Exporting protection:

EU trade agreements, geographical indications, and gastronationalism[*]

Martijn Huysmans[†]

Abstract

A key objective of EU trade policy is to obtain wider protection for its specialty foods, known as Geographical Indications (GIs). While the WTO provides some protection for GIs under Trade Related Aspects of Intellectual Property (TRIPS), the EU has successfully considered additional protection for its GIs a red line in recent Free Trade Agreements (FTAs). FTAs are negotiated by the Commission but require member state approval. Given that both Greece and Italy have threatened not to ratify CETA over insufficient GI protection, GIs clearly matter. This article provides and analyzes new data on GI protection in 11 recent EU trade agreements. It finds that EU FTAs are more likely to protect GIs with higher sales values and from countries in the South of Europe, where GIs are highly salient because of gastronationalism. These findings illustrate how economic and political considerations shape and enable EU policy exports.

Keywords Trade agreements • Geographical Indications • Intellectual Property • TRIPS • European Union

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[†] Assistant Professor, Utrecht University School of Economics. Email: m.huysmans@uu.nl.

1 Introduction

A Geographical Indication (GI) certifies and protects an agricultural product from a specific geographical origin, with "given quality […] essentially attributable to its geographical origin" (WTO 1994). Recognizing their importance in trade, the Design of Trade Agreements (DESTA) project codes whether GIs are referenced in trade agreements (Dür et al. 2014), but provides no further detail. This article provides and analyzes more in-depth data on the protection of individual GIs for 11 EU FTAs to study the political economy of EU trade policy.

Proponents of GIs, such as the EU, argue that they improve consumer information and hence have positive welfare effects (Lence et al. 2007; Moschini et al. 2008). Detractors of GIs, such as the US, argue that they stifle competition and innovation, and that they are unnecessary given the possibility of using private trademarks (Osgood and Feng 2018). Just like for standards in general, empirically assessing the welfare and trade effects of GIs as a non-tariff measure is difficult and contentious (Beghin et al. 2015).

The different appraisal of GIs between the EU and the US has resulted in an ongoing conflict, dubbed the "War on Terroir" by Josling (2006). A recent episode of this conflict were the negotiations over the Transatlantic Trade and Investment Partnership, where GIs were a major stumbling block (Hough 2016; Matthews 2016; Michalopoulos 2016; Young 2016).

GIs are not just a trivial detail in FTAs. Both Greece and Italy have threatened not to ratify CETA because they deem the obtained GI protection insufficient (Malkoutzis 2016; Reuters 2018). Even German media reported on the lack of protection of Bavarian Beer in CETA (Uken 2015). Any agreement on Brexit will have to deal with GIs (European Commission 2017). In July 2018, the EU has started FTA negotiations with Australia, which in the past strongly opposed increased GI protection at the WTO (William Van Caenegem et al. 2014).

Given the fundamental disagreement on GIs, studying them allows for direct insight into the global battle for influence between the EU and the US (O'Connor and Bosio 2017). For third countries, giving in to the EU may preclude or limit the potential of future deals with the US, and vice versa. In this respect, the inclusion of 143 GIs in the Comprehensive Economic and Trade Agreement (CETA) with Canada, a country close to the US, is a significant success for the EU in terms of policy export. Some commentators have concluded that "The EU's disputed system of geographical indications is taking over the planet" (Livingstone 2017: 1). Indeed, GIs are also gaining popularity in the global South (Marie-Vivien and Biénabe 2017).

Of course, optimism on the EU's recent success in exporting its GI policies should be balanced by a reminder that it has been forced to take the bilateral road because it could no longer successfully export its policies at the multilateral level (De Bièvre and Poletti 2013; Sbragia 2010). In addition, in many other areas than GIs the EU's capacity to export its regulations seems to have declined significantly (Young 2015).

To explain why the EU has been relatively successful in exporting its GI policies through FTAs, the theory developed in this article points to their public salience, rather than their economic importance. Because GIs are so salient in five Southern member states, FTAs will only be ratified if they protect a sufficient number of GIs from those high demand countries.

One look at the overall sales figure makes clear that EU GI trade policy has to be about more than just economics. Indeed, in 2010, only about 1 B€ worth of food GIs was exported outside of the EU. This corresponds to less than 0.01% of EU GDP.

GIs and food culture more generally are important aspects of local and national identity (Broude 2005). DeSoucey (2010: 433) has used the term "gastronationalism" to refer to the attachment to and protection of foods in response to globalization and its "homogenizing tendencies". While the fear of homogenization may be overblown, it does seem clear that free trade often benefits mostly large and cost-competitive firms (Baccini et al. 2017).

Existing studies on GIs in EU FTAs focus on qualitative levels of protection and compare only a limited selection of FTAs. In contrast, this article considers 11 recent FTAs negotiated by the EU and moves to a quantitative analysis based on its novel coding of the lists of protected GIs. It contributes to the literature by showing that GIs from the South of Europe are more likely to be protected, even if they have lower sales. In terms of broader relevance, this article illustrates how both economic and political considerations shape and enable EU policy exports.

2 GIs and EU trade policy

The EU counts over 1300 GIs protecting food items such as Gouda Holland or Prosciutto di Parma. On average, such products are sold for about twice the price of similar non-GI products (Chever et al. 2012). Protected GI names cannot be used by producers outside of the relevant area. As an example, in the EU you cannot sell a cheese as Feta if it was not manufactured in the protected area in Greece.

Most EU countries have at least one GI, with Malta and Estonia being the exception. However, the vast majority of GIs is concentrated in the "Southern Five": France, Greece, Italy, Portugal

and Spain. These five countries have over 70% of all EU food GIs, and 80% of wine GIs (Huysmans and Swinnen n.d.). Figure 1 illustrates the number of GIs per country by May 2018.
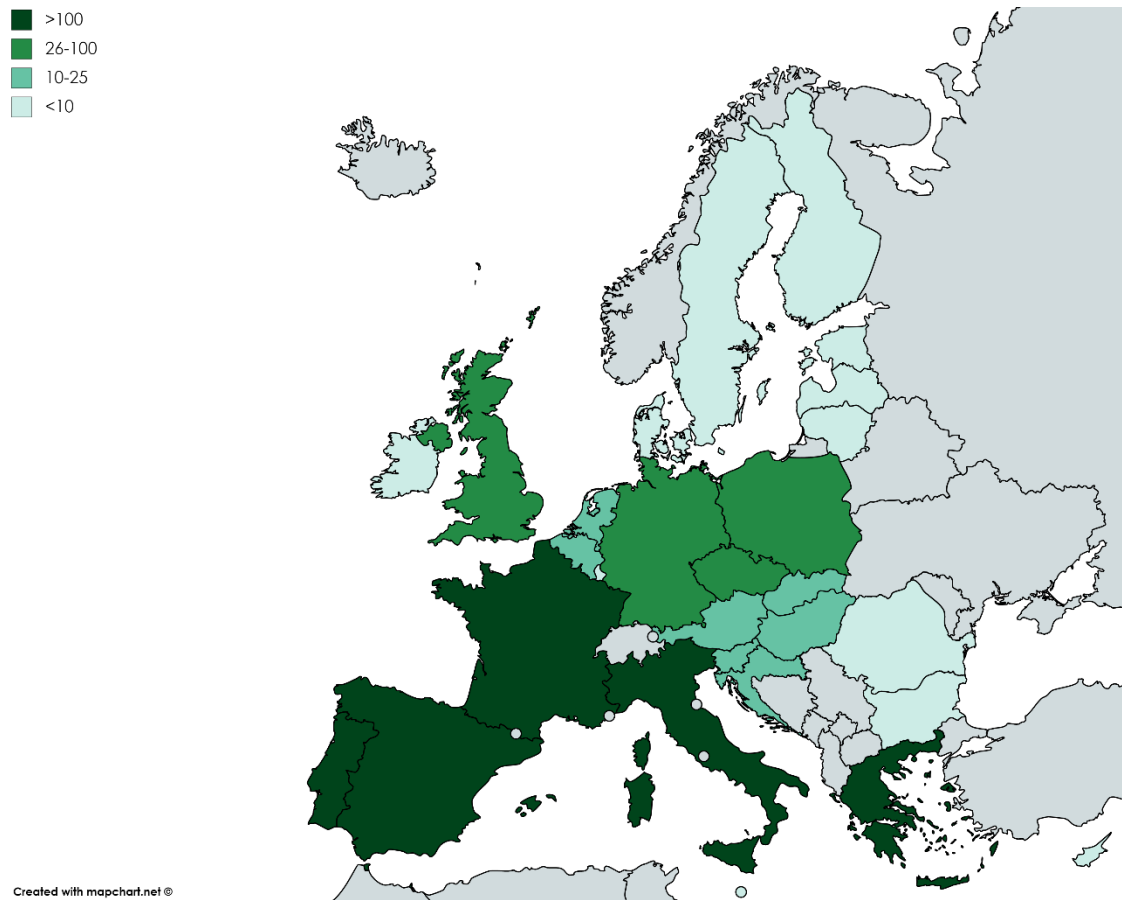

Figure 1. EU28: food GIs by May 2018

In light of cultural preservation, one of the advantages of protecting GIs through a specific or *sui generis* system rather than through ordinary trademarks, is that this feature may help small traditional producers threatened by globalization (Broude 2005: 651-656). By spreading the fixed costs of marketing and certification, GI schemes may allow them to survive even if they cannot afford to build up an individual trademark-protected brand (Moschini et al., 2008: 807).

A related argument to the preservation of traditional production methods, is the objective of preserving rural economies and populations. This argument is mentioned explicitly in the preamble to regulation EEC 2081/92: "the promotion of products having certain characteristics could be of considerable benefit to the rural economy, in particular to less-favoured or remote areas, by improving the incomes of farmers and by retaining the rural population in these areas".

EU GIs are not necessarily protected outside of the Single Market. Under Article 23 of Trade Related Aspects of Intellectual Property (TRIPS), GIs for wines and spirits are fairly well protected (Goldberg 2001; Raustiala and Munzer 2007; WTO 1994). In contrast, Article 22

TRIPS provides less protection for GIs covering foodstuffs (Addor and Grazoli 2002; Vittori 2010). Hence this article focuses on food GIs.

Given the failure of the WTO Doha round (De Bièvre and Poletti 2013; Evans and Blakeney 2006; Hughes 2006), the EU has been seeking to extend the protection level of Article 23 TRIPS to its foodstuff GIs by means of bilateral FTAs (DG AGRI 2012). Consistent with the Global Europe strategy, the EU has focused on large economies for this 'new generation' of trade agreements (Young 2015). The 2009 FTA with South Korea was the first in this series.

The EU's commitment to GI protection in FTAs remains strong. Recently, the EU has started negotiations for a trade agreement with Australia and New Zeeland. As per its mandate from the Council, the Commission will have to ensure that any agreement provides "direct protection […] through the agreement of a list of GIs […] at a high level of protection building upon Article 23 TRIPs" (Council of the EU 2018: 15). While it remains to be seen if Australia will give in, the US pullback from the Trans-Pacific partnership (to which Australia is a member) seems to make this more likely.

EU Trade agreements are negotiated by the Commission, on mandates from the Council (Dür and Zimmermann 2007). The final agreement then needs approval from the Council and, since the Lisbon Treaty, also from the European Parliament. The Council, where the member states are represented, operates de facto by consensus. This means that the Commission has to search for compromises that are acceptable to all member states (De Bièvre 2018), also taking into account non-trade issues (Lechner 2016).

In principle, trade is an exclusive EU competence. However, since these agreements often also touch upon other competences (such as state-investor dispute settlement), the European Court of Justice has ruled in relation to the Singapore FTA that such agreements also need to be ratified by the parliaments of the member states. Even before this judgement, the Commission had decided to have CETA be ratified by the national parliaments. On top of consensual decision-making in the Council, this means that the national parliaments have an ex-post veto.

The need for support from all member states has helped the EU in getting concessions from its trading partners (De Bièvre and Poletti 2013). This has been called the "paradox of weakness" (De Bièvre 2018). Consistent with the logic of two-level games, the Commission can credibly threaten that no agreement is possible unless the partner concedes (Putnam 1988). On the other hand, this also means that in order to secure any agreement at all, issue linkage is often

necessary (Dür 2014). By integrating GIs into broad trade agreements, all EU member states as well as the negotiating partner can win from the final agreement.

Regarding the FTAs that were concluded, it is hard to assess the cost of the concessions given in return for the protection of GIs (Matthews 2016). However, it is not unthinkable that these exceed the potential benefits of additional exports of EU GIs. Even more importantly, if it continues treating the protection of GIs as a red line, the EU may never be able to reach an FTA with the US. In this light, the ongoing negotiations with Australia are important to watch.

3   Recent EU trade agreements

This article studies all EU FTAs that protect lists of foodstuff GIs and for which negotiations have been concluded since 2009 – the start of the 'new generation'.[1] It does not include standalone agreements on GIs nor FTAs that only protect wine or spirits GIs. It also excludes the Stabilization and Association Agreements (SAAs) with the Balkan countries: with the exception of Kosovo, these have been signed before 2009. The Kosovo SAA, signed in 2015, protects all registered EU food GIs and so does not contain a list of protected GIs.

The resulting 11 agreements are listed in Table 1. They have been ordered by the end date of negotiations.[2] For the signed agreements, the table lists the year they were signed and also their date of provisional application and of full effect, if applicable. Because ratification by all member states can take time, most parts of signed agreements are applied provisionally as soon as the European Parliament and the counterparty have given their approval and both sides are ready for implementation. As an example, this has been the case with CETA since September 2017. Once all member states have ratified, the agreements come into complete effect.

There are different types and names of trade agreements. The agreements with South Korea, the Andean countries (Columbia, Peru and since 2017 Ecuador), Singapore and Vietnam are simply called FTAs. With the Central American countries (Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and Panama) the EU has signed an Association Agreement (AA). With Georgia, Moldova and Ukraine, Deep and Comprehensive Free Trade Agreements (DCFTAs) have been concluded. Canada and the EU signed a Comprehensive Economic and Trade Agreement (CETA). With the South African Development Community and with Japan, the EU

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[1] In April 2018, an agreement in principle was reached with Mexico, but the final negotiated texts with list of GIs have not been published yet. Hence the EU-Mexico agreement is omitted from the analysis.
[2] The dates used are those of the conclusion of negotiations, as reflected by DG Trade press releases.

entered into Economic Partnership Agreements (EPAs). The table only refers to South Africa, because the provisions on GIs in the EPA only apply to South Africa itself and not to the other members of the community (Botswana, Lesotho, Mozambique, Namibia, Swaziland).

Table 1. Overview of EU FTAs since South Korea protecting GIs.

Order	Counterparty	Type	Negotiated	Signed	Provisional	Effective	GIs
1	South Korea	FTA	2009	2010	2011	2015	60
2	Andean	FTA	2010	2012	2013		34
3	Central America	AA	2010	2012	2013		88
4	Ukraine	DCFTA	2012	2014	2016	2017	811
5	Georgia	DCFTA	2013	2014	2014	2016	805
6	Moldova	DCFTA	2013	2014	2014	2016	852
7	South Africa	EPA	2014	2016	2016		110
8	Canada	CETA	2014	2016	2017		143
9	Singapore	FTA	2014	2018			83
10	Vietnam	FTA	2015				59
11	Japan	EPA	2017	2018	2019		78

The last column of Table 1 shows the variance in the number of listed food GIs. While the Andean FTA protects only 34 GIs, the DCFTA with Moldova protects 852. Figure 2 illustrates the fraction of GIs listed in these 11 FTAs per EU28 country. To compute the fractions, observations were limited to GIs registered at the latest in the calendar year before the conclusion of FTA negotiations. While there are some differences with Figure 1, again the Southern Five stand out: France, Greece, Italy, Portugal and Spain.
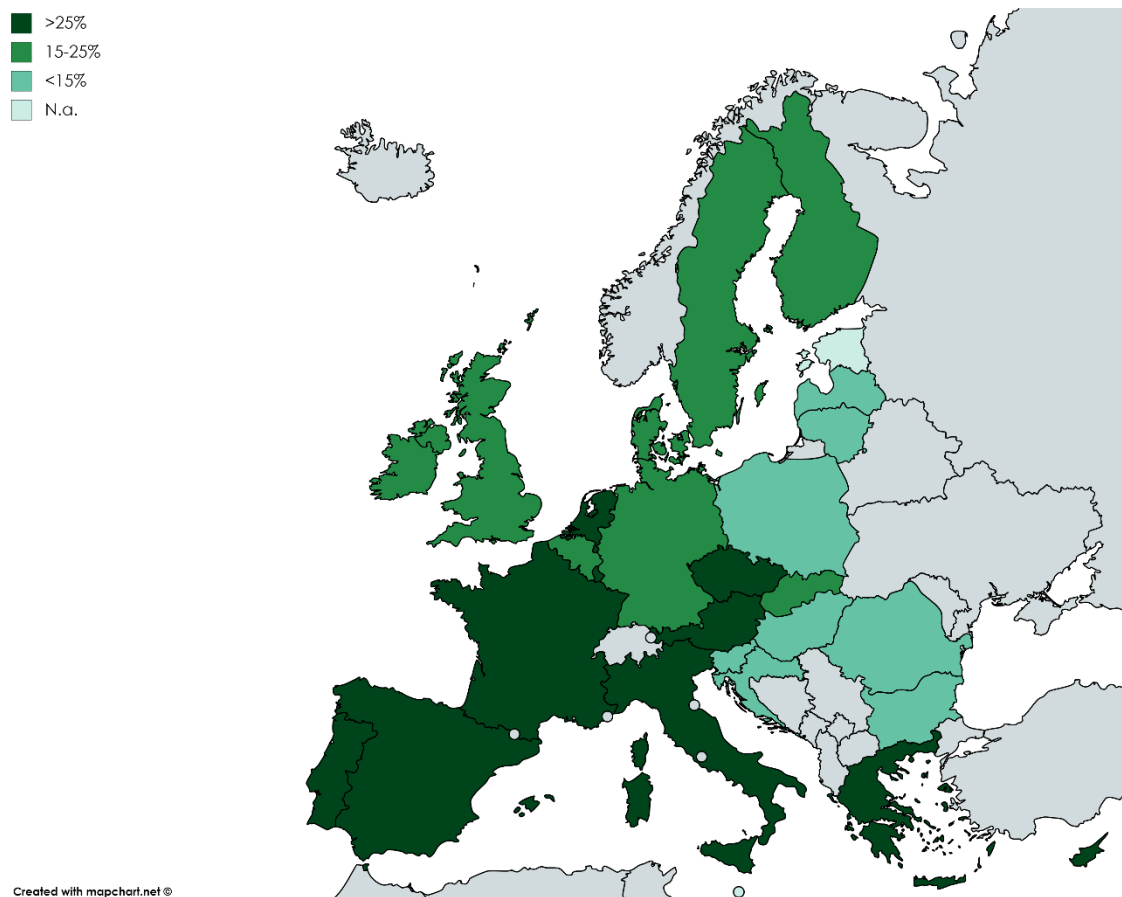
Figure 2. EU28: fraction of GIs listed in 11 FTAs.

3.1 Qualitative aspects of GI protection

While O'Connor & Richardson (2012) analyze lists of protected GIs, their analysis remains descriptive and limited to three FTAs (South Korea, Andean and Central American) and three GI-only agreements (Switzerland, Moldova and Georgia). They show that the lists vary widely across these cases, although there is a common base protected in all of them.

Table 2 gives an overview of the GIs listed in all 11 FTAs. It is striking that this list only contains GIs from GI-rich Southern EU countries. While most of the products are well-known, some are not. Probably the two least known are Priego de Córdoba (an olive oil from Spain) and Masticha Chiou (a natural gum from Greece). From the economic perspective of imitation outside of the EU, it hardly seems necessary to protect these products. The reason for their inclusion in all FTAs may be more political. As discussed, both Greece and Italy have threatened not to ratify CETA because it does not protect enough GIs. While padding the lists with unknown GIs may not bring much economically, it likely also requires less concessions to the FTA counterparty in return. Hence the listing of unknown GIs from the Southern Five may be a strategy by the EU to satisfy gastronationalism while limiting the required concessions.

Table 2. GIs listed in all 11 FTAs.

GI	Country	Category
Brie de Meaux	France	Cheeses
Camembert de Normandie	France	Cheeses
Canard à foie gras du Sud-Ouest	France	Meat Products
Comté	France	Cheeses
Emmental de Savoie	France	Cheeses
Gorgonzola	Italy	Cheeses
Grana Padano	Italy	Cheeses
Jambon de Bayonne	France	Meat Products
Mortadella Bologna	Italy	Meat Products
Parmigiano Reggiano	Italy	Cheeses
Priego de Córdoba	Spain	Oils and Fats
Prosciutto di Parma	Italy	Meat Products
Prosciutto di San Daniele	Italy	Meat Products
Prosciutto Toscano	Italy	Meat Products
Provolone Valpadana	Italy	Cheeses
Pruneaux d'Agen	France	Fruit, Vegetables & Cereals
Reblochon (de Savoie)	France	Cheeses
Roquefort	France	Cheeses
Taleggio	Italy	Cheeses
Ελιά Καλαμάτας (Elia Kalamatas)	Greece	Fruit, Vegetables & Cereals
Μαστίχα Χίου (Masticha Chiou)	Greece	Natural Gums & Resins
Φέτα (Feta)	Greece	Cheeses

Engelhardt (2015) studies 5 EU FTAs: those with South Korea, with Colombia & Peru (also known as the Andean FTA), the Central American countries, Canada, and Georgia. He concludes that the EU has been broadly successful in achieving its goals of GI protection. In particular, the EU managed to protect lists of GIs and have its partners accept co-existence with prior trademarks. On the other hand, he finds that the lists diverge widely and that not all FTAs provide for equally strong enforcement.

Matthews (2016) compares a set of EU agreements to a set of US agreements, in order to anticipate potential outcomes for the now frozen TTIP negotiations. On the EU side, his analysis includes the agreements between the EU and South Korea, Singapore, and Canada. He compares them to those between the US and South Korea and the Trans-Pacific Partnership (TPP) that was being negotiated between 12 American and Asian countries. He concludes that the EU and the US have negotiated very different agreements regarding GIs, and that finding a compromise for TTIP will be difficult.

In a similar spirit, O'Connor and Bosio (2017) compare the EU-South Korea agreement to US-South Korea and EU-Vietnam to the TPP. They find support for a "first come first served" rule:

whoever comes first affects the scope for compromise with the second. For instance, because of what Vietnam had agreed to during TPP negotiations, a clause was added to the EU-Vietnam agreement that listed GIs may be invalidated later on. Partial exceptions were also made for prior users of the terms Feta, Champagne, and other listed GIs.

To conclude, the existing literature has established two main findings. First, it has shown that across EU FTAs the lists of protected GIs as well as the protection level differ. Second, it has shown how the conflict between the EU and the US has affected their preferential trade agreements with third parties. Building on this prior literature, this article moves to a quantitative analysis of the protected GIs in EU FTAs.

4   Hypotheses and data

Because the protection of a GI requires effort and concessions by the EU on other aspects such as market access (Matthews 2016), the Commission is expected to focus on GIs that are valuable in export. Leading to the same hypothesis, producers of more valuable GIs in export are more likely to lobby for protection. Based on the Melitz (2003) model of trade, one might also entertain the opposite hypothesis, since GIs with large sales are likely already competitive in exports (Curzi and Olper 2012). However, this requires that they are safeguarded from imitation under the same name; otherwise their price premium risks being eroded away (Meloni and Swinnen 2018; Winfree and McCluskey 2005). So even though high sales GIs might already be more competitive in exports than low sales GIs, I still expect them to lobby more in order to maintain their price premium in export markets.

H1: GIs with higher export values are more likely to be protected.

As explained above, EU trade agreements require ex-post approval from the member states. Recent agreements require explicit ratification by all individual member states, but also in the past the Council de facto only ratified if there was a consensus (De Bièvre 2018). This means that countries have an ex-post veto if they feel that an insufficient number of their GIs is protected. Anticipating this, one expects the Commission to focus on GIs from countries where they are highly salient, and the demand for protection is high. Indeed, such high demand countries might otherwise not approve the agreement. Conversely, low demand countries in terms of GIs are not likely to bock ratification because of the lack of protection of their GIs. An alternative but complementary channel favoring high demand countries is informational. Politicians and bureaucrats from groups with high demands in a given policy area tend to have

superior information in that area (Krehbiel 1991). Applying this to the Commission, one can expect it to rely more on bureaucrats and information from high demand countries. The direct and informational channel for high demand countries hence lead to the same hypothesis:

H2: GIs from high demand countries are more likely to be protected.

As argued above, economic concerns are not the sole determinant of EU GI policy. A clear illustration of the symbolic importance of GIs in certain EU countries is the case of Feta and CETA. The Greek party Syriza has threatened not to ratify CETA (Christides 2013), among other reasons because it does not fully protect Feta.[3] This is striking for two reasons. First, under the status quo there is no protection of Feta at all. Second, exports of Feta to Canada in 2011 amounted to only about 4M€ (Malkoutzis 2016) or roughly 0.002% of Greek GDP. Even if these would have doubled or increased ten-fold through full protection, the potential contribution to Greek GDP seems modest. Countries where GIs are highly salient may hence require protection even for GIs with limited sales value

H3: For high demand countries, sales value matters less for protection.

To test these hypotheses, a series of variables will be used as described below.

4.1 Dependent variable and predictors

The dependent variable, *Listed*, is 1 for GIs that are listed in a given agreement and 0 otherwise. It has been newly coded from the annexes to the 11 agreements listed in Table 1. Data on the universe of GIs comes from the Commission's DOOR database, which is publicly available. The main analysis limits observations to GIs that were registered one year before negotiations were concluded, but robustness checks reported later use longer lags. This leads to a total of 11,510 observations.

Since there is no public data on the export value of GIs, H1 will be tested with two proxy variables. The first proxy, *ln(Sales)*, is the log of estimated sales in euros. The estimate is based on data by Chever et al. (2012), who provide sales values of GIs at the country-category level. Categories are for instance "1.1 Fresh Meat" or "2.4 Bread, Pastry, Confectionary". The estimated sales is then simply GI sales divided by the number of GIs of that country in that

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[3] While Feta is listed, it is only partially protected. Notably, it is subject to a grandfathering clause that allows existing Canadian producers of 'Feta' to continue, and to a clause which allows potential new producers to refer to their product as Feta-style, Feta-like etc. In the empirical part, a robustness check codes Feta and other products with similar exceptions as not being protected at all.

category. If for reasons of confidentiality the figures for a certain country-category combination are omitted, I use the average value in that category across countries.

Sales is a rough proxy. Based on data provided by EUIPO (2016), the average sales value of the top 10 GIs (including wine and spirits) is 1.3B€.[4] Comparing this to the maximum category-country sales estimate of 103 M€, it is clear that in practice GI values are much more skewed than the proxy.

The second proxy for export value is *CatExport*, also taken from Chever et al. (2012). It gives the fraction of GI value exported outside of the producer country. This data is only available at the category level. Hence the variable is a rough proxy for how much of a given GI is exported.

To test H2, the dummy *Southern5* is 1 for France, Greece, Italy, Portugal and Spain. These countries have about 70% of EU food GIs and an even larger share of wine GIs (Huysmans and Swinnen n.d.). They are also well known for their food and food culture (DeSoucey 2010). Other measures for high demand countries are used as robustness checks.

If both *ln(Sales)* and *Southern5* have positive coefficients, H3 can then be tested by interacting them. The expectation is for the interaction effect to be negative but small, so that the effect of *Southern5* is still positive at large sales.

4.2 Control variables

While I have argued that all countries have an ex-post veto, one may still expect larger countries to have more influence, irrespective of whether they have high demand for GI protection. To control for this, *CtryVotes* gives the number of country votes in the Council under the rules of the Nice Treaty, which were used until 2014. Robustness checks will use shares of EU population and Shapley-Shubik power indices instead.

At the GI level, two control variables are used: *YearReg* and *PDO*. The first controls for the year a GI was registered in the EU, since more valuable GIs may have been registered earlier, and are more established. The second, *PDO*, is 1 for GIs that are registered as Protected Designations of Origin (PDOs) rather than Protected Geographical Indications (PGIs). They may have higher margins than PGIs, leading to more producer lobbying.

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[4] As listed in alphabetical order: Bayerisches Bier, Cava, Champagne, Cognac, Grana Padano, Parmigiano Reggiano, Pays d'Oc, Prosciutto di Parma, Rioja, Scotch Whisky.

It is well established in the trade literature that colonial ties positively affect trade flows (Head et al. 2010). However, in the case of GI protection an opposite effect may play: former colonies may resist protection of GIs from their former colonizers. The dummy *Colonial ties* is 1 for GIs from formerly colonizing countries.[5]

Table 3 gives descriptive statistics for all of these variables. A correlation table is provided in the Appendix.

Table 3. Descriptive statistics for GIs registered one year before negotiations in 11 FTAs.

Variable	N	Min	Max	Average	Source of underlying data
Listed	11,510	0	1	0.27	FTA appendices coded by author
ln(Sales)	11,495	10.6	18.4	15.7	Chever et al. (2012), Country-Category
CatExport	11,510	0	0.66	0.22	Chever et al. (2012), Category estimate
Southern5	11,510	0	1	0.77	Huysmans & Swinnen (forthc.)
CtryVotes	11,510	4	29	23.0	Council Votes
YearReg	11,510	1996	2016	2002.6	DOOR database: year of registration
PDO	11,510	0	1	0.50	DOOR database: PDO vs. PGI
Colonial ties	11,510	0	1	0.06	

5 Methods and results

The probability that GI i in category k from country c is listed in agreement a is estimated as:

$$p(Listed_{ikca}) = \Phi(\alpha + \beta_1 SalesEst_{kc} + \beta_2 CatExport_k + \beta_3 Southern5_c + \beta_4 CtryVote_c + \gamma X_{ikca} + \gamma_a).$$

In this expression, γ_a are FTA fixed effects. Standard errors are clustered at the GI level. The results are reported in Table 4. Model 1 includes only the variables for H1 and H2. Model 2 adds all control variables. To test H3, Model 3 adds the interaction term ln(Sales)*Southern5.

Table 4. Probit regression of Listed.

Probit of Listed	(1)	(2)	(3)
ln(Sales)	0.052***	0.114***	0.235***
	(0.012)	(0.028)	(0.074)
CatExport	0.160	0.758*	0.870**
	(0.186)	(0.423)	(0.422)
Southern5	0.278***	0.207**	2.607**
	(0.047)	(0.097)	(1.291)
ln(Sales)*Southern5			-0.147*

			(0.081)
CtryVotes		-0.006	-0.004
		(0.005)	(0.005)
YearReg		-0.118***	-0.119***
		(0.009)	(0.010)
PDO		-0.003	0.021
		(0.080)	(0.081)
Colonial ties		-0.007	0.006
		(0.083)	(0.083)
FTA FE	No	Yes	Yes
Constant	-1.681	233.039	231.130
N	11,495	11,495	11,495
Pseudo R-squared	0.01	0.54	0.54
Clusters	1,288 GIs	1,288 GIs	1,288 GIs

*Robust standard errors in brackets. *p<0.1, **p<0.05, ***p<0.01*

The results confirm all three hypotheses: GIs with higher sales and from the Southern Five are significantly more likely to be protected in FTAs, but low sales matter less for the Southern Five. Figure 3 shows the predicted probabilities of being listed based on models 2 and 3, averaged over all other covariates. The figures show that the effects of *ln(Sales)* and *Southern5* are substantively significant.
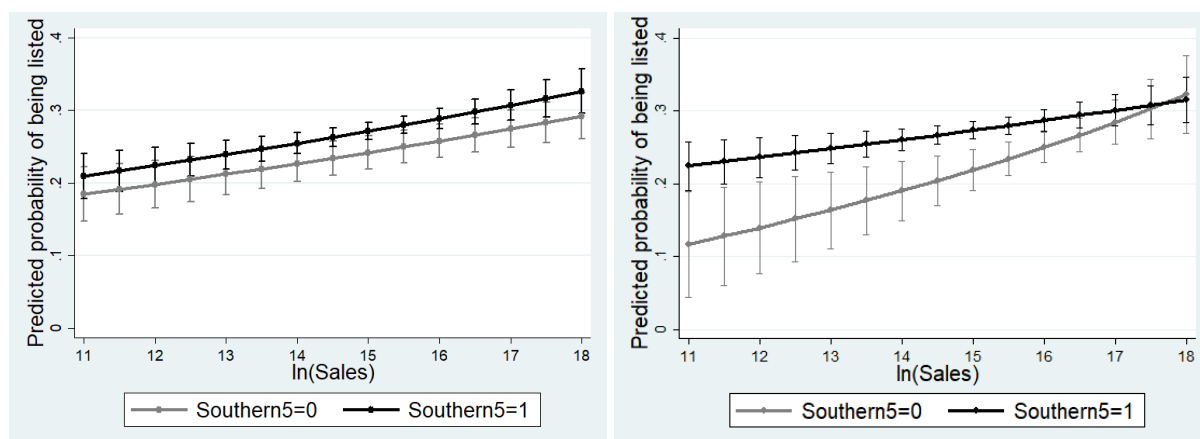
*Figure 3. Predicted probabilities without and with interaction ln(Sales)*Southern5*

Consistent with the idea that countries each have an ex-post veto irrespective of their size and voting weight, the coefficient for *CtryVotes* is not significant. This confirms the hypothesis that in the matter of GI protection in FTAs high demand is more important than voting weight.

As shown by the significant coefficient for *YearReg*, older GIs are more likely to be listed, likely because they are more valuable or more established. The coefficients for *PDO* and *Colonial ties* are not significant.

5.1 Robustness Checks

Table 5 reports the results of four main robustness checks. The coefficients related to H1-H3 retain the expected sign and remain significant across all of them.

Model 4 controls for whether a GI was listed in previous FTAs. The variable *Listed before* gives the number of times a GI has been listed in previous FTAs as ordered in Table 1. Its coefficient is positive and both highly significant and large, but hard to interpret. It could capture path-dependency at the GI-level, but in any case it captures unobserved heterogeneity at the GI-level, driven by elements such as a GI's true export value.

Model 5 drops the three DCFTAs. In such more comprehensive agreements with countries in its neighborhood, the EU can demand closer regulatory alignment and/or exchange more concessions. As is clear from Table 1, they indeed list the majority of GIs. However, as Table 5 shows, the results are robust to dropping these FTAs. Note that without the DCFTAs, the baseline probability of being listed drops from 27% to 8%.

Model 6 clusters the standard errors at the country level rather than the GI level, and model 7 only codes *Listed* as 1 for GIs that have been fully listed, i.e. no grandfathering for existing producers or other exceptions were made. So for instance, since Feta was not fully protected in CETA, in this model it is coded as a 0 for Canada. Both the significance and magnitude of the main coefficients are similar to model 3.

Table 5. Main robustness checks.

Probit of Listed	(4) Listed before	(5) Drop DCFTA	(6) SE at Country	(7) Only full
ln(Sales)	0.119**	0.409***	0.235***	0.230***
	(0.046)	(0.096)	(0.056)	(0.074)
CatExport	0.834**	1.174**	0.870***	0.894**
	(0.361)	(0.475)	(0.300)	(0.426)
Southern5	1.586**	3.573**	2.607**	2.685**
	(0.806)	(1.798)	(1.112)	(1.278)
ln(Sales)*Southern5	-0.098*	-0.203*	-0.147**	-0.153*
	(0.050)	(0.109)	(0.071)	(0.080)
CtryVotes	-0.002	-0.009	-0.004	-0.003
	(0.004)	(0.007)	(0.011)	(0.005)
YearReg	-0.095***	-0.050***	-0.119***	-0.119***
	(0.008)	(0.008)	(0.013)	(0.010)
PDO	-0.070	0.088	0.021	0.015
	(0.055)	(0.109)	(0.152)	(0.081)
Colonial ties	0.157	0.020	0.006	0.020
	(0.121)	(0.073)	(0.139)	(0.083)
Listed before	0.944***			

	(0.073)			
FTA FE	Yes	Yes	Yes	Yes
Constant	185.856	90.349	231.130	232.535
N	11,495	8,363	11,495	11,495
Pseudo R-squared	0.70	0.13	0.54	0.54
Clusters	1,288 GIs	1,288 GIs	25 countries	1,288 GIs

Robust standard errors in brackets. *p<0.1, **p<0.05, ***p<0.01

A next set of robustness checks uses alternative measures for high demand countries and for voting power. They are reported in Table 6. Model 8 replaces *Southern5* by the *Number of GIs* at the country level. While the coefficient is positive, it is not significant. This is likely because countries like Germany also have many GIs, but do not have as strong a food culture and demand for protection as the Southern Five (DeSoucey 2010). Model 9 replaces *Southern5* by *GI sales/GDP*, measured at the country level. It uses data from Chever et al. (2012) for total GI sales; this data is missing for Cyprus, Finland, Slovenia and Sweden because of confidentiality. GDP data comes from Eurostat. The coefficient of *GI sales/GDP* is negative but not significant. This strengthens the idea that countries care about GIs for more than purely economic reasons.

Table 6. Robustness checks: alternative measure of high demanders and voting power.

Probit of Listed	(8) Number of GIs	(9) GI sales/GDP	(10) Population share	(11) Lisbon Index
ln(Sales)	0.101***	0.111***	0.245***	0.250***
	(0.028)	(0.028)	(0.075)	(0.075)
CatExport	0.748*	0.717*	0.877**	0.880**
	(0.421)	(0.423)	(0.423)	(0.424)
Southern5			2.613**	2.656**
			(1.281)	(1.281)
Number of GIs	0.001			
	(0.001)			
GI sales/GDP		-0.041		
		(0.026)		
ln(Sales)*Southern5			-0.147*	-0.151*
			(0.080)	(0.080)
CtryVotes	-0.008	-0.005		
	(0.007)	(0.006)		
Population share			-0.013	
			(0.009)	
Lisbon power share				-0.017*
				(0.010)
Controls & Constant	Yes	Yes	Yes	Yes
N	11,495	11,254	11,495	11,495
Pseudo R-squared	0.54	0.54	0.54	0.54
Clusters	1,288 GIs	1,251 GIs	1,288 GIs	1,288 GIs

Robust standard errors in brackets. *p<0.1, **p<0.05, ***p<0.01

Model 10 replaces *CtryVotes* by EU population share based on Eurostat population data. It includes Croatia as of 2013. Just like *CtryVotes*, *Population share* is not a significant predictor of GI listing in FTAs, while *Southern5* remains significant. Model 11 replaces *CtryVotes* by *Lisbon power share*, the Shapley Shubik index under the Lisbon voting rules for qualified majority in the Council (Widgrén 2009). Results were similar using the Banzhaf power index (Antonakakis et al. 2016). Surprisingly, the coefficient for *Lisbon power share* is negative and just significant at 10%. However, its magnitude is limited, so that not too much should be read into this. *Southern5* remains significant even controlling for the alternative measures of power in models 10 and 11. This confirms that high demand is more important than a country's voting power in getting GIs protected in trade agreements.

Finally, Table 7 varies the time that needs to elapse between a GI's registration and the end of FTA negotiations for it to be used as an observation. Neither the significance nor the magnitude of the coefficients vary much across these different specifications.

Table 7. Robustness checks: varying required time lag between GI registration and FTA negotiation.

Probit of Listed	(12)	(13)	(10)
	2 years before	3 years before	4 years before
ln(Sales)	0.240***	0.256***	0.316***
	(0.073)	(0.073)	(0.073)
CatExport	0.965**	0.973**	0.989**
	(0.423)	(0.431)	(0.464)
Southern5	2.522**	2.394*	2.683**
	(1.280)	(1.277)	(1.319)
ln(Sales)*Southern5	-0.143*	-0.134*	-0.149*
	(0.080)	(0.080)	(0.082)
Controls & Constant	Yes	Yes	Yes
N	10,814	10,101	9,413
Pseudo R-squared	0.55	0.59	0.64
Clusters	1,231 GIs	1,183 GIs	1,137 GIs

*Robust standard errors in brackets. *p<0.1, **p<0.05, ***p<0.01*

6   Conclusion

Through recent FTAs the EU has been able to expand the protection of about one quarter of its GIs internationally, in spite of opposition by the US. This article presented the first quantitative analysis of GI lists in all 11 relevant FTAs since the 2009 agreement with South Korea. It finds that more valuable GIs are more likely to be listed, but that sales value matters less for the Southern Five: France, Italy, Greece, Portugal and Spain. These five countries also get frequent external protection for less valuable GIs.

The demand for external GI protection through FTAs is as much cultural and political as it is driven by economics. Overall, only about 1 B€ of GIs or less than 0.01% of EU GDP is exported outside of the EU (Chever et al. 2012). Even though Greece only exports 4 M€ of Feta to Canada, it has threatened not to ratify CETA because it only partially protects Feta. Clearly, a key factor in the demand for protection is gastronationalism: cultural attachment to food and the desire to protect it as an expression of national identity. This factor is especially strong in the Southern Five.

So, both economic and cultural factors explain the demand for external GI protection through FTAs. Combined with the political process for concluding EU trade deals, they continue to enable the "paradox of weakness" in EU trade deals. Finding a compromise that all EU countries will agree to is not easy for the Commission. Yet in line with the logic of two-level games, countries' potential ex-post veto gives the Commission a credible red line. This has enabled to EU to successfully convince 11 partners, including Canada, to protect at least some of its GIs.

One may wonder whether protecting GIs is worth it, especially in light of the likely concessions and the risk of foregoing a trade deal with the US, which seems unwilling to protect EU food GIs by means other than individual trademarks. For better or for worse, the identity aspects of GIs seem to trump economics. However, given the growing resistance to globalization, the price of protecting GIs may be necessary in order to maintain support for free trade across EU member states.

In conclusion, through its FTAs the EU seems to be winning its battle with the US over GIs. This finding is important, because across many policy areas it has been argued that the EU is no longer able to export its regulations (Young 2015). One can only conclude that EU food really is exceptional.

7 References

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8 Appendix

Table 8. Correlations between the regression variables.

Correlations	Listed	Sales	Export	South	Votes	YearReg	PDO	Colonial
Listed	1.00							
ln(Sales)	0.05	1.00						
CatExport	0.02	0.15	1.00					
Southern5	0.07	-0.21	-0.05	1.00				
CtryVotes	0.00	0.40	0.06	0.22	1.00			
YearReg	-0.24	-0.01	0.03	-0.23	0.06	1.00		
PDO	0.06	0.04	0.20	0.21	-0.02	-0.20	1.00	
Colonial ties	-0.11	0.07	0.01	0.09	0.16	-0.01	-0.01	1.00