

Local Economies on Their Minds: Explaining European Preferences for Geographic Origin Food Labels

Most shoppers check labels to see where their food is produced. Inspecting food labels for geographic origin allows consumers to exercise their values. Consumers might believe that purchasing food produced locally, or at least within specific countries or regions, supports farmers or food producers in that area. Alternatively, they might be concerned with the distance foods traveled and the effects that long-distance transportation has on the environment. Food choices might be based upon awareness of the working conditions of those involved in food production and the choices might be based upon ethical or moral concerns.

European Union (EU) policies aim to encourage geographic origin labeling on foods in order to ensure a stable supply and quality of food for European consumers. Other factors, such as the price and brand of foods, can play a role in the decision process.¹ The consumers' situations, in terms of socio-economic status, gender, and household composition, influence concerns about other food labels, such as organic, fair trade, and non-GMO labels.² Ultimately, consumers might be more concerned about how geographic origin of foods affects local, rural, or agricultural development than the effects on the environment.³

Research shows that people do not check food labels for nutritional information as often as they claim,⁴ so do they even care about geographic origin labels? If so, why do some Europeans believe that geographic origin is important when purchasing foods, while others do not? Do the same factors influencing a person's belief about the importance of geographic origin influence their concern about the price, quality, and brand of foods? This study examines the factors that influence the importance that respondents place on the geographic origin of their food. Specifically, this research looks at whether Europeans who are concerned about food production in their own country and in the EU and

those who believe that agriculture preserves rural areas are more likely to report that geographic origin is important when purchasing food. Following a review of existing research focused on the link between geographic origin and rural development and the other factors that influence food label choices, this paper shall explain the methods and data used to test the hypotheses. Survey data reveals that having an opinion about European food production and rural development were important indicators in predicting the likelihood of reporting that geographic origin was important when purchasing food. Finally, limitations of the study as well as suggestions for future research are discussed.

Geographic Origin and Support for Rural Development

Concern about the geographic origin of one's food is part of a larger focus on quality and alternative food systems.⁵ Geographic origin labels are amongst a collection of values-based food labels, including organic, non-GMO (genetically modified organisms), and fair trade, which have emerged as food purchases have become a reflection of one's political and moral beliefs and identity. Purchasing foods with values-based labels suggests that consumers have concerns about social justice and the environment in mind as they make their choices.⁶ As Elizabeth Barham theorizes, purchasing food based upon the values expressed on the label implies that consumers have a deeper understanding of the economy, a non-market sense that cannot be monetized but has consequences for humanity and nature.⁷

Geographic origin labels can be used by food producers to promote local economic development within the global economy by marketing and protecting local resources and taking advantage of consumers' desires to avoid homogenized products.⁸ Geographic origin is just one of a number of "values based labels" that have evolved into a social movement that allows consumers to reflect and judge a product based upon their social and cultural values.⁹ Such labeling has been used as a countermovement to the globalization of food production.¹⁰ "Thus, GIs [geographic indications] may be a more effective form of protection for small farmers and other less powerful actors than, for

example, trademarks, which could be more easily monopolized and co-opted by powerful actors.”¹¹ Those very areas that were kept out of industrialization, often because of rugged or isolated terrain, offer unique food production methods that can provide distinct goods that can be marketed for their exceptional reputations or value.¹² Geographic origin labeling offers an avenue for establishing a monopoly over perceptions of quality and unique characteristics in a global economy where smaller producers struggle against global competition.¹³ For example, a strong cooperative maintained control of the quality and the meaning attached to the territory of origin of Comte’ cheese production, which promoted economic and community cohesion in the Jura Massif region of France.¹⁴

A more vertically integrated, competitive, and homogenized system has resulted from the globalization of agriculture and food production.¹⁵ Farmers and food producers compete globally to get their products into markets controlled by large corporations. For example, some large, corporate, supermarket chains provide shelf space only for those food products that they know the largest segment of their customers will purchase, leaving unique, artisanal, or more expensively produced commodities out of their stores or designated to a small specialty shelf. Smaller farmers and producers cannot compete with larger, corporate agribusinesses in a globalized economy.¹⁶

However, the concept of “regional origin of products” developed over decades and even centuries of understandings about specific innovations or environmental and economic conditions of “remote or isolated communities.”¹⁷ As Gilles Allaire, Francois Casabianca, and Erik Thevenod-Mottet point out, some cheeses were aged in specific conditions and particular wine grapes were grown in certain terrains or soils and over time became recognized for their distinct qualities and value. Regulations were established within the Greek, Roman, and Egyptian Empires to protect such commodities. Eventually, cross-regional and cross-national trade allowed for the transference of technology and species. Parmesan cheese made from Holstein cows’ milk is now made in Wisconsin, and pinot noir grapes are grown for California vintners, so the regional monopoly on the value of such food products has declined or been lost altogether.

The European Union's Common Agricultural Policy (CAP) was designed to not only ensure access to food, but to assure quality as well. The policy is based upon the philosophy that by improving quality, European farmers can increase productivity, competitiveness, and profitability, and rural communities are able to remain environmentally and economically sustainable, thus ensuring future food security.¹⁸ The EU CAP includes a complex system of labeling specialty foods and geographic origin of production is the more common label sought by producers.¹⁹

Interestingly, it appears that Europeans and North Americans are concerned about where their food is produced for different reasons.²⁰ The European local food movement is rooted in concern surrounding rural economic development and the survival of small rural farms and businesses.²¹ Local food movements in Europe are often based upon a desire to revitalize local knowledge and culture about how food is produced through traditional methods, as well as the motivation for rural economic development.²² North Americans, on the other hand, are more interested in shortening the food supply chain, and re-establishing local food production and consumption out of concern for the environment and social justice—hence their passion for Community Supported Agriculture (CSA) farms.²³

Other Factors that Influence Food Choices

Research on consumer support for other food labels and purchase criteria, such as food labeled organic or containing genetically modified organisms (GMOs), offer insight into which other factors influence consumer attitudes.²⁴ Studies found that organic food consumers tended to be female, between 30 and 45 years old, with children, and higher education and income levels.²⁵ Consumers who expressed concern about the environment were more likely to purchase organic food.²⁶ Consumers were also more likely to purchase organic food if they reported concern about food being prepared in environmentally-friendly ways or produced without disturbing nature or causing pain to animals.²⁷ Consumers who purchased organic foods were also found to be more willing to pay for food labeled *fair trade*.²⁸ Non-whites, women, and those who consider the environment when making purchases, were also more likely to agree to pay more for fair trade foods.²⁹

Women were also found to be more trusting of information provided by environmental and consumer organizations. They were also less likely to accept GMOs, food genetically altered through biotechnology to be disease or pest resistant. Older citizens were less accepting of GMOs, as were those with more awareness about their existence and those who placed themselves toward the left of a political scale.³⁰ Yet another study found that most Europeans rejected the benefits of GMOs due to perceived risks. Younger respondents to the Eurobarometer survey who had more knowledge about science were more accepting of GMOs, but most rejected the use of GMO technology on food even if it contained fewer pesticide residues or “were grown in a more environmentally friendly way.”³¹ Europeans from the United Kingdom and Spain were more likely to perceive GMOs more positively due to the presence of commercial interests in GM foods in those countries.³²

Two studies asked respondents to choose between paired comparisons of food with eco-labels. The labels were based upon different production locales or methods: Locally grown (within 50 miles), U.S. grown, humanely produced (cruelty-free), living wage (provides above poverty wages to workers) or small-scale (supports small farmers or businesses).³³ In a sample of 1,000 households in central California, humanely produced food was preferred most often, with women more likely than men to prefer humanely produced food and men more likely than women to prefer locally produced foods.³⁴ Older respondents and those with children were more likely to choose locally produced food over those produced by providing a living wage. In another study with a national sample, locally produced foods were preferred most often, and rural residents were most likely to choose locally produced foods over foods with other eco-labels³⁵ In a related study, Maria Luz Loureiro and Jill J. McClusky tested whether the European Union’s Protected Geographical Identification (PGI) label was preferred by customers, and whether or not they were willing to pay premium prices for beef with the PGI label. They concluded that the PGI label was an effective indicator of quality to consumers, thus linking a food’s geography with beliefs about quality.³⁶

Of course, the price of food is important when consumers make their choices. Not surprisingly, consumers concerned about making their food budgets stretch considered price over quality and healthful choices.³⁷ The price and quality of food are two criteria that consumers often try to balance when purchasing.³⁸ Food brands are also important to consumers. Food marketing influences food choices, especially of children. Children were found to classify sugary, junk foods as “kids’ foods” and healthy fruits and vegetables as “adult food.”³⁹ When offered a choice, one study found that older children in particular preferred a lunch comprised of mostly unhealthy foods of specific brands of crisps, candy, and soda.⁴⁰

Descriptive analyses from the Eurobarometer 77.2 (the survey conducted biannually by the European Commission to gauge European attitudes on policies and issues) showed that nearly all (96 percent) Europeans take quality of food into consideration when they make their purchases, but fewer (71 percent) considered the geographical origin.⁴¹ Patterns existed between a respondent’s nationality and their likelihood of considering geographic origin when purchasing foods. More respondents from Greece (90 percent) and Italy (80 percent) than the United Kingdom (52 percent) and Belgium (56 percent) indicated that they considered the geographic origin of a food before purchasing. Older Europeans were also more likely to consider geographic origin.⁴² While the patterns in differences in likelihood to consider geographic origin have not been studied previously, it is possible that concerns about local food production and rural development are a factor. For example, respondents from Greece were more likely (61 percent) than respondents from Denmark (2 percent) to be concerned about sufficient food production to meet the needs of their own country.⁴³ This research examines which factors influence whether individuals consider geographic origin, quality, price, and brand when purchasing foods.

Research Questions and Hypotheses

Such patterns leave a few research questions unanswered. Why are some respondents more likely to believe that geographic origin is an important criterion when purchasing food? What other

factors determine the likelihood of a respondent believing that geographic origin is important when purchasing food?

Similar to the concern about GMOs, women, older respondents, and those with more years of education and higher social status were hypothesized in this study to be more concerned about where their food is produced. Based upon previous research that focused on the motivations for choosing locally produced foods,⁴⁴ it was hypothesized that Europeans who were concerned about food production in their own countries and who believed that agriculture preserved rural areas were more likely to report that geographic origin of food was important to them. Beliefs about the benefits of agriculture on the environment were hypothesized to be insignificant in determining the importance of geographic origin of food.

Data and Methods

The empirical analyses conducted for this paper utilized data from the Eurobarometer 77.2 survey⁴⁵ administered in March, 2012. Through face-to-face interviews of a probability sample of nearly 1,000 respondents from each country within the European Union, the Eurobarometer has measured public opinions on various social issues since 1973.⁴⁶ Respondents from twenty-seven countries (N=26,593), including Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Great Britain, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain and Sweden, with separate samples from East Germany and Northern Ireland, were included in the Eurobarometer 77.2. All respondents were fifteen years old or older, citizens of the country they resided in, EU-citizens and had command of one of their country's respective languages. The Eurobarometer 77.2 included questions that gauged public opinion about the financial and economic crisis, social service helplines, rail service, food production and quality, and cyber security.⁴⁷ Of interest to this study, the survey included a question that asked respondents how important it was to them that they knew where their food is grown.

Although some descriptive analyses exist,⁴⁸ this study conducted additional descriptive and inferential statistical analyses to test the research hypotheses. The following logistic regression model tested which factors affect a respondent's likelihood for reporting that geographic origin was important when purchasing food:

$$\ln(p/1-p) = \beta_0 + \beta_1(X_1) + e$$

Dependent Variables ($\ln(p/1-p)$): Geographic Origin, Price, Quality and Brand

Respondents to the Eurobarometer 77.2 answered a series of questions about what was important to them when they purchased food. Queries centered on the importance of geographic origin, price, quality and brands of foods through the question, "When buying food, how important are the following for you personally?" with the answer options of "very important," "fairly important," "not very important," "not at all important," and "depends on product." The answers to these questions were recoded into dichotomous variables so that 1= "very or fairly important" and 0= "not very important, not at all important or it depends on the product."

Independent Variables (X):

The gender response in the survey was recoded as Female =1 and Male = 0. Those cases who indicated that they were Married or Cohabiting were coded as "1" and those who were single, divorced/separated, widowed, or other were coded as "0." The variable "Household Situation" was recoded to measure Children in Household by coding households with single or multiple residents with children present as "1" and single or multiple persons without children as "0." Age was measured in years from the answer to the question, "How old are you?" Length of Education was created from the answers to the question "How old were you when you stopped full-time education?" by coding those answers of twenty years or more as "1" and anything lower as "0." Level in Society was measured on a scale of 1 to 10 from the question "On the following scale, step '1' corresponds to "the lowest level in the society"; step '10' corresponds to "the highest level in the society." Could you tell me on which step you would place yourself?" If respondents reported they were Employed (by self or other) their

answers were coded as “1” and “0” if they were not employed. Respondents answers to the question, “During the last twelve months, would you say you had difficulties to pay your bills at the end of the month?” were coded as “1” if they answered “most of the time” or “from time to time” and “0” if the answered “almost never/never” for the variable Difficulty Paying Bills. Right/Left Ideology was measured on a scale of 1 to 10, with higher numbers indicating more right-leaning ideology, based upon answers to the question, “In political matters people talk of ‘the left’ and ‘the right.’ How would you place your views on this scale?” Rural Area or Small Village was based upon the answer to the question, “Would you say you live in a rural area or village, small or middle-sized town, large town?” Answers of “rural area or village and small town” were coded as “1” and all others were coded as “0.” The variable Read News Online was based upon responses to the question “Which of the following activities do you do online?” If respondents indicated that one of their online activities included reading news, their answers were coded as “1.” If they did not mention “reading news,” their answers were coded as “0.” Concerned/Own Country was based upon answers to the question, “To what extent are you concerned that sufficient food is produced to meet the needs of the population in your own country?” “Very or fairly concerned” answers were coded as “1” and “Not very and Not at all concerned” answers were coded as “0.” The variable Less Dependent was created from the question, “The EU should produce more food in order to be less dependent on importing food from other countries.” Responses of “Totally Agree” and “Tend to Agree” were coded as “1,” while responses of “Tend to Disagree” and “Totally Disagree” were coded as “0.” Responses of “Totally Agree and “Tend to Agree” were also coded “1” and “Tend to Disagree and “Totally Disagree” were coded as “0” for answers to the question, “Agriculture helps to preserve and protect rural areas” and “Agriculture is beneficial for the environment” to create the variables “Agriculture Preserves Rural Areas” and “Agriculture Benefits Environment.”

Using the EUROSTAT adjustment, this study weighted the data to represent national sample's proportion of the total population of the EU27 countries.⁴⁹ Multi-collinearity iterations indicated that none of the variable inflation rates (VIFs) were above 2.0.

Results

Table 1. Descriptive Frequencies:

	Frequency	Valid Percent
When buying food, how important are the following for you personally (Fairly or Very Important)?		
Geographic Origin	18999	71.7
Price	24108	90.8
Quality	25513	96.1
Brand	12388	46.8
Female	13736	51.7
Married or cohabiting	16838	64.2
Children in household	10537	40.2
Length of Ed. 20+ Years	7014	29.5
Employed (by self or other)	12948	48.7
Rural or small village resident	8717	32.8
Had difficulty paying bills some or most of the time	9878	38.2
Respondent Mentioned Reading News as an Online Activity	12054	64.1
Fairly or Very Concerned about Food Production Sufficiency in Own country	11478	43.7
EU Food Policies Should help Europe become less dependent	21405	83.1
Agriculture helps preserve rural areas	23754	91.4
Agriculture is beneficial to the environment	21501	83.5

Table 2: Descriptive Statistics

	Mean	SD	Min	Max
Age	46.76	18.411	15	98
Self-placement of level in society	5.46	1.56	1	10
Right-leaning Ideology	5.07	2.05	1	10

Table 1 demonstrates that over seventy percent (71.7 percent) reported that where a food came from was important when they were purchasing food, 90.8 percent reported that price was important, and 96.1 percent reported that quality was important. Only 46.8 percent of respondents indicated that brand was an important criterion when purchasing food. Just slightly over half were female (51.7 percent), almost two-thirds (64.2 percent) were married or cohabiting, and 40.2 percent had children living in their household. Almost one third had completed full-time education to age twenty or higher (29.5 percent) and almost one half (48.7 percent) were employed. Just less than one-third of the respondents were from a rural area or village or small town (32.8 percent). Thirty-eight percent had difficulty paying their bills from time to time or most of the time. Almost two-thirds (64.1 percent) mentioned that they read the news online. Only 43.7 percent agreed or totally agreed with the statement that they were concerned about their own country in terms of food production sufficiency. A large majority (83.1 percent) agreed with the statement, “The EU should produce more food in order to be less dependent on importing food from other countries,” and 91.4 percent agreed that, “Agriculture helps preserve rural areas.” Almost 84 percent agreed that, “Agriculture is beneficial to the environment.”

As indicated in Table 2, the average age of the respondents was 46.76. On average, respondents placed themselves in the middle levels of society (5.46 on a 10 point scale) and in the middle (5.07) in terms of political ideology.

Logistic Regression Results for Geographic Origin As Important When Purchasing Food

Table 3 shows that if a respondent was female, she was 46.8 percent more likely to report that geographic origin was important when purchasing food, and if she or he was married or cohabiting, that likelihood increased 45.5 percent. For each additional year of age, a respondent was 1.8 percent more likely to report that geographic origin was important when purchasing food, and if a respondent continued full-time education to twenty years or older, the likelihood increased by 13.1 percent. As

respondents' self-rated level of society increased by one point on a 10 point scale, the likelihood of saying that geographic origin was important increased by 7.6 percent, and if they were employed they were 43.9 percent more likely to report geographic origin as an important criteria. Yet, if they had difficulty paying bills their likelihood of claiming geographic origin as important increased by 19.7 percent. If respondents mentioned reading the news as one of their online activities, they were 32.2 percent more likely to mention geographic origin as a food criterion. Those who were concerned about food production sufficiency in their own countries and those who agreed that the EU should produce more food in order to become less dependent on other countries were 71.3 percent and 39.2 percent(respectively) more likely to report that geographic origin was important when purchasing food. Those who agreed that agriculture helps preserve rural areas were 27.3 percent more likely. Political ideology, whether or not respondents lived in rural areas or small villages, and whether or not they agreed that agriculture benefits the environment were not significant determinants of the likelihood of expressing a concern about the geographic origin of the food they purchase.

There were only three non-significant variables in the results of logistic regression analyses of likelihood of reporting price as an important criterion when purchasing food. Marital status, political ideology, and whether or not a respondent mentioned reading the news as one of their online activities were not significant determinants of reporting price and important. Many of the same variables important to determining whether or not someone claimed that geographic origin was important were also relevant in determining whether price was important. Women were 15.5 percent and households with children in them were 27.2 percent more likely to mention price as an important factor when purchasing food. Not surprisingly, those who reported having difficulty paying bills were 116.6 percent more likely to report price as an important criterion. If respondents expressed concern about food production sufficiency in their own countries or believed that EU food policies should promote less dependence on other countries, price was 46.7 percent and 104.2 percent more likely, respectively, to be mentioned. Respondents who believed that agriculture preserves rural areas and those who

believed that agriculture benefits the environment were 28.9 percent and 68.2 percent more likely to claim to use price as a factor when making food purchase decisions.

Older, more educated, employed respondents and those who self-reported being in a higher level of society, were less likely to use price as a criteria when purchasing food. For each additional year of age, the likelihood of reporting that price was an important factor decreased by 0.6 percent, and if respondents continued their formal educations to age twenty or higher, they were 23 percent less likely to report price as important. For each additional point on the 10-point scale of level in society and if they were employed, respondents were 17 percent and 22 percent less likely to report claim that they checked the price on food before purchasing. If respondents lived in rural areas or small villages they were 21.3 percent less likely to claim using price as a food purchase criteria.

Fewer variables were significant determinants of respondents' claims to use "quality" as a criterion for purchasing food. This is not surprising considering that there was little variation in that dependent variable, with 96 percent of the respondents saying that quality of food was important. If respondents were married or cohabiting, they were 43 percent more likely to report quality as an important factor. For each additional year of age, the likelihood of reporting quality as an important characteristic of the food they purchase increased by 1.8 percent. If they were employed, lived in a rural area or small village, and mentioned reading the news as one of their online activities, they were 55.8 percent, 58.9 percent, and 68.0 percent more likely, respectively, to report that the quality of the food was an important purchasing criterion. Those who believed that EU food policies should promote less dependence on other countries and those who believed that agriculture helped preserve rural areas were 133.3 percent and 209.4 percent more likely, respectively, to say they used quality as food purchase criteria. If respondents agreed that agriculture was beneficial to the environment, they were 27.5 percent less likely to mention quality as a food-purchasing criterion. Gender, children in the household, education, level in society, difficulty paying bills, political ideology, concerns about food production sufficiency in one's own country, and beliefs that agriculture benefits the environment were

not significant factors in determining whether or not respondents reported quality as an important factor influencing their food purchases.

Only 41 percent of respondents reported using the brand of food as criteria when making their purchases. For each additional point on a scale of 1 to 10 on the self-reported scale of level in society, the likelihood of identifying a food's brand as important increased by 10.9 percent. That likelihood increased by 12.3 percent if the respondent was employed and by 17 percent if the respondent reported having difficulty paying bills. For each additional right-leaning point on a scale of 1 to 10 on the political ideology scale, a respondent was 8.1 percent more likely to use a food's brand when choosing a food and 10.1 percent more likely if the respondent reported reading the news as an online activity. Those who were concerned about food production sufficiency in their own countries, those who believed that EU food policies should promote less dependence on other countries, and those who believed that agriculture benefits the environment were 40.1 percent, 47.5 percent, and 54.8 percent more likely to report using a food's brand as a criteria when making a purchase. Respondents who completed formal education to 20 years of age or higher were 12.8 percent less likely to report checking food brands when making a purchase, and those who lived in rural areas and small villages were 19.6 percent less likely to claim that food brands were important.

Table 3: Logistic Regression Results for Important Criteria When Purchasing Food

	Geographic Origin			Price			Quality			Brand		
	<i>B</i>	<i>SE</i>	Odds	<i>B</i>	<i>SE</i>	Odds	<i>B</i>	<i>SE</i>	Odds	<i>B</i>	<i>SE</i>	Odds
Female	.384**	.044	1.468	.144*	.062	1.155	.097	.120	1.102	.070	.038	1.073
Married or Cohabiting	.375**	.050	1.455	-.051	.075	.950	.357*	.133	1.430	-.002	.045	.998
Children in Household	-.124**	.047	.883	.240**	.067	1.272	-.186	.129	.830	.041	.041	1.042
Age	.018**	.002	1.018	-.006*	.002	.994	.018**	.004	1.018	.000	.001	1.000
Length of Education	.123**	.045	1.131	-.262**	.063	.770	-.052	.124	.950	-.137**	.040	.872
Level in Society	.073**	.015	1.076	-.198**	.023	.821	.046	.041	1.047	.104**	.014	1.109
Employed	.364**	.050	1.439	-.249**	.079	.780	.443**	.130	1.558	.116**	.045	1.123
Difficulty Paying Bills	.180**	.049	1.197	.773**	.085	2.166	-.052	.130	.949	.157**	.043	1.170
Right/Left Ideology	.005	.011	1.005	.022	.016	1.023	.046	.030	1.047	.078**	.010	1.081
Rural or Small Village	.053	.046	1.055	-.239**	.065	.787	.463**	.140	1.589	-.218**	.041	.804
Reads News Online	.279**	.045	1.322	.075	.065	1.078	.519**	.118	1.680	.097*	.040	1.101
Concerned Own Country	.538**	.047	1.713	.383**	.071	1.467	-.023	.128	.977	.372**	.051	1.401
Less Dependent	.331**	.053	1.392	.714**	.067	2.042	.847**	.130	2.333	.367**	.047	1.475
Agri. preserve rural areas	.241**	.073	1.273	.254**	.095	1.289	1.130**	.160	3.094	-.028	.070	.972
Agri. benefits env.	-.031	.058	.969	.520**	.074	1.682	-.322*	.164	.725	.437**	.055	1.548
Constant	-1.807**	.157	.164	2.150**	.233	8.584	.170	.379	1.185	-2.151**	.146	.116
Cox & Snell R ²	.047			.064			.015			.043		
Nagelkerke R ²	.068			.128			.070			.057		

* $p \leq .05$, ** $p \leq .01$

Discussion

Many of the same factors previously found to influence concern about GMO's or organic foods were found to be associated with concern about geographic origin. Women, married, and older respondents and those with higher education, as well as those who reported reading news online, were more likely to report geographic origin as an important factor when purchasing foods. Additionally, employed respondents and those self-reported in a higher social class also claimed that the geographic origin of their food was important. These results are not surprising, since concerns about value-based labels are based upon awareness, understanding, and the economic means to purchase foods based upon criteria other than price. That might explain why those respondents with children were less likely to express concern about geographic origin. Such respondents consider the price (and probably the tastes of their children, although this was not included in the study) over other values when purchasing food. Surprisingly, those who reported having difficulty paying bills were more likely to claim that geographic origin was important when making food purchases.

While many of the same factors that helped explain why Europeans might check foods for the geographic origin also explained why they claimed to check the price, quality and brand. There were some interesting differences. Many of the factors, such as age, education, level in society, and employment, that increased the likelihood of believing that geographic origin of foods was important actually decreased the likelihood of expressing concern about the price of foods. Those who expressed concern about food production sufficiency in their own countries were also more likely to say that geographic origin, price, and brand were important. Geographic origin, price, quality, and brand were all important to Europeans who expressed a desire for less dependence on importing foods from other countries. Those who believed that agriculture preserves rural areas were more likely to say that geographic origin, price and quality were important, but only price and brand were important to those who believed that agriculture benefits the environment.

Those who checked their foods for geographic origin were more likely to do so because they were concerned about food production sufficiency in their own countries and the EU's dependence on other countries for food production. As hypothesized, those who believed that agriculture helped preserve rural areas were more likely to report checking a food label for where it was produced, and the belief that agriculture benefitted the environment *was not* a significant indicator of checking food labels for geographic origin. These findings support previous research about the motivations for re-localized food production and consumption amongst Europeans.⁵⁰ For Europeans, geographic origin of food appears to be more important because of the benefits of agriculture to the local economy and the importance of preserving local cultural traditions in food production techniques. Geographic origin of food is not so much about Europeans' concern about the environment.

Results from this study suggest that geographic origin was important to Europeans based upon their desire to maintain local food production and promote rural development. However, one limitation of this study is that it is not possible to know exactly what respondents believed about the particular criteria as they answered the questions. Was geographic origin important because they were concerned about purchasing foods from certain countries or *avoiding* foods from specific countries and regions? For example, consumers may avoid foods from countries where GMOs are more common or where food production may not be regulated as strictly as it is in the EU. Unfortunately, the data analyzed do not allow for such nuances to be tested.

However, these results do suggest that respondents believed geography was important because they looked for foods produced in their own countries or nearby, since concern about food production in their own countries and a desire to become less dependent on other countries were significant factors, as was the belief that agriculture is good for rural areas. In other words, the cross-national differences in concern about geographic origin of food can be explained by differences in concerns about local food production and economic dependence on other countries. Specifically, the fact that more Greek respondents reported choosing foods based upon geographic origin⁵¹ can be explained by

the Greeks' simultaneous concerns about food production in their own country and beliefs that food policies should promote less dependence on others.

Still, future research should explore the deeper motivations for European concern about where food is produced. Such deeper motivations cannot be investigated through the analyses of secondary survey data. The types of questions asked and how those questions were phrased limit this particular study. Further research employing more qualitative methods would allow for a more in-depth analysis of why people have specific preferences for local, quality and organic or low-cost food.

This study demonstrates that concern about the geographic origin of food is linked to anxieties about local and regional economic development. This concern is most likely a response to the globalization of food systems and a desire to promote local food production and culture. Understanding why some Europeans are more focused on the geographic origin of food than others should help policymakers as they attempt to gain support from those not as concerned about where their food was produced and as they promote European agriculture and food production. Outside of Europe, other policymakers in other regions can consider which factors affect the popularity of policies centered on value based labeling of food as a way to promote economic development. Food producers and marketers can use this information to better understand the motivations of their consumers. Promoting environmental benefits of food production will be less effective than focusing on consumers' concerns about their local economies.

ENDNOTES

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