ESTIMATING CONSUMER DEMAND ON COUNTRY OF ORIGIN (COO) LABELLING WITHIN THE SCOPE OF TRANSATLANTIC TRADE AND INVESTMENT PARTNERSHIP (TTIP) NEGOTIATIONS: CROSS-COUNTRY COMPARISON OF GERMAN AND US CONSUMERS FOCUSSED ON HOME APPLIANCE SECTOR

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ABSTRACT

This paper aims to analyse the differences in consumer demand on COO labelling in Germany and the United States in order to estimate the need for standardisation of product labelling practices in the scope of TTIP negotiations. The study is focussed on items that highlight differences in perceptions and values between German and US consumers with regard to sourcing information during a large or semi-large purchase. The empirical analysis is based on a survey of German and US consumers focussed on home appliance sector (N=590). The results suggest significant differences in cross-country values and behaviour.

INTRODUCTION

Taking into consideration the fact that the European Union and the United States are each other's main trading partners in goods and services and account for the largest bilateral trade relationship, mutual recognition in terms of non-tariff barriers (NTB) together with a reduction and/or elimination of existing tariffs would have a significant impact on international trade flows as well as economic performance of the trading parties (ECORYS, 2014). Currently under negotiation is a possible trade and investment partnership with a potential to be the largest free trade agreement (FTA) ever negotiated in terms of combined economic size, population, and investment covered (Beck, 2014). However, since 2007 the EU-US negotiations on potential implementation of listed measures run against rising public concern regarding inter alia non-harmonised quality standards existing both in Europe and the United States.

A harmonisation of quality standards entails a strong potential for promotion of trade flows between the EU and the US and is a major barrier while entering the US market. The most crucial types of trade costs the exporters have to face are represented by NTBs, whereby administrative obstacles, quality and labelling requirements are listed as the three most important areas (Felbermayr, Larch et al., 2013). NTBs, are linked to customer preferences, language and geography (Francois et al., 2013). These factors make the standardization policies regulating product labelling, the use of product names and disclosure of product sourcing information to end consumers to a key part of the TTIP negotiations.

A crucial dimension in the course of the TTIP harmonisation of quality standards discussion is an investigation of compatibility of consumer demands on product information, including COO and sourcing details, in Europe and the US. Furthermore, the possible implementation of the TTIP

spurs an interesting debate that is rooted in the similarities and differences between European and American consumer cultures, e.g. consumer perception and readiness to buy imported goods from Europe or the US respectively in case of open markets and availability of sourcing information.

To better inform at least a portion of this discussion, this study investigates consumer preferences and purchasing behaviour with regard to the availability and use of COO sourcing information. Findings suggest significant differences in cross-country values and behaviour.

DATA AND METHODOLOGY

Data for this study were collected by research teams of university students in Germany and the United States. The survey instrument first went through iterative drafts with the data collection teams in both countries to ensure that the layout and wording were consistent in both language versions of the instrument. Teams then were trained on data collection techniques, and given 6 weeks to gather data from their peer networks. The original data set included 693 respondents (320 American and 373 German). The final sample includes 590 individual survey respondents (262 American; 328 German), who completed both the demographic and subject portions of the survey. Over 60% of the respondents identified themselves as between ages 21-30, with roughly 12% younger and the balance older.

Measures

The study is focussed on items that highlight differences in perceptions and values between German and American consumers with regard to sourcing information on product labelling during a large or semi-large purchase, such as a home appliance. Each of the following is treated as a dependent variable:

Read Label. Respondents were asked if they read product labels when purchasing home appliances and consumer electronics (options: Always, Usually, Seldom, or Never).

Main Factors in Determining Product Buying Decisions. Respondents were asked to rank product attributes that contributed as the most important factors in their buying decisions, selecting a ranking for their top three of six attribute options (Price, Quality, Brand Prestige, Convenience, Design, and Accessibility). These rankings were then converted into ordinal values for each of the attributes (e.g. if a respondent ranked Price as most important, the value for the Price variable for that respondent was assigned a 3, the highest possible).

Implications for Consumer Behaviour. Respondents were asked how likely they would agree to statements regarding how they would change their actual behaviour given the presence of sourcing information. This was assessed using a 5 point Likert scale with three items: whether the Respondents would abstain from purchasing a product, if it came from a country with a known poor reputation (Abstain from Buying), whether they would favour products from countries with known positive reputation for quality (Favour Products), and whether they support government policy requiring COO labelling (Support Government Policy).

Product Distinctions are Issue Specific. Respondents were asked to assume that sourcing information on COO was available, then asked if they would abstain from a purchase if the source countries reputation was poor with respect to one of the following six issues within the source country: Weak Environmental Laws, Allowing Child Labour, Known Tax Haven, Corrupt

Government, Known to Exploit Workers, Would not Boycott regardless of Reputation. Respondents selected a level of agreement or disagreement for each issue on a 5 point Likert scale.

The independent variables comprise the demographic differences in the study sample. The research focus is on the first variable indicating national differences between US and German Respondents.
Country. Respondents indicated their national origin (0=United States; 1=Germany).
Gender. Respondents indicated their gender with (0=female; 1=male).
Age. Respondent age was divided into five categories: <20, 21-30, 31-50, 51-69, 70+.
Income. Respondents identified their monthly disposable income as either low, middle, or high, corresponding to values of >970 USD, 970-7300 USD, and < 7300 USD.

Estimation

A variety of topics from consumer preferences and political beliefs are surveyed, whereby the primary research focus is a cross-country comparison in order to specify the differences between the two national groups across the standardized questions. Rather than attempting to combine the measures using ad hoc factor analysis, a series of individual analysis of each survey item measured, controlling only for basic demographic differences, is conducted. Each of the surveyed measures is constructed as utilizing an ordinal scale, with high values corresponding to strong agreement with the specific item. Consequently, ordinal logistic regression for each survey item controlling for country, gender, age, and income differences is performed.

RESULTS

Tables 3 and 4 present estimation results of each survey item of interest from an ordinal logit model controlling for Respondent home country and demographic characteristics. While these items are broadly categorized into subject criteria, they each represent a single survey measure. Tables 3 and 4 differ in that the content of the items surveyed covers differing categories and in the number of ordinal response options. In Table 3, Respondents first selected between "Always, Usually, Seldom, and Never" in referring to the frequency in which they read product labels, and to rank of buying decision criteria with three being most important, two as next most, down to zero. Survey items included in Table 4 had a 5-point Likert Scale ranging from "Strongly Agree" as the high value to "Strongly Disagree" as the low value. As both Tables represent ordinal logit models, the cut values are reported underneath the variables of interest, noting that there are significant jumps between nearly level for every item.

The primary variable of research interest is Country, coded zero for Respondents from the United States and one for Respondents from Germany. A significant value indicates a difference in perception or behaviour between the two groups. Thus, in examining the Likelihood of Reading Product Labels in Table 3, first a significant difference between practices from the two consumption cultures is observed. German consumers are significantly more likely to read labels when making purchases of home appliances and consumer electronics (Chi^2 = 16.22, p < 0.05). Similarly, men, regardless of nationality, are less likely than women to read product labels.

To better understand the differences between the two consumption cultures, respondents were asked to select and rank product characteristics that they did value, regardless of their decision to

read or ignore labels. A trend became apparent in these rankings. First, the Country coefficient is significant and negative in both the Price and Quality models, and significant and positive in the Design model (Chi^2 = 84.01, 41.66, and 37.80 respectively, p < 0.001 in each). German consumers appear to value product design over price or perceived quality compared to American consumers. While there were no Country differences for Product Convenience, there were significant differences for both Gender and Age (Chi^2 = 17.96, p < 0.05). Men appear to value Convenience less than women, although Convenience tends to become increasingly important as respondents get older.

Consumer product and information preferences are separated from actual behaviour. Three specific consumer behaviour patterns are examined, whether the Respondents would actually abstain from purchasing a product if it came from a country with a known poor reputation, whether they would favour products from countries with known positive reputation for quality, and whether they support government policy requiring COO labelling. The left half of Table 4 displays the results for the ordinal logit models for each of the three Implications for Consumer Behaviour. Consistent with the initial finding, in all three cases, German respondents are more likely to take action either through abstaining from certain product purchases (Chi^2 = 49.74, p < 0.01), valuing products based on their country of origin (Chi^2 = 30.61, p < 0.001), and advocating for government action to require sourcing information (Chi^2 = 31.13, p < 0.001).

The right half of Table 4 examines which specific issues are of concern when considering the availability of COO sourcing information. The Respondents were asked if, assuming the information was available, they would abstain from buying a product from a country under certain conditions. Given the analysis provided in Table 3, it was expected that Country of Respondent would be significant and positive for each of the specific issues. The Country variable was significant and in the anticipated direction in four of the six models. In each of these cases being a German consumer implied a preference for abstaining from a product purchase based on COO information. In the case that a COO was known as a tax haven, the Country variable was significant and negative (Chi^2 = 41, p < 0.001). On this particular issue, German consumers are significantly less likely to abstain from purchasing a product than Americans. There were no significant differences based on Respondent Country for the source country's reputation as having or lacking a corrupt government.

DISCUSSION

The study highlights key differences between German and American consumers with respect to their perception, values and behavioural patterns. Specifically, strong and consistent evidence that German consumers value more normative aspects in their purchasing decisions is provided. Relative to American, German consumers value product design more than product price. German consumers are also more likely to seek and incorporate product sourcing information into their buying decisions, meaning the consumer demand on COO labelling in Germany is higher compared to the U.S. Notably, German consumers appear more passionate about the implications of their consumer spending habits than American counterparts. For their part, Americans appear price sensitive first and foremost.

The findings of the study indicate the importance of measures aimed at achieving harmonized standards regarding disclosure of product sourcing information and labelling in the course of TTIP agreement negotiations. An assumed successful TTIP implementation would bring both trading parties into the position of global standard setters and eventually encourage third parties to adopt their regulatory standards in order to improve market opportunities.

However, considering the existing differences in consumer demand on quality measures - specifically addressing regulations on product information disclosure and labelling policies – the harmonization of standards and further reduction of NTBs could become a major challenge for the TTIP negotiators. New regulations and instruments need to be invented, in order to achieve compatibility of two well-functioning and mature regulatory systems without lowering the existing standards of consumer and/or environmental protection, or other sensitive areas.

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Table 3 Consumer Purchasing Behaviours

VARIABLES	Likelihood of Reading Product Labels	Main Factors in Determining Product Buying Decisions			
		Price	Quality	Convenience	Design
Country	0.313*	-1.465***	-0.998***	0.0591	0.810***
(0 = US)	(0.154)	(0.166)	(0.160)	(0.170)	(0.176)
Gender	-0.356*	-0.0676	-0.0858	-0.429*	0.767***
(0 = Female)	(0.151)	(0.153)	(0.151)	(0.169)	(0.178)
Age	0.147	-0.0411	-0.0738	0.333**	-0.0619
	(0.100)	(0.103)	(0.103)	(0.110)	(0.116)
Income	0.147	0.0359	0.0385	-0.0627	0.115
	(0.145)	(0.147)	(0.144)	(0.159)	(0.165)
LL Chi^2(4)	16.220	84.010	41.660	17.960	37.800
Pseudo R2	0.0105	0.0551	0.0277	0.015	0.0313

N = 590. SE in parentheses   *** $p<0.001$, ** $p<0.01$, * $p<0.05$, + $p<0.1$

Table 4 Drivers of Consumer Behavior

VARIABLES	Implications for Consumer Behavior			Product by Distinctions are Issue Specific					
	Abstain from Buying	Favor Products	Support Gov't Policy	Weak Enviro. Laws	Allowing Child Labor	Known Tax Haven	Corrupt Gov't	Known to Exploit Workers	Would not Boycott
Country (0 = US, 1 = DE)	0.47**	0.58***	0.69***	0.40**	0.55***	-0.60***	0.17	0.37*	-0.44**
	(0.15)	(0.16)	(0.15)	(0.15)	(0.15)	(0.15)	(0.15)	(0.15)	(0.15)
Gender (0 = Female)	-0.17	0.14	-0.21	-0.83***	-0.69***	-0.60***	-0.78***	-0.51***	0.41**
	(0.15)	(0.15)	(0.15)	(0.16)	(0.15)	(0.15)	(0.15)	(0.15)	(0.15)
Age	0.60***	0.35***	0.25*	0.35***	0.20+	0.38***	0.52***	0.30**	-0.26*
	(0.10)	(0.10)	(0.10)	(0.10)	(0.11)	(0.11)	(0.10)	(0.10)	(0.10)
Income	-0.22	-0.00	-0.23	-0.13	-0.15	-0.25+	-0.30*	-0.30*	0.10
	(0.14)	(0.15)	(0.15)	(0.15)	(0.15)	(0.15)	(0.15)	(0.15)	(0.14)
Constant	-2.34***	-2.96***	-2.59***	-3.18***	-3.489***	-2.76***	-2.71***	-3.15***	-1.82***
	(0.34)	(0.41)	(0.32)	(0.35)	(0.36)	(0.31)	(0.33)	(0.34)	(0.28)
Constant	-0.092	-0.91**	-1.21***	-1.44***	-1.88***	-1.05***	-1.16***	-1.85***	-0.28
	(0.28)	(0.29)	(0.28)	(0.29)	(0.29)	(0.28)	(0.28)	(0.30)	(0.27)
Constant	1.19***	0.36	0.48+	0.061	-0.81**	0.81**	0.499+	-0.63*	1.18***
	(0.28)	(0.27)	(0.27)	(0.28)	(0.28)	(0.28)	(0.28)	(0.28)	(0.28)
Constant	3.17***	2.27***	2.39***	2.14***	0.61*	2.54***	2.306***	1.24***	2.82***
	(0.31)	(0.29)	(0.29)	(0.30)	(0.28)	(0.31)	(0.30)	(0.28)	(0.33)
LL Chi^2(4)	49.74	30.61	31.130	50.99	39.10	41.08	54.60	27.74	24.54
Pseudo R2	0.03	0.02	0.019	0.031	0.025	0.025	0.032	0.017	0.014

N = 590. Standard errors in parentheses. *** $p<0.001$, ** $p<0.01$, * $p<0.05$, + $p<0.1$