that while the product specifications of some GIs clearly affect taste, those of others do not. Hence consumers and policymakers whose quality equation is limited to search and experience attributes will not generally find that GIs certify quality in that narrow sense.

The valuation of quality attributes by consumers

While GI products tend to have higher prices, sales, and exports (Agostino and Trivieri, 2014; AND-International, 2019; Chever et al., 2012; Curzi and Olper, 2012; Huysmans and Curzi, 2020; Loureiro and McCluskey, 2000; Raimondi et al., 2020; Sorgho and Larue,

2014; Vandecandelaere et al., 2020), not much literature exists on which actual or perceived quality attributes of GIs drive this. A study that has looked into Hessian apple wine finds that the willingness to pay for this GI comes more from a willingness to support local producers – arguably a credence or Potemkin attribute – rather than from considerations of gustatory quality (Teuber, 2011). However, other studies have found that the strongest driver of using GI labels in shopping decisions is that they signal better quality (Verbeke et al., 2012: 225).

As the previous sections have shown, GI product specifications may impact all types of quality attributes. However, in practice, some GIs may regulate mostly credence and Potemkin attributes, which have high verification and certification costs. Proponents of GIs sometimes use this fact to justify government GI schemes as necessary to help small traditional high-quality producers who cannot bear the costs. However, detractors may wonder to what extent these attributes are the ones most consumers care about.

In a meta-study, Moser et al. (2011) find that origin was a significant driver of consumer choice in only one out of 8 studies. When differentiating between European and new world consumers, origin is even less relevant for new world consumers (Moser et al., 2011: 130; Prescott et al., 2020: 7). This is likely to be part of the explanation why GIs are more popular in Europe than elsewhere: the one quality attribute that all GIs regulate is geographical origin per se, which is not valued equally by new world consumers.

If most US consumers simply do not value credence and Potemkin attributes such as origin and authenticity, the EU may need to face this reality in trade negotiations with the US. In particular, in order to forbid the unqualified use of its GI names in the US, the EU might consider accepting the use of GI names combined with their true origin. Of course, such a strategy has risks. It will likely make stronger protection harder – in future deals with the US but also with third countries.

Conclusion

This article shows how the SECPP model of quality can be used to evaluate the European GI quality schemes for PGIs and PDOs. The SECPP model adds Potemkin and placebo attributes to the standard model of search, experience, and credence attributes of quality.

The main requirement for EU GIs is a specific geographical origin, which is a credence attribute. The link between origin and GIs is not always as straightforward as one may assume. For instance, Stilton cheese cannot be made in the village of Stilton, the pigs for Parma ham may come from outside the Parma province, and Feta is not a region. Yet overall, GIs do certify a certain regional origin.

While the GI product specification may impose rules that affect composition and taste – search and experience attributes – this is not independently verified by blind tasting or otherwise. A small exploratory blind tasting showed that while a majority of consumers prefers Gouda North-Holland PDO to generic Gouda, the same is not true for Gouda Holland PGI.

In addition to origin, product specifications may affect other credence and Potemkin attributes, such as whether it was produced in a sustainable way and where the good was packaged. Finally, there may also be placebo attributes involved, such as when industrially produced products are perceived as authentic and traditional just because they are GI certified.

Not all consumers value credence and Potemkin attributes. Hence for some consumers geographical origin per se can have a weight in their quality equation while for others it does not. The European GI schemes can only guarantee higher quality for consumers who indeed value the guaranteed origin and product specification of a GI. For other consumers GIs may do more harm than good. By prohibiting the use of GI names, even accompanied by “like” or “style” and their true geographical origin, search costs are increased rather than lowered for such consumers.

Research indicates that new world consumers tend to care less about origin. Hence full EU GI protection on the US market may be unnecessary as well as unrealistic. In order to forbid the unqualified use of its GI names in the US, the EU might consider accepting the use of GI names combined with their true origin. Such a softer stance may also help the UK in concluding trade deals with both the EU and the US (Prescott et al., 2020).

In conclusion, by separating out the different quality attributes that EU GIs may affect, we hope to have clarified the possibilities and limits for GIs to appropriate the brand value of regional specialty foods. In addition, the SECPP framework provides some common ground for a more nuanced transatlantic debate on GIs, regional origin and quality. Future empirical research could investigate in more detail how specific GIs affect the different SECPP quality attributes.

References

- Addor F and Grazioli A (2005) Geographical Indications beyond Wines and Spirits. *The Journal of World Intellectual Property* 5(6): 865–897. DOI: 10.1111/j.1747-1796.2002.tb00185.x.
- Aggarwal R, Singh H and Prashar S (2014) Branding of geographical indications in India: A paradigm to sustain its premium value. *International Journal of Law and Management* 56(6): 431–442.

- Agostino M and Trivieri F (2014) Geographical indication and wine exports. An empirical investigation considering the major European producers. *Food Policy* 46: 22–36. Available at: <http://dx.doi.org/10.1016/j.foodpol.2014.02.002>.
- Akerlof G (1970) The market for 'lemons': Quality uncertainty and the market mechanism. *The Quarterly Journal of Economics* 84(3): 488–500.
- AND-International (2019) *Study on Economic Value of EU Quality Schemes, Geographical Indications (GIs) and Traditional Specialities Guaranteed (TSGs)*. Publications Office of the European Union, Directorate-General for Agriculture and Rural Development.
- AND-International, ECORYS and COGEA (2020) *Evaluation Support Study on Geographical Indications and Traditional Specialities Guaranteed Protected in the EU*. Brussels: Publications Office of the European Union, Directorate-General for Agriculture and Rural Development. DOI: 10.2762/891024.
- Andreou E (2021) It's official: halloumi is Cypriot. *Cyprus Mail* Mar 29. Available at: <https://cyprus-mail.com/2021/03/29/president-welcomes-eus-halloumi-decision/>.
- Astley M (2013) Make Stilton in Stilton? No! Defra rejects Stilton PDO amendment. *DairyReporter.com*. Available at: <https://www.dairyreporter.com/Article/2013/10/24/Make-Stilton-in-Stilton-No!-Defra-rejects-Stilton-PDO-amendment>.
- Barham E (2003) Translating terroir. *Journal of Rural Studies* 19: 127–138.
- Beattie A (2019) EU trade negotiators find non-Greek 'feta' hard to swallow. *Financial Times*, 22 August. Available at: <https://www.ft.com/content/55d787c8-c4d2-11e9-a8e9-296ca66511c9>.
- Blancheton B and Hlady-Rispal M (2021) Ensuring product quality: luxury clusters in cognac and leather. *Regional Studies* 55(2). Taylor & Francis: 282–294. DOI: 10.1080/00343404.2020.1800626.
- Chever T, Renault C, Renault S, et al. (2012) Value of production of agricultural products and foodstuffs, wines, aromatised wines and spirits protected by a geographical indication (GI). *AND-International final report to the European Commission, TENDER N° AGRI-2011-EVAL-04*: 1–85. Available at: http://ec.europa.eu/agriculture/external-studies/2012/value-gi/final-report_en.pdf.
- Chilla T, Fink B, Balling R, et al. (2020) The EU Food Label 'Protected Geographical Indication': Economic Implications and Their Spatial Dimension. *Sustainability* 12(5503): 1–21.

- Curzi D and Olper A (2012) Export behavior of Italian food firms: Does product quality matter? *Food Policy* 37(5): 493–503. Available at: <http://dx.doi.org/10.1016/j.foodpol.2012.05.004>.
- Deconinck K, Huysmans M and Swinnen JFM (2015) The Political Economy of Geographical Indications. *LICOS Discussion Paper Series* 372: 1–36.
- Desquilbet M and Monier-Dilhan S (2015) Are geographical indications a worthy quality label? A framework with endogenous quality choice. *European Review of Agricultural Economics* 42(1): 129–150.
- Donnelly C (ed.) (2016) *The Oxford Companion to Cheese*. New York, NY: Oxford University Press.
- Engelhardt T (2015) Geographical Indications Under Recent EU Trade Agreements. *IIC International Review of Intellectual Property and Competition Law* 46(7): 781–818.
- Evans GE and Blakeney M (2006) The protection of geographical indications after Doha: Quo vadis? *Journal of International Economic Law* 9(3): 575–614.
- Financial Mirror (2020) Halloumi PDO remains political prisoner. *Financial Mirror* Sep 23. Available at: <https://www.financialmirror.com/2020/09/23/halloumi-pdo-remains-political-prisoner/>.
- Food and Agriculture Organization of the United Nations (2019) *Geographical Indications for Sustainable Food Systems: Preserving and Promoting Agricultural and Food Heritage*.
- Fortuna G (2020) EU Court leaves Cyprus on the grill as halloumi trademark rift heats up. *Euractiv*, 21 January. Available at: <https://www.euractiv.com/section/agriculture-food/news/eu-court-leaves-cyprus-on-the-grill-as-halloumi-trademark-rift-heats-up/>.
- Gangjee D (2007) Say cheese!: a sharper image of generic use through the lens of Feta. *European Intellectual Property Review* 29(5): 172–179.
- Gangjee DS (2017) Proving Provenance? Geographical Indications Certification and its Ambiguities. *World Development* 98: 12–24. Available at: <http://dx.doi.org/10.1016/j.worlddev.2015.04.009>.
- Hough C (2016) The EU tries to grab all the cheese. *Politico.com*, 8 June.
- Hughes J (2006) Champagne, Feta, and Bourbon: The Spirited Debate About Geographical Indications. *Hastings Law Journal* 58: 299–386.

- Huysmans M (2020) Exporting protection: EU trade agreements, geographical indications, and gastronomic nationalism. *Review of International Political Economy* (Online First). Routledge: 1–28. DOI: 10.1080/09692290.2020.1844272.
- Huysmans M and Curzi D (2020) The impact of protecting EU Geographical Indications in trade agreements. *Paper prepared for 94th Annual Conference of the Agricultural Economics Society*: 1–22.
- Huysmans M and Swinnen J (2019) No Terroir in the Cold? A Note on the Geography of Geographical Indications. *Journal of Agricultural Economics* 70(2). Blackwell Publishing Ltd: 550–559.
- Ilbery B, Morris C, Buller H, et al. (2005) Product, process and place: An examination of food marketing and labelling schemes in Europe and North America. *European Urban and Regional Studies* 12(2): 116–132. DOI: 10.1177/0969776405048499.
- Jahn G, Schramm M and Spiller A (2005) The Reliability of Certification: Quality Labels as a Consumer Policy Tool. *Journal of Consumer Policy* 28: 53–73.
- Josling T (2006) The war on terroir: geographical indications as a transatlantic trade conflict. *Journal of Agricultural Economics* 57(3): 337–363.
- Khandelwal A (2010) The long and short (of) quality ladders. *Review of Economic Studies* 77(4): 1450–1476.
- Legueltel PP (2020) Guerre du camembert: l'étiquette « Fabriqué en Normandie » bannie des rayons. *Les Echos*, 31 December. Available at: <https://www.lesechos.fr/pme-regions/normandie/guerre-du-camembert-letiquette-fabrique-en-normandie-bannie-des-rayons-1277407>.
- Leufkens D (2018) The problem of heterogeneity between protected geographical indications: a meta-analysis. *British Food Journal* 120(12): 2843–2856.
- Li C, Bai J, Gao Z, et al. (2017) Willingness to pay for “taste of Europe”: geographical origin labeling controversy in China. *British Food Journal* 119(8): 1897–1914.
- Loureiro ML and McCluskey JJ (2000) Assessing consumer response to protected geographical identification labeling. *Agribusiness* 16(3): 309–320. Available at: <http://www.ses.wsu.edu/PDFFiles/JournalArticle/McCluskey/PGI.pdf>.
- Mancini MC, Arfini F, Veneziani M, et al. (2016) Geographical Indications and Transatlantic Trade Negotiations: Different US and EU Perspectives. *EuroChoices* 16(2): 34–40.
- Marie-Vivien D and Biénabe E (2017) The Multifaceted Role of the State in the Protection of Geographical Indications: A Worldwide Review. *World Development* 98: 1–11.

- Matthews A (2016) What outcome to expect on Geographical Indications in the TTIP free trade negotiations with the United States. In: Arfini F, Mancini M, Veneziani M, et al. (eds) *Intellectual Property Rights for Geographical Indications: What Is at Stake in the TTIP?* Newcastle upon Tyne: Cambridge Scholars Publishing, pp. 2–18.
- Moens B, Leali G and Mears E (2020) Halloumi cheese puts EU's Canada trade deal to the test. *Politico.eu*, 4 August.
- Moser R, Raffaelli R and Thilmany-McFadden D (2011) Consumer preferences for fruit and vegetables with credence-based attributes: A review. *International Food and Agribusiness Management Review* 14(2): 121–142.
- Murdoch J, Marsden T and Banks J (2000) Quality, nature, and embeddedness: Some theoretical considerations in the context of the food sector. *Economic Geography* 76(2): 107–125. DOI: 10.4324/9781315237213-6.
- Parrott N, Wilson N and Murdoch J (2002) Spatializing quality: Regional protection and the alternative geography of food. *European Urban and Regional Studies* 9(3): 241–261. DOI: 10.1177/0967642002009003878.
- Prescott C, Pilato M and Bellia C (2020) Geographical indications in the UK after Brexit: An uncertain future? *Food Policy* 90(101808): 1–9. Available at: <https://doi.org/10.1016/j.foodpol.2019.101808>.
- Raimondi V, Falco C, Curzi D, et al. (2020) Trade effects of geographical indication policy: The EU case. *Journal of Agricultural Economics* 71(2): 330–356. Available at: <https://onlinelibrary.wiley.com/doi/abs/10.1111/1477-9552.12349>.
- Rangnekar D (2004) The Socio-Economics of Geographical Indications: A review of empirical evidence from Europe. *UNCTAD-ICTSD Project on Intellectual Property Rights and Sustainable Development* (8).
- Raustiala K and Munzer SR (2007) The global struggle over geographic indications. *European Journal of International Law* 18(2): 337–365.
- Rickard BJ, McCluskey JJ and Patterson RW (2015) Reputation tapping. *European Review of Agricultural Economics* 42(4): 675–701. DOI: 10.1093/erae/jbv003.
- Sorgho Z and Larue B (2014) Geographical indication regulation and intra-trade in the European Union. *Agricultural Economics* 45(S1): 1–12.
- Stevenson T (2008) Definitive study of Champagne's expansion plans. *wine-pages.com* (March). Available at: <https://wine-pages.com/columnist-articles/the-definitive-study-of-champagnes-expansion-plans/>.

- Swinnen J, Deconinck K, Vandemoortele T, et al. (2015) *Quality Standards, Value Chains, and International Development: Economic and Political Theory*. Cambridge: Cambridge University Press.
- Swinnen JFM and Vandemoortele T (2011) Trade and the Political Economy of Food Standards. *Journal of Agricultural Economics* 62(2): 259–280.
- Tagliabue J (2008) Champagne, Switzerland, can't use its own name. *The New York Times* (April 27). Available at: <https://www.nytimes.com/2008/04/27/world/europe/27iht-champagne.4.12377766.html>.
- Teuber R (2011) Consumers' and producers' expectations towards geographical indications: Empirical evidence for a German case study. *British Food Journal* 113(7): 900–918.
- Tietzel M and Weber M (1991) Von Betrügern, Blendern und Opportunisten – Eine ökonomische Analyse. *Zeitschrift für Wirtschaftspolitik* 40(2): 109–137.
- Török Á, Jantyk L, Maró ZM, et al. (2020) Understanding the real-world impact of geographical indications: A critical review of the empirical economic literature. *Sustainability (Switzerland)* 12(22): 1–24. DOI: 10.3390/su12229434.
- Tregear A, Arfini F, Belletti G, et al. (2007) Regional foods and rural development: The role of product qualification. *Journal of Rural Studies* 23: 12–22.
- Van Caenegem W, Cleary JA and Drahos P (2014) Pride and Profit: Geographical Indications as Regional Development Tools in Australia. *Journal of Economic and Social Policy* 16(1): 1–23.
- van Noord D (2019) *Geographic indications as Potemkin attributes: A new perspective on European food quality schemes*. Utrecht University.
- Vandecandelaere E, Teyssier C and Barjolle D (2020) Strengthening Sustainable Food Systems through Geographical Indications: Evidence from 9 Worldwide Case Studies. *Journal of Sustainability Research* 2(4): 1–37. DOI: 10.20900/jsr20200031.
- Velčovská Š and Sadílek T (2015) Certification of cheeses and cheese products origin by EU countries. *British Food Journal* 117(7): 1843–1858.
- Verbeke W, Pieniak Z, Guerrero L, et al. (2012) Consumers' awareness and attitudinal determinants of European Union quality label use on traditional foods. *Bio-based and Applied Economics* 1(2): 213–229.
- Vittori M (2010) The International Debate on Geographical Indications (GIs): The Point of View of the Global Coalition of GI Producers-oriGIn. *The Journal of World Intellectual Property* 13(2): 304–314. Available at: <http://doi.wiley.com/10.1111/j.1747->

1796.2009.00373.x.

- Watson KW (2016) Reign of Terroir: How to Resist Europe's Efforts to Control Common Food Names as Geographical Indications. *CATO Institute Policy Analysis* 787(Feb 16): 1–15.
- Wax E (2019) Commission takes Denmark to court over fake feta cheese. *Politico* Nov 27. Available at: <https://www.politico.eu/article/commission-takes-denmark-to-court-over-fake-feta-cheese/>.
- Wine Spectator (2018) What is a "super Tuscan" wine? *winespectator.com* (Nov 19). Available at: <https://www.winespectator.com/articles/what-is-definition-of-super-tuscan-wine-57238>.
- Winfrey JA and McCluskey JJ (2005) Collective reputation and quality. *American Journal of Agricultural Economics* 87(1): 206–213.
- WTO (1994) *Uruguay Round Agreement: TRIPS. Part II—Standards Concerning the Availability, Scope and Use of Intellectual Property Rights, Section 3: Geographical Indications*. Geneva: World Trade Organization.
- Zhao X, Finlay D and Kneafsey M (2014) The effectiveness of contemporary Geographical Indications (GIs) schemes in enhancing the quality of Chinese agrifoods - Experiences from the field. *Journal of Rural Studies* 36. Elsevier Ltd: 77–86. DOI: 10.1016/j.jrurstud.2014.06.012.