

The Socio-Economics of Geographical Indications

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Background

- Economic and political discussion on geographical indications is booming;
- Europe:
 - move away from traditional instruments of Common Agricultural Policy;
 - competitiveness and market income in the agricultural and food sector increasingly important;
 - high-quality products with regional origin major element of European food quality policy;
 - instrument of European rural development policy.







Questions

- 1. Is there an economic rationale for the protection of geographical indications?
- 2. Which regulations does the EU provide for the promotion and protection of geographical indications and food specialties?
- 3. How can these policies be evaluated?
 - Potential benefits?
 - Potential costs?
 - For the affected producer groups?
 - For the society?







Introduction

- **1** Introduction
- **2** The Economic Rationale for the Protection of Geographical Indications
- **3** Existing Regulations for the Protection of Geographical Indications and Food Specialties: The EU Case
- 4 Potential Benefits and Costs for Producer Groups and the Society
- **5** Summary and Conclusions







2 The Economic Rationale for the Protection of Geographical Indications







2 Economic Rationale (1)

- Consumers may suffer from <u>quality uncertainty</u> and <u>asymmetric information</u>.
- High and low qualities may be sold at the same price.
- Akerlof: High qualities may be crowded out by low qualities ("lemon" problem).
- Here: Quality is due to regional origin.
- Protection of geographical origin may avoid market failure!







Economic rationale (2)

- Legal protection and associated label: Geographical origin turns from a credence to a search characteristic.
- Protection of regional-origin label reduces search costs and, thus, raises consumer welfare.
- Intellectual property right: High-quality producers get a reputation premium and a higher income.
- Imitators and non-original producers are kept away from the market.
- Beneficial for remote regions, rural development and economic cohesion.







3 Existing Regulations for the Protection of Geographical Indications and Food Specialties: The EU Case







Legal Protection of Geographically Differentiated Foods by the EU

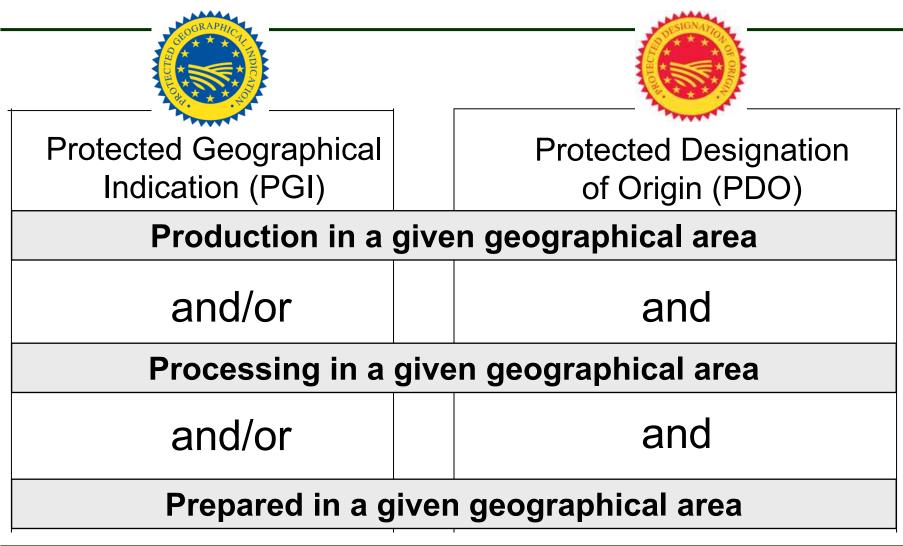
- Regulation 510/2006 captures the legal protection of origin-labelled foods:
 - Protected Geographical Indications (PGIs)
 - Protected Designations of Origin (PDOs)
- Regulation 509/2006 provides additional legal protection on agricultural products and foodstuffs for Traditional Specialties Guaranteed (TSGs)
- Major element of European food quality policy
- Objectives: improving income of farmers; retaining rural population in these areas.







Differential Requirements of the EU Labels (1)









Differential Requirements of the EU Labels (2)

Traditional specialties guaranteed (TSGs) (Regulation 509/2006) have to carry <u>a specific character</u>:

Production using traditional

raw materials

and /or

traditional composition of a product

and/or

traditional mode of production and/or processing









Survey of PDOs, PGIs and TSGs



Policy Measures for Support and Promotion of Geographical Indications

- Creation of a collective brand: Protection against imitation by non-original producers:
 - club good is established
 - if successful: price premium initiated or secured
- Funding of origin-related promotion in the national or provincial agricultural policy:
 - ➤ Co-financing
 - Subsidies on advertising







Issues in the Evaluation of Geographical Indications

(1) Will there be a price premium by the protection and promotion of GIs?

(2) Are producers better off by participating in a protected collective brand?

(3) How can the legal protection of GIs be assessed from the society's point of view?







4 Potential Benefits and Costs for Producer Groups and the Society

4.1 Willingness to Pay for Regional Origin?







On Consumers' Willingness to Pay for Regional Origin:

- Many consumer studies do exist.
- Regional-origin foods with reputation seem to be perceived as high-quality foods.
- Methodologies used:
 - Consumer surveys (contingent valuation) econometric demand system
 - Hedonic price analysis (use of market data on prices and characteristics of goods)







Perceptions of Consumers Concerning the Regional Origin of Foods: Selected Results

Authors/method	Subject	Results	
van der Lans et al.	Italian extra	Some consumer groups value the	
2001 / survey and conjoint analysis	virgin olive oils	region of origin and some do not; direct effect on product preference for	
conjoint analysis		residents of the region; no general	
		positive effect	
Teuber 2011 / survey	Hessian apple	Willingness to pay exists; rises if	
and binary logit	wine	consumers expect support for local	
		economy; limited knowledge about GIs	
Hassan, Monier-Dilhan	French	PDO demand is more price-elastic than	
and Orozco 2011 /	cheese	non-PDO demand; PDOs are clearly	
demand-system	market. PDO	high-quality products; ε^{D} : -2.08	
analysis	versus non-	(Comté); -2.91 (PDO Brie); -3.72 (PDO	
	PDO products	Camembert); - 4.73 (Roquefort)	
Loureiro and	Galician veal	PGI label causes a price premium on	
McCluskey 2000 /		high-quality cuts of meat, up to a	
hedonic analysis		certain quality level	

Source: Own compilation.







Hedonic Analysis: Specialty Coffee as a Case Study (1)

- Basic question: Do market data reveal a price premium for regional origin that consumers are willing to pay (apart from other characteristics)?
- How large is the implicit value of regional origin for high-value coffees? (Teuber 2009)
- Analysis of internet auction data: "Cup-of-excellence" website.
- Coffees of various important producer countries and regions considered.
- Methodology: Hedonic price analysis.







Hedonic Analysis: Specialty Coffee as a Case Study (2)

Basic idea of hedonic price analysis

- Consumers buy a good on the basis of its characteristics: Product = a bundle of characteristics.
- Characteristics are what consumers are looking for.
- Product prices are a function of the characteristics the goods contain:

(1)
$$p = p (z_1, z_2, ..., z_n)$$

with z_i = quantity of characteristic *i* in one unit of a product.







Hedonic Analysis: Specialty Coffee as a Case Study (3)

- Applied to coffee varieties:
 (2) Coffee price p = p (score, rank, <u>regional</u>
 <u>origin</u>, coffee variety, certification, year)
- Computation of the implicit price:

(3)
$$\partial p / \partial z_i = \hat{p}_i$$

with: \hat{p}_i = implicit price for characteristic *i*.

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Case Study Coffee Specialties (3): Results

Dependent Variable	Log(Price)		
Score	0.072***	(0.000)	-
1st Rank	0.889***	(0.000)	
2 nd Rank	0.323***	(0.000)	-
3 rd Rank	0.258***	(0.000)	-
Log (lot size)	-0.390***	(0.000)	1
Log (Coffee Area)	0.028**	(0.007)	1
Coffee variety			
Reference: Bourbon			
Catuai	0.013	(0.747)	
Caturra	0.049	(0.086)	
Pacamara	0.007	(0.926)	
Typica	0.054	(0.564)	
Othere	0.048	(U.S.)	
origin			
Reference:			
Honduras			
Bolivia	0.488***	(0.000)	
Brazil	0.409***	(0.000)	
Colombia	0.311***	(0.000)	
Costa Rica	- 0.083	(0.162)	
El Salvador	0.226***	(0.000)	
Guatemala	0.559***	(0.000)	
Nicaragua	0.168***	(0.000)	1
C. Fication			
Reference.			
certificatrion	0.00744	(0.000)	-
Organic	0.237**	(0.002)	-
Rainforest Alliance	-0.054	(0.203)	-
Year			_
Reference: 2003	0.40.4**	(0.00.1)	-
2004	0.134**	(0.004)	-
2005	0.113**	(0.009)	-
2006	0.275***	(0.000)	-
2007	0.584***	(0.000)	-
Adj: R squared		0.71	-
-value		92.58	1

Origin		
Reference:		
Honduras		
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Colombia	0.311***	(0.000)
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El Salvador	0.226***	(0.000)
Guatemala	0.559***	(0.000)
Nicaragua	0.168***	(0.000)

***, **, * indicates statistical significance at the 99.9%, 99% and 95% levels. p-values in parantheses. Source: Teuber 2010.







Conclusions from Willingness-to-Pay Studies

- Willingness to pay for the regional origin: exists according to
 - survey results;
 - hedonic price studies.
- Potential for a price premium and welfare gain for producers due to protection and promotion of geographical indications!
- But: Case studies needed: Do benefits outweigh the additional costs?







4.2 Price, Income and Welfare Effects of Geographical Indications







The price premium for a high-quality regional product

Economic definition of a specialty product:

"Specialty food and drink products should be differentiated from mainstream or commodity products". They should "target niche markets and command a premium price" (DTZ Pieda Consulting, 1999).

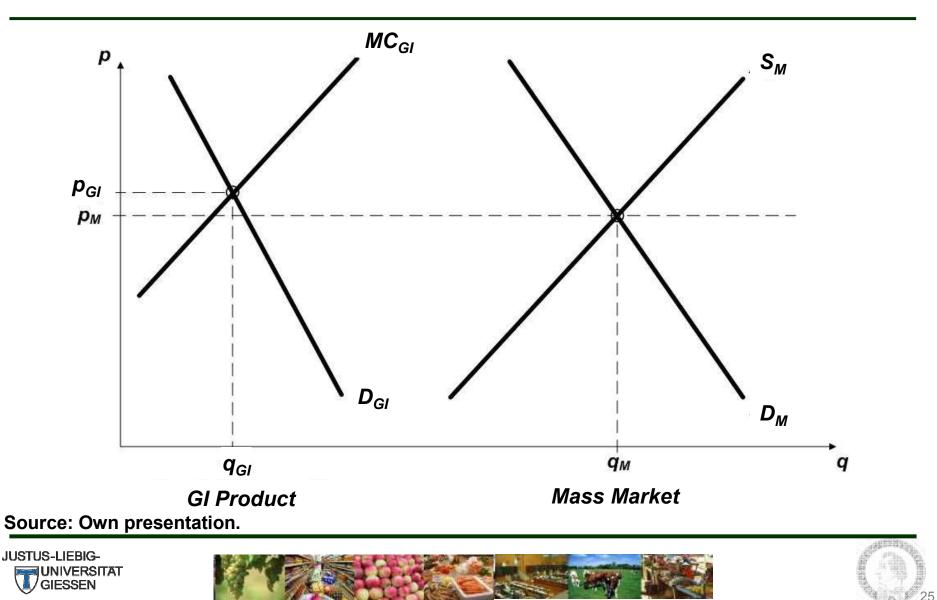
Regional specialties should receive a price premium for their characteristic regional origin!







Markets for a High-quality Regional Product and the Standard Quality with Perfect Competition



Relevant policy questions and answers

- Does the promotion and protection of geographical indications induce a price premium?
 - > Yes, if demand shifts more than supply!
 - > The net producer price will then increase.
 - Producer welfare will rise, too.
- Does promotion and protection of geographical indications improve social welfare?

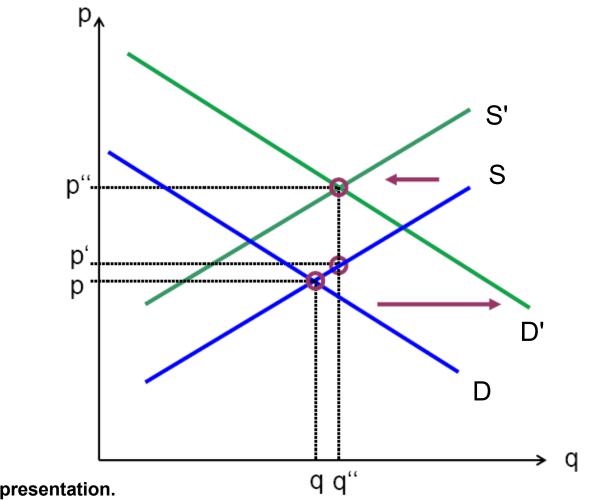
Not necessarily!







Price Effects of the Protection and Promotion of Geographical Indications



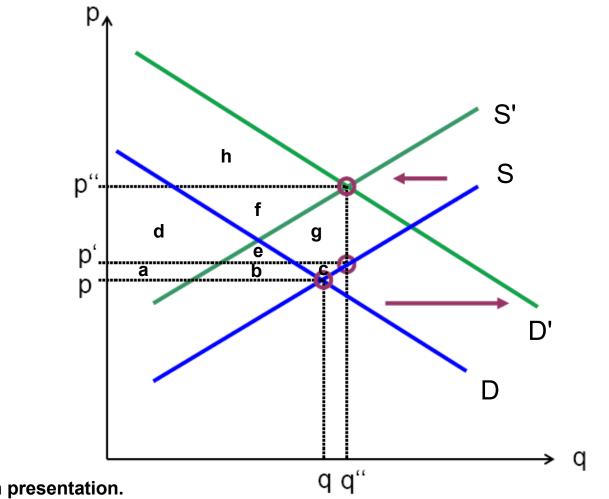
Source: Own presentation.

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Welfare Effects of the Protection and Promotion of Geographical Indications



Source: Own presentation.

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Welfare Effects

(with informative advertising; label reduces consumers' search costs; perfect competition; check-off program):

- \triangle Producer surplus: a + b + c
- \triangle Consumer surplus: *d e* + *h*
- $\Delta \text{ Welfare:} \qquad a+b+c+h-d-e$







Did PDOs and PGIs Raise Producer Welfare? (1)

- Only few rigorous empirical analyses!
- Broad evidence on quality assurance schemes and commodity promotion:
 - Producers gain, but:
 - Very low advertising elasticity of demand (0.1 or less).
- Advertising of PDO and PGI labels may be costly: Largely unknown labels!







Did PDOs and PGIs Raise Producer Welfare? (2)

- But: Producers seem to expect welfare gain!
- DOOR-Database of the EU, May 2011: 1031 registered PDOs, PGIs & TSGs
 - ≻ 515 PDOs, 476 PGIs and 40 TSGs
 - Majority in Italy (228), France (183) and Spain (148)
- Requests in 2010: 8 PDOs, 33 PGIs and five TSGs.







5 Summary and Conclusions (1)

- Geographical indications have the potential to contribute to economic policy objectives:
 - may reduce quality uncertainty;
 - may secure intellectual property;
 - may lead to a price premium;
 - > may raise income in rural areas;
 - \succ may improve economic cohesion.







5 Summary and Conclusions (2)

- Geographical indications bear substantial risks, too:
 - ➢ May foster market power → anticompetitive effects!
 - Do they really provide "true" information?
 - Do production clubs exclude efficient competitors?
 - New protectionist instrument in trade policy?







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Thank you very much for your attention!





