



SSE RIGA

**SSE Riga Student Research Papers**

2022 : 8 (250)

# **CONSUMER ETHNOCENTRISM AND ITS DETERMINANT IMPACT ON THE PURCHASE INTENTION OF DOMESTIC AND FOREIGN BEER BRANDS IN LATVIA**

Authors: Vincents Kārlis Goldmanis  
Viktors Zubarevičs

ISSN 1691-4643

ISBN 978-9984-822-74-7

May 2022  
Riga

**Consumer Ethnocentrism and Its Determinant Impact on  
the Purchase Intention of Domestic and Foreign Beer  
Brands in Latvia**

Vincents Kārlis Goldmanis

and

Viktors Zubarevičs

Supervisor: Ivars Austers

May 2022  
Riga

## Table of Contents

<b>Abstract</b> .....	<b>4</b>
<b>1. Introduction</b> .....	<b>4</b>
<b>2. Literature review</b> .....	<b>5</b>
2.1. Historical topic development .....	5
2.2. Conceptual model and theoretical framework.....	7
2.3. Studies in the Baltics .....	11
2.4. Summary and hypotheses .....	11
<b>3. Methodology</b> .....	<b>12</b>
3.1. Consumer ethnocentrism .....	13
3.2. Patriotism/nationalism .....	15
3.3. Cultural openness .....	16
3.4. Collectivism.....	17
3.5. Brand equity and awareness .....	17
3.6. Purchase intention .....	19
3.7. Other (control) variables .....	19
3.8. Data collection and sample .....	21
<b>4. Results and discussion</b> .....	<b>22</b>
4.1. Scale validation .....	22
4.2. Descriptive statistics .....	23
4.3. Regression analysis .....	26
4.3.1. Model output analysis.....	27
4.3.2. Model diagnostics .....	29
4.4. Discussion .....	31
<b>5. Conclusions</b> .....	<b>36</b>
<b>6. References</b> .....	<b>37</b>
<b>7. Appendix</b> .....	<b>40</b>
Appendix A. The survey instrument .....	40

---

SSE RIGA

## **Abstract**

Consumer ethnocentrism, which studies consumer purchase intent based purely on the origin of a product, has been a field of study since 1987. Since then, a lot of studies have been conducted in the field, studying consumer ethnocentrism in various countries and regarding various consumer goods, though little of that research has been conducted in the Baltics. This paper attempts to fill this gap and studies consumer ethnocentrism and its determinant impact on purchase intention in Latvia for domestic and foreign beer brands. Primary data is collected with a survey instrument mostly from Latvian-speaking, ethnically Latvian students residing in Riga and surrounding Riga. Using multivariate linear ordinary least squares (OLS) regressions, the findings suggest that although consumer ethnocentrism does not impact the purchase intention of either domestic or foreign beer brands, patriotism and cultural openness have a statistically significantly positive, but collectivism negative impact on the purchase intention of domestic beer brands. The purchase intention of foreign beer brands, however, is statistically significantly affected only by cultural openness.

## **1. Introduction**

The foundation of a successful company is the ability to sell the goods or services the company produces. While that much is rather obvious, it is also obvious that to sell more products, each company must know how to properly advertise its products – which attributes to emphasize and which, perhaps, to exclude from marketing campaigns.

One such attribute is the origin of the product – generally, companies can question whether they should emphasize which country their product originates from. If so – for which products should their origin be emphasized and in which markets?

This is the basis of the studies done on the country-of-origin effect and consumer ethnocentrism. The original notion of ethnocentrism before Shimp and Sharma (1987) existed purely outside the field of economics and consumer behavior. They were the first to relate ethnocentrism to consumerism and from then onwards their work has been used to measure ethnocentric consumer tendencies towards domestic versus foreign goods.

Thus, consumer ethnocentrism becomes part of a wider topic about country-of-origin effects which is concerned with the impact of a particular country's image on consumer purchases or intentions to buy, when considering specific cues in the product itself. Shimp and Sharma (1987) developed the consumer ethnocentrism tendency scale (CETSCALE)

which they characterize as a “general notion of a disposition to act in some consistent fashion towards foreign products in toto” (Shimp & Sharma, 1987, p. 281).

Since then, both the original 17-item and reduced 10-item CETSCALE have been used to conduct research on consumer ethnocentrism in various regions and by combining the CETSCALE with other measures. For example, the CETSCALE has been studied together with measures for individualism and collectivism to study how ethnocentric marketing impacts the purchase intent for domestic and foreign smartphone and shoe brands (Han & Guo, 2018). Another example of the CETSCALE being combined with other measures, specifically with measures for patriotism and nationalism in Turkey and the Czech Republic, was done by Balabanis et al. (2001).

Consumer ethnocentrism has also been researched in the Baltic states, though the authors of this study have found only the paper by Vida and Fairhurst (1999), analyzing consumer ethnocentrism in several post-communist European states, including Estonia.

Considering the lack of research papers on consumer ethnocentrism in Latvia and that the studies usually tackle consumer ethnocentrism towards a certain type of product in a particular region, this paper seeks to tackle the following two questions.

- (1) How does consumer ethnocentrism impact the purchase intention of domestic and foreign beers in Latvia?
- (2) How do the determining factors of consumer ethnocentrism impact the purchase intention of domestic and foreign beers in Latvia?

To answer those two research questions, the following hypotheses are formulated based on the studies conducted on consumer ethnocentrism and expanded upon in the literature review. Consumer ethnocentrism, patriotism, nationalism, cultural openness, and collectivism are expected to have a positive effect on domestic beer brand purchase intention. However, consumer ethnocentrism, patriotism, nationalism, and collectivism are expected to have a negative effect on the purchase intention of foreign beer brands, but cultural openness is expected to have a positive effect.

## **2. Literature review**

### ***2.1. Historical topic development***

Consumer ethnocentrism is part of a wider topic of country-of-origin studies which is concerned with the impact of country-of-origin communication on consumer choices as a

result of the biases and preconceptions they hold towards a particular country independent of the objective qualities of the product and its features (Al-Sulaiti & Baker, 1998).

Early experimental studies investigated how country-of-origin communication for identical products affects the test subject's preference for them and found that there is indeed a significant effect (Schooler, 1965; Schooler & Wildt, 1968). Surveys on the same topic were conducted that confirmed that certain goods from some countries are perceived better than from other countries (Reiersen, 1966). Interestingly, Schooler and Sunoo (1969) did not find a bias in American students, when the evaluated products were labeled regionally (Asia, Africa, etc.). With this, a new topic of research in consumer behavior started to emerge to find the determinants and reasons for this bias and to develop a more rigorous theoretical framework for the phenomena.

Later, more elaborate studies started to appear. Schooler (1971) surveyed a larger, representative sample of consumers in Missouri, U.S., which contrasts the earlier studies where primarily university students were researched. The findings supported earlier experimental results with student samples – country-of-origin did seem to cause a bias in consumers across various good categories when the products were with national labeling. The results of Schooler (1971) did not, however, indicate that regional labeling has a smaller impact on the bias. Their research also showed that there are significant differences in the intensity of the bias between different country-of-origin labeling. Evidence of a significant impact of demographic variables was also found – older respondents displayed a larger bias against foreign labeling than younger people, females exhibited a smaller bias against foreign labeling than males for most foreign countries, more educated consumers were less biased against foreign goods, and race also had a significant impact on the product evaluations in favor of foreign goods (Schooler, 1971).

The bias against foreign goods was then formalized by Shimp and Sharma (1987) who developed the concept of consumer ethnocentrism, taking as a basis the sociological concept of ethnocentrism. Shimp and Sharma (1987) describe that ethnocentric consumer views purchasing imported goods as wrong purely because the goods are imported, while non-ethnocentric consumers view purchasing imported goods neutrally or even positively.

To measure consumer ethnocentrism, Shimp and Sharma (1987) developed the consumer ethnocentrism tendency scale (CETSCALE), a set of 17 items to measure American tendency toward buying imported goods. They validated and assessed the reliability of the CETSCALE, achieving the research objective of creating a psychometrically rigorous scale for measuring consumer ethnocentrism. It has since been used mainly in a

reduced form of 10 questions, e.g., Han and Guo (2018), Balabanis et al. (2001), 7 questions, e.g., Fischer and Zeugner-Roth (2017), 6 questions, e.g., Erkaya (2019). The scale has also been validated and used to measure consumer ethnocentrism in several countries other than the U.S.

## ***2.2. Conceptual model and theoretical framework***

Sharma et al. (1995) researched the theoretical underpinnings for consumer ethnocentrism. The research was done in Korea – a very different cultural environment from the U.S., where their initial CETSCALE validation study took place. They postulated socio-psychological causes of consumer ethnocentrism, demographic factors that impact it, and moderating factors to consumer ethnocentrism. Thus, they put consumer ethnocentrism in a broader research context of social, cultural, and psychological attributes that people possess.

In the conceptual model of Sharma et al. (1995), consumer ethnocentrism has a direct impact on consumer attitudes toward imported products. They find that cultural openness has a significant negative correlation with consumer ethnocentrism and patriotism and that conservatism correlates with consumer ethnocentrism positively and significantly, additionally, collectivism also has a significant positive correlation.

Since consumer ethnocentrism has a negative correlation with cultural openness, as reported by Sharma et al. (1995), and higher consumer ethnocentrism is associated with (1) higher preference for domestic goods, and (2) lower preference for foreign goods, it is reasonable to expect that cultural openness will have an opposite effect on purchase intention, namely, higher cultural openness will lead to (1) lower preference for domestic goods, and (2) higher preference for foreign goods. Similarly, since collectivism is found to correlate positively with consumer ethnocentrism by Sharma et al. (1995), the expected effect on purchase intention should be the same in direction.

Sharma et al. (1995) do not find support for age impacting consumer ethnocentrism; however, education and income have a significant negative correlation and gender has a significant positive correlation with consumer ethnocentrism.

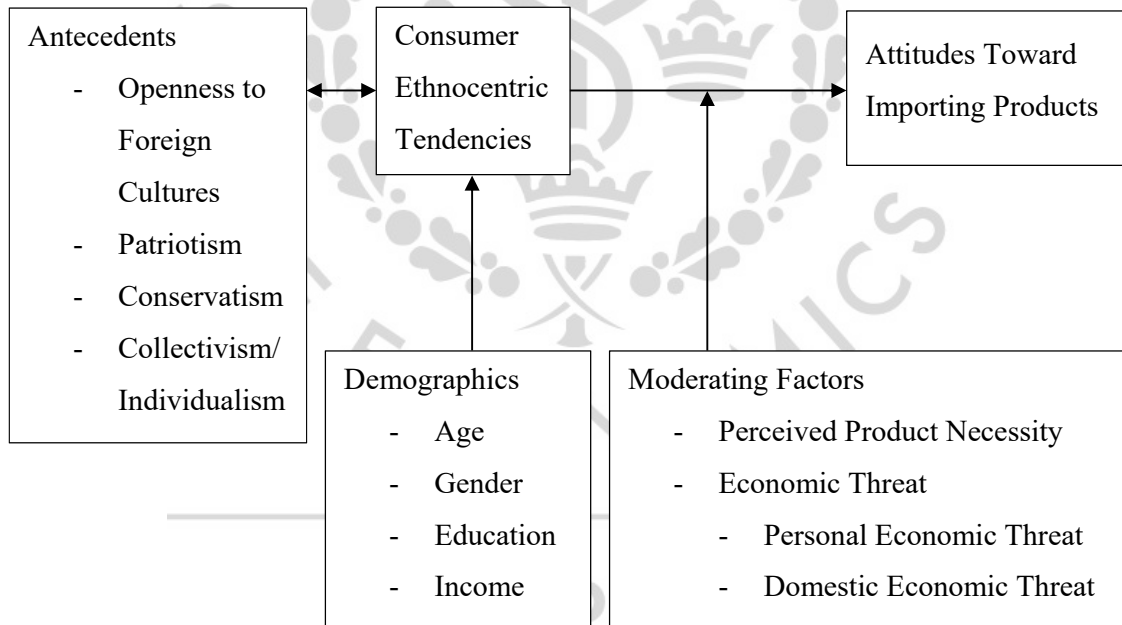
Sharma et al. (1995) also confirmed that products perceived as unnecessary will have a stronger consumer ethnocentrism effect on the attitudes toward importing the product. Similarly, they found that the larger the perceived threat of the products is, the larger the effect of consumer ethnocentrism will be on their attitudes towards importing that product. These Sharma et al. (1995) conclusions allow hypothesizing about the impact of consumer ethnocentrism on attitudes toward importing different product categories, for example, it

would be reasonable to expect that luxury goods are more likely to be affected by consumer ethnocentric tendencies as these goods might be considered relatively unnecessary and pose little economic threat if a particular imported luxury good does not have local competition or alternatives. Products in some categories cannot be expected to be affected uniformly by consumer ethnocentrism as, for example, food products contain many subcategories that may be perceived as necessary (e.g., bread, milk, sugar), whereas others (e.g., chocolate, potato chips) may be perceived as unnecessary. Moreover, the perceived necessity of certain goods may vary between different countries and cultures depending on their economic, historical, geographic, and cultural backgrounds. Similarly, the perceived economic threat may be affected by geopolitical as well as the economic situation of the country of interest.

The visual representation of the conceptual model developed by Sharma et al. (1995) can be seen in Figure 1.

**Figure 1**

*Consumer Ethnocentrism and Determinant Conceptual Model*



*Note.* Model created by and quoted from Sharma et al. (1995).

Vida and Fairhurst (1999) examined, in particular, the cultural openness and demographic factors within a partial conceptual model of the determining factors of consumer ethnocentrism proposed by Sharma et al. (1995) in the Czech Republic, Estonia, Hungary, and Poland. They used foreign brand awareness as a proxy for cultural openness as at that time the market had recently opened up to more foreign goods and marketing investments (Vida & Fairhurst, 1999). They found that people who have greater brand



awareness possess less consumer ethnocentrism tendency, thus confirming the link between consumer ethnocentrism and cultural openness.

Balabanis et al. (2001) examined a modified model from the one proposed by Sharma et al. (1995), swapping cultural openness to foreign cultures, conservatism, and collectivism/individualism for nationalism, patriotism, and internationalism. They focused on the determining factors of consumer ethnocentrism. The research was conducted in Turkey and the Czech Republic, further diversifying the cultural context in which consumer ethnocentrism research is carried out. Balabanis et al. (2001) find mixed results that depend on the country. Their findings support the conclusions of Sharma et al. (1995) that consumer ethnocentrism conceptual model relationships will differ in studies in different countries and cultural environments and that the effect of consumer ethnocentrism depends on the context in which the studies are carried out. On top of that, they will be different based on each country's history and how it shaped their interpretations of social realities. For example, Balabanis et al. (2001) report that consumer ethnocentrism in Turkey is influenced mainly by patriotism. In the Czech Republic, on the other hand, consumer ethnocentrism is influenced primarily by nationalism. Neither in Turkey nor the Czech Republic was internationalism found to be connected to consumer ethnocentrism.

With regards to the demographic variables, Balabanis et al. (2001) find that gender, age, and income significantly impact consumer ethnocentrism in Turkey, however, only income is found to significantly contribute to consumer ethnocentrism in the Czech Republic.

To summarize, the theoretical framework relationships within consumer ethnocentrism research cannot be considered definitive. It depends on the historical context of each country and how that shapes the social reality and character of the people in any particular country. Therefore, it is relevant to explore how consumer ethnocentrism, alongside its determining factors and demographic characteristics, impacts purchase intention in each country of interest independently from the conclusions of previous research in different countries. Latvia is a particularly interesting territory for consumer ethnocentrism research due to its history of being occupied in the 20<sup>th</sup> century, as well as due to a significant minority population both in the capital Riga and in other regions. In 2018, 62.2% of Latvia's population were estimated to be Latvian, whereas 25.2% were Russian, and the rest other ethnic minorities. In Riga, the proportion of Latvians was 47.0%, while Russians comprised 36.8% of Riga's population (Central Statistics Bureau of Latvia, n.d.). The proximity of a large minority group in the country might shape the views and attitudes of every group within the population.

Fischer and Zeugner-Roth (2017) examined the relationship between product ethnicity, national identity, and consumer ethnocentrism in Belgium and the U.S. The construct of national identity is highly similar to the patriotism scale that is employed in this study, by qualitatively comparing the items that both scales contain. Product ethnicity in their study was defined as low, moderate, or high based on how the category of that product was evaluated relative to a foreign product (e.g., French wines would be evaluated as having higher product ethnicity than Latvian wines). They found that national identity has a strong effect on the choice of domestic products and that consumer ethnocentrism and national identity contribute to the preference for domestic over foreign goods independently. They also found evidence of product ethnicity interaction with national identity – national identity perception impacts the choice of domestic products only if imported product ethnicity is higher, however, it has no effect if the product ethnicity is lower. Additionally, they find that increasing levels of national identity eventually overpower the effect of high product ethnicity.

Importantly, Fischer and Zeugner-Roth (2017) distinguish between the categories of variables in their impact on consumer choices. The categories are cognitive (product ethnicity, since this is a conscious knowledge or presupposition about the expected quality of a certain product category from a certain country), normative (consumer ethnocentrism, as it represents consumers' beliefs on the right course of action in terms of domestic vs. foreign goods), and affective (national identity since it represents certain feelings of belongingness).

In the context of this study, the variables can also be grouped into these categories – cognitive (brand equity and brand awareness, since the questions prompt to evaluate the features of the presented product and respondent's knowledge of them), affective (patriotism, nationalism, cultural openness), and normative (consumer ethnocentrism, collectivism).

Erkaya (2019) conducted a study in the U.S. on the impact of consumer ethnocentrism, cosmopolitanism, patriotism, collectivism, and cultural openness on purchase intention. The focal point of their study was specifically on purchase intention, and they find that consumer ethnocentrism, patriotism, and collectivism have a statistically significant negative impact, whereas cosmopolitanism and cultural openness has a statistically significant positive impact on the choice of foreign products.

Han and Guo (2018) researched the effect of consumer ethnocentrism, collectivism, individualism, and ethnocentric advertising of domestic and foreign shoe and smartphone brands on the purchase intention of those brands in China. They used the reduced 10-question CETSCALE and found that consumer ethnocentrism has a statistically significant impact on

purchase intention for domestic brands. They also show that collectivism negatively impacts the choice of foreign brands and vice versa for individualism.

### ***2.3. Studies in the Baltics***

Vida and Fairhurst (1999) analyze consumer ethnocentrism differences in four post-communist countries – Estonia, the Czech Republic, Hungary, and Poland – to research what the differences in consumer ethnocentrism are between consumers in these post-communist countries.

Parts (2007) details the history of the field of ethnocentrism in sociology and the history of the fields of consumer ethnocentrism and the COO effect. After reviewing the history of the field, Parts (2007) focuses on Estonian consumer ethnocentrism and the COO effect regarding food products and finds that Estonians are quite ethnocentric regarding food but have the most positive outlook on the COO effect of Latvian and Lithuanian foodstuff.

### ***2.4. Summary and hypotheses***

As concluded by Sharma et al. (1995), the determining factors of consumer ethnocentrism will not always have the same impact across cultures, and as mentioned in the previous paragraphs, little research has been conducted on this topic in the Baltic states. These two facts mean that it is difficult to be confident in any predictions or hypotheses regarding consumer ethnocentrism and its determinants in Latvia. However, before collecting data for consumer ethnocentrism in Latvia, there is also no definitive reason to believe consumer ethnocentrism in Latvia will be different from the countries previously studied. In other words, although there has been little prior research on consumer ethnocentrism in the Baltics, where the assumption could be made that the results would be similar to those in Latvia, derivation of hypotheses about consumer ethnocentrism in Latvia from research conducted globally is still possible. Thus, based on the papers previously mentioned in the literature review, the authors propose the following hypotheses which will be analyzed in the discussion part of the paper:

H1) consumer ethnocentrism, according to the previously mentioned definition (Shimp & Sharma, 1987, p. 281), will have a positive effect on the purchase intention of domestic beer and a negative on the purchase intention of foreign beer;

H2) patriotism will have a positive effect on the purchase intention of domestic beer and a negative effect on the purchase intention of foreign beer (Balabanis et al., 2001; Erkaya, 2019; Sharma et al., 1995);

H3) nationalism will have a positive effect on the purchase intention of domestic beer and a negative effect on the purchase intention of foreign beer (Balabanis et al., 2001; Sharma et al., 1995);

H4) cultural openness will have a negative effect on the purchase intent of domestic beer and a positive effect on the purchase intent of foreign beer (Erkaya, 2019; Sharma et al., 1995);

H5) collectivism will have a positive effect on the purchase intent of domestic beer and a negative effect on the purchase intent of foreign beer (Erkaya, 2019; Han & Guo, 2018).

### **3. Methodology**

Choosing to study consumer ethnocentrism regarding a specific good requires picking a good to study. Beer products were chosen as the focus of the study because both domestic and foreign beer brands can easily be bought in Latvia, whereas many other goods might not be domestically produced (e.g., laptops) or might be very specific, with few substitutes or competitors, limiting consumer ability to choose between domestic and foreign products (e.g., medicine).

Secondary data sets for this line of studies in Latvia or the Baltics are scarce or non-existing. Therefore, primary data was collected using a questionnaire distributed through various online channels. The questionnaire consists of items that measure consumer ethnocentrism, patriotism, nationalism, cultural openness, collectivism, and purchase intention of 2 similar products in the beer category with similar price points, but different brands. The products displayed in the questionnaire are of clearly different countries of origin, which is made possible by the highly local brand naming conventions by local producers, such as, to name a few, “Bauskas”, “Užavas”, “Valmiermuiža”, and “Lāčplēsis”. Additionally, data is collected on various control variables, including brand awareness and brand equity to control for other factors that might impact purchase intention, and the relevant demographic information about gender, age, ethnicity, most frequently spoken language, income level, education, average monthly beer consumption and region of residence.

The data is analyzed using the “R” data analysis software and multivariate linear ordinary least squares (OLS) regression with interaction terms is employed to establish relationships between purchase intention, consumer ethnocentrism, and other variables.

The survey instrument is comprised of all the scales of the variables and control variables described in the following sections. An example of the survey instrument can be viewed in Appendix A. Due to scarce resources of the authors that can be allocated to academic research and the time constraints of the Thesis, the survey instrument was targeted at a wide range of respondents, the only restriction being that they speak and understand the Latvian language, as that is the language of the survey.

Qualtrics platform is used for storing and managing the survey instrument. The survey instrument was distributed online through Facebook, LinkedIn, and Reddit social network platforms and to the Latvian part of the Stockholm School of Economics in Riga (SSE Riga) community via e-mail.

The variables on which the data has been collected concerning this study come from different conceptual and theoretical frameworks presented in the literature review, and studies on consumer ethnocentrism and its impact on purchase intention. The data is collected on the determining factors of consumer ethnocentrism of the model proposed in Sharma et al. (1995) – cultural openness, patriotism, and collectivism. Since patriotism and conservatism are highly correlated in their research paper, conservatism is excluded from the model in the present study. To keep the survey instrument as short as possible, the individualism variable is excluded as well since it has also been excluded in other research papers, e.g., Erkaya (2019). To gain a more nuanced insight into purchase intention, a scale measuring nationalism alongside patriotism is included. These two concepts are related but distinct, patriotism measures attachment towards the native country, whereas nationalism measures a degree of superiority of the native country in contrast to others.

### ***3.1. Consumer ethnocentrism***

This variable is measured using the 10-item CETSCALE. Each question is measured using a Likert scale, with answers ranging from 1 (strongly disagree) to 7 (strongly agree). Thus, the value of the variable is in the range of 10 to 70.

Although the original CETSCALE by Shimp and Sharma (1987) consists of 17 questions, a reduced 10-or-fewer item variant has been frequently employed in the literature. For example, a national consumer good study, as cited by Shimp and Sharma (1987), used the 10-item scale. That study, though not available publicly, was used in the validity and reliability assessment of the CETSCALE by Shimp and Sharma (1987). Han and Guo (2018), and Chakraborty and Sadachar (2020) also used the 10-item scale where questions were drawn from the original 17-item CETSCALE. Erkaya (2019), for example, used a 7-item

CETSCALE. The reduced CETSCALE in other research papers was selected in a way that suits best their research topic and survey instrument.

To make the survey instrument shorter, 10 items based on how frequently they were employed in other studies were selected. A list of the full 17-item questionnaire with the frequency of each question in the literature studying purchase intention, and the selection of the CETSCALE items used in this research paper, can be found in Table 1.

**Table 1**

*CETSCALE, Question Frequency, and the Selection Used in This Research Paper*

#	Question	Total	This paper
4	American products, first, last, and foremost.	4	Yes
8	We should purchase products manufactured in America instead of letting other countries get rich off us.	4	Yes
11	Americans should not buy foreign products, because this hurts American business and causes unemployment.	4	Yes
13	It may cost me in the long run, but I prefer to support American products.	4	Yes
5	Purchasing foreign-made products is un-American.	3	Yes
7	A real American should always buy American-made products.	3	Yes
16	We should buy from foreign countries only those products that we cannot obtain within our own country.	3	Yes
2	Only those products that are unavailable in the U.S. should be imported.	2	Yes
6	It is not right to purchase foreign products, because it puts Americans out of jobs.	2	Yes
9	It is always best to purchase American products.	2	Yes
17	American consumers who purchase products made in other countries are responsible for putting their fellow Americans out of work.	2	
3	Buy American-made products. Keep America working.	1	
1	American people should always buy American-made products instead of imports.	0	

10	There should be very little trading or purchasing of goods from other countries unless out of necessity.	0
12	Curbs should be put on all imports.	0
14	Foreigners should not be allowed to put their products on our markets.	0
15	Foreign products should be taxed heavily to reduce their entry into the U.S.	0

*Note.* Table created by the authors using data from Shimp and Sharma (1987). This table shows all 17 items of the CETSCALE by Shimp and Sharma (1987) ordered by frequency with which each of them is employed in the literature reviewed by the authors.

### 3.2. Patriotism/nationalism

To measure patriotism and nationalism a scale suggested by the thesis supervisor – Ivars Austers – is used, who is currently studying patriotism and nationalism in connection to the COVID-19 pandemic (Austers & Silkane, 2021). The scale consists of 10 items, 5 for patriotism and 5 for nationalism. Erkaya (2019), and Balabanis et al. (2001) used patriotism scales developed by Kosterman and Feshbach (1989) with 11 items on the scale, however, the items are highly similar to the patriotism scale that is used in this research paper with the exception that the chosen scale in the present study contains one item that includes references to specific cultural and historical regions of Latvia. Thus, the scale used in this research paper is better suited for Latvia from a qualitative point of view. The items are measured on a 7-item Likert scale, where 1 represents “strongly disagree” and 7 – “strongly agree”. The value of the patriotism and nationalism variables, therefore, range between 5 and 35. The full scale can be found in Table 2.

**Table 2**

#### *Patriotism/Nationalism Scale*

#	Variable	Question
1	Patriotism	I am proud to belong to Latvia.
2	Patriotism	I feel closely connected with Latvia.
3	Patriotism	I love Latvia.

4	Patriotism	Even if it would be more profitable to live in another country, I still choose to live in Latvia.
5	Patriotism	I can identify myself with one of the cultural and historical regions of Latvia – Vidzeme, Latgale, Kurzeme, Zemgale or Sēlija.
6	Nationalism	Placing your nation over others is not a bad thing, it is just an expression of love for your people.
7	Nationalism	It is not good to be too open to other nations.
8	Nationalism	It is absurd to think that all nations are the same. Some nations are more, some less respectable.
9	Nationalism	The country's ethnic majority should always have greater political rights than minorities.
10	Nationalism	All the great works are inspired by national feelings.

*Note.* Table created by the authors using data from Austers and Silkane (2021). This table contains the patriotism and nationalism scale items, and identification to which variable each item pertains.

### 3.3. Cultural openness

For measuring cultural openness, the scale employed in Sharma et al. (1995) is used, which they developed for their study on the determining and moderating factors of consumer ethnocentrism. Although the full list of items in the cultural openness scale was not reported in the study, Erkaya (2019) employed and reported the scale used by Sharma et al. (1995) in his research paper on the impact of consumer ethnocentrism and other variables on purchase intention. The scale consists of 6 items reported by Erkaya (2019), each of which is measured using a Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). The value of this variable, thus, ranges from 6 to 42. The items of the scale are reported in Table 3.

**Table 3**

#### *Cultural Openness Scale*

#	Question
1	I would like to learn more about other countries.
2	I have a strong desire to overseas travel.
3	I would like to have opportunities to meet people from other countries.



- 4 I am very interested in trying food from different countries.
- 5 I am open-minded towards foreigners and their habits.
- 6 We should have a respect for traditions, cultures, and way of other nations.

---

*Note.* Table created by the authors using data from Erkaya (2019).

### **3.4. Collectivism**

For measuring this variable, a scale developed by Yoo and Donthu (2002) is used. It consists of 6 items and was administered with a Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). This scale was also used by Erkaya (2019), albeit slightly modified and reduced to 3 questions. This collectivism scale was also used in Yoo and Donthu (2005) in their study about personal cultural orientation effects on consumer ethnocentrism. Sharma et al. (1995) used a different scale to measure collectivism, developed by Hui (1988); however, this scale measures collectivism separately towards various social interpersonal relationship categories (spouse, parents, relatives, neighbors, friends, and coworkers), which is not relevant for the present research paper. Hui's (1988) scale was not used since a more concise scale is available and already employed in academic research. The value of this variable ranges from 6 to 42. The items of the scale can be found in Table 4.

**Table 4**

*Collectivism Scale*

---

#	Question
1 <sup>a</sup>	Individuals should sacrifice self-interest for the group that they belong to.
2	Individuals should stick with the group even through difficulties.
3	Group welfare is more important than individual rewards.
4 <sup>a</sup>	Group success is more important than individual success.
5	Individuals should pursue their goals after considering the welfare of the group.
6 <sup>a</sup>	Group loyalty should be encouraged even if individual goals suffer.

---

*Note.* Table created by the authors using data from Yoo and Donthu (2002).

<sup>a</sup> Question was used in Erkaya (2019).

### **3.5. Brand equity and awareness**

To measure brand equity, the overall brand equity (OBE) scale developed by Yoo and Donthu (2001) is used. Their research paper was focused on developing and validating the

multidimensional brand equity (MBE) scale and OBE was used to test the convergent validity of MBE, which they indeed found to be valid. However, as in this study, the interest is not in MBE, and to keep the survey instrument concise, OBE was determined to be the best choice. Brand perceptions might impact purchase intention; therefore, equity is included in the regressions to control for that. The scale consists of 4 items each of which is measured using a Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). Thus, the value of the variable ranges from 4 to 28. The list of the items in the OBE scale can be found in Table 5.

**Table 5**

*Overall Brand Equity (OBE) Scale*

#	Question
1	It makes sense to buy X instead of any other brand, even if they are the same.
2	Even if another brand has the same features as X, I would prefer to buy X.
3	If there is another brand as good as X, I prefer to buy X.
4	If another brand is not different from X in any way, it seems smarter to purchase X.

*Note.* Table created by the authors using data from Yoo and Donthu (2001).

Vida and Fairhurst (1999) found that brand awareness significantly impacts consumer ethnocentrism. Brand awareness also might impact the purchase intention; therefore, it is beneficial to be included to avoid omitted variable bias. Vida and Fairhurst (1999) used a brand awareness scale with 3 items from a study on competitive interference effects on consumer memory of the advertisement by Kent and Allen (1994). Each item is measured with a Likert scale ranging from 1 to 7, thus, the value of the brand awareness variable ranges from 3 to 21. The scale can be found in Table 6. In addition to Vida and Fairhurst (1999), the brand awareness scale has also been employed by Han and Guo (2018), two of the three scale items matching Kent and Allen's (1994) scale.

**Table 6**

*Brand Awareness Scale*

#	Question
1	Regarding this brand, are you (familiar/unfamiliar)?
2	Regarding this brand, are you (inexperienced/experienced)?
3	Regarding this brand, are you (not knowledgeable/knowledgeable)?

*Note.* Table created by the authors using data from Kent and Allen (1994).

### **3.6. Purchase intention**

To measure purchase intent, one item is used: "I would buy this product." The item is on a Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree).

With the help of the Qualtrics survey instrument tool, stimulus sampling is performed for the questions that relate to the pictures of domestic and foreign beer brands. A pool of 8 domestic-foreign beer product pairs was collected and each respondent got one randomly assigned product pair and the questions that must be answered regarding the displayed picture. This allows for a greater generalization of the results and controls for distortions or bias in results caused by the appearance of the products.

The criteria for the choice of stimuli, for a domestic-foreign beer brand pair, are as follows:

- Both domestic and foreign brand names must unambiguously indicate that it is either Latvian or foreign. Bauskas, Cēsu, Valmiermuiža, Užavas, Tērvete, Piebalgas, Mežpils, Staburags, and Lielvārdes are unambiguous examples because each of these brand names is a city in Latvia. Unambiguous examples for foreign brands include Bohemia Regent, Krombacher, Krušovice, Grimbergen, Schöfferhofer, and Staropramen since they are written in a different language.
- The domestic brand must be produced in Latvia, whereas the foreign brand must be imported, as indicated by the retailer.
- The brand must be available at <https://www.barbora.lv/> e-commerce site since the orders are fulfilled exclusively from one of the largest retail chains in Latvia – Maxima. This ensures that each brand is widely available for purchase in Latvia.
- The products in each stimuli pair must be of the same volume, packaging type, and in a similar price range. A product is considered to be of the same price range if the regular (non-promotion) price of the foreign product is in the +/- 5% range of the domestic one.

### **3.7. Other (control) variables**

Various demographic information from the respondents is collected as it has been theorized and shown that they have an impact on consumer ethnocentrism tendency. Shimp and Sharma (1987) suggested that consumers with poor job security might be more ethnocentric due to perceived threats to their own and others' livelihood that is created by purchasing foreign goods. Additionally, age was suggested to be an important factor due to

generally smaller job security. The geographic area of a person's residence also might have an impact on consumer ethnocentrism due to different levels of development, and thus job security, income levels, and welfare in general. Vida and Fairhurst (1999) confirmed that age significantly impacts consumer ethnocentrism. They also found that gender has a significant effect.

Since in Latvia in general and in Riga in particular the ethnic minority share of the population is quite large, a question on the respondent's ethnicity is included.

In addition to demographics, respondents are also asked to indicate their average monthly beer consumption volume, as it is plausible that more prolific beer drinkers might have greater purchase intention of beer in general.

Some of the control variables, namely ethnicity and geographic area of a person's residence, turned out to be rather uniform in the responses to the survey as mostly Latvians living either in or near Riga responded to the survey. This has limited the ability to ascertain meaningful inferences from the available data for ethnicity or region of residence simply due to a lack of responses from other ethnicities and regions in Latvia. The full list of demographic variables can be found in Table 7.

**Table 7**

*Demographic and Other Variables*

#	Variable
1 <sup>a</sup>	Gender
2 <sup>a</sup>	Age
3 <sup>a</sup>	Education level
4 <sup>a</sup>	Income level
5	Ethnicity
6	Region of residence
7 <sup>a</sup>	Monthly beer consumption

*Note.* Created by the authors. The table shows the demographic and other variables that are used in this research paper. The questions can be found in Appendix A.

<sup>a</sup> Demographic variables used in regression analysis.

### *3.8. Data collection and sample*

All survey instruments were translated into Latvian from English except for nationalism and patriotism scales which were already in Latvian. These scales were provided to the authors by Thesis supervisor Ivars Austers, who uses them in his research paper (Austers & Silkane, 2021).

The translations were then organized into questions and statements in the Qualtrics survey creation and distribution tool. Consumer ethnocentrism, nationalism, patriotism, cultural openness, and collectivism scales were put under one question as statements, to improve faster and more convenient completion of the survey due to Qualtrics tool user interface benefits. All the statements containing previously mentioned scales were randomized at each survey session to mitigate bias that could arise from the fixed ordering of scales and questions within the scales.

After the questions from the scales, the survey instrument displayed to the respondent pictures of 2 products that consisted of one domestic beer brand and one foreign beer brand. The respondent firstly saw the picture and afterward the statements on purchase intention, brand equity, and brand awareness. To mitigate the bias that could come from unique product visual appearance and characteristics stimuli sampling technique was employed – 8 product pairs were prepared, one of which was randomly assigned to each respondent. The order of foreign or domestic products was also randomized, however, the purchase intention, brand awareness, and brand equity statements were not, they were shown to the respondent in a non-randomized order. The pictures for each of the 16 products employed in this research paper were obtained from the internet since in the e-commerce store they were not of sufficient quality. All the product pictures obtained from the internet were identical to the ones displayed in the e-commerce store. The obtained product pictures were then manually adjusted – the margins were cut as close as possible to the product dimensions, and each picture was adjusted to be exactly 500 pixels tall. This ensured that the pictures are identical except for the products themselves.

After the product pair, the respondents were asked to provide information on the demographic and control variables. All the survey questions, except for the respondent's e-mail, were mandatory, and the survey could not be finished without answering all of them. This setting was enabled due to the concern that survey respondents on mobile devices could by accident not answer one or several questions.

The survey instrument was tested on 2 fellow students and 1 person who is not a student and consequently, some wording was adjusted in some of the questions, thus improving the translation and readability.

The survey was then distributed on the social media networks of the authors, and an e-mail was sent to Latvian-speaking SSE Riga students. Due to this, it is difficult to estimate the total number of recipients. Potential respondents were incentivized by communicating that at the end of the survey a lottery would be conducted in which one randomly chosen participant would be awarded EUR 100 for the participation, and they would be contacted via e-mail they had the option to leave at the end of the survey.

In total, 392 surveys were started, but 241 were finished. 2 respondents were below the age of 18, which are filtered out of the sample as this survey includes questions on consumption of alcoholic drinks, thus the final sample size is 239. The low completion rate likely was because the survey instrument is rather long. Another contributing factor is a “misclick” – clicking on the survey without the intention of filling it out. This is very likely since 126 of the respondents did not answer any of the questions. Given that the survey was distributed on social media and the length of the survey instrument, the low finish/start ratio is not considered to be unusual or detrimental. Han and Guo (2018) also conducted surveys through e-mail and instant messaging platforms which yielded 252 responses out of 400 survey instrument recipients.

## **4. Results and discussion**

### ***4.1. Scale validation***

The internal consistency of the composite variable values was measured for consumer ethnocentrism, patriotism, nationalism, cultural openness, collectivism scales, and brand awareness and brand equity. Cronbach’s alpha was used as the main indicator of the data obtained with the scales. Each scale scored Cronbach’s alpha above 0.70, except for the nationalism scale, for which the value was 0.68, which is quite close to the recommended value of 0.70. Each scale except for nationalism, collectivism, and patriotism scored Cronbach’s alpha above or equal to 0.80, with collectivism scoring 0.79, but patriotism scoring 0.78. The exact values of this test for each scale can be found in Table 8.

#### **Table 8**

*Cronbach’s Alpha for the Variable Scales*

Variable scale	Cronbach's alpha	# of items in the scale
CET scale	0.90	10
Patriotism scale	0.78	5
Nationalism scale	0.68	5
Cultural openness scale	0.80	6
Collectivism scale	0.79	6
Brand awareness (domestic)	0.80	3
Brand awareness (foreign)	0.88	3
Brand equity (domestic)	0.93	4
Brand equity (foreign)	0.92	4

*Note.* Created by the authors. The table shows Cronbach's alpha for the scales of the variables of interest. The test was performed on a sample size of 239.

#### 4.2. Descriptive statistics

The sample consists of 58% females, 40% males, and 2% of persons who do not wish to reveal their gender. 88% are of Latvian ethnicity, 8% are Russian, and 4% are of another ethnicity. 43% of respondents in the sample were students, however, only 26% were exclusively students. The other categories are not reported for convenience. For distribution characterization on respondent age, monthly income, monthly beer consumption, and years of completed education refer to Table 9.

**Table 9**

*Sample Description*

	CONSUMPTION	AGE	EDUCATION	INCOME	BR_AW_DOM	BR_AW_FOR	BR_EQ_DOM	BR_EQ_FOR	PI_DOM	PI_FOR
Min	0	18	0	0	3	3	4	4	1	1
Median	1	28	15	900	13	3	15	9	5	3
Mean	2.93	30.92	14.95	1035.85	12.60	6.13	14.26	10.01	4.13	3.35
Max	60	68	37	8000	21	21	28	25	7	7

Standard deviation	6.59	11.38	4.84	969.63	5.58	4.68	6.52	5.01	2.05	2.03
--------------------	------	-------	------	--------	------	------	------	------	------	------

*Note.* Created by the authors. The table shows the sample (n = 239) description for respondents' monthly beer consumption (CONSUMPTION), age (AGE), years of completed education (EDUCATION), monthly income (INCOME), brand awareness of domestic brands (BR\_AW\_DOM), brand awareness of foreign brands (BR\_AW\_FOR), brand equity of domestic brands (BR\_EQ\_DOM), brand equity of foreign brands (BR\_EQ\_FOR), purchase intention of domestic brands (PI\_DOM), and purchase intention of foreign brands (PI\_FOR).

Table 10 contains the correlation matrix and the means and standard deviations for each of the regression variables. Overall, the sample is not very ethnocentric with an average value of 32.23 out of 70 which might be affected by the fact that the sample is rather young, the mean value for age is 31 with a standard deviation of 11.38. This result stems from the fact that a significant proportion of the sample are students. The respondents in the sample are slightly more patriotic than ethnocentric, with an average patriotism value of 25.95 out of 42, however, they scored low on nationalism (14.82 out of 42). Cultural openness in the sample is likely high also due to the high proportion of students, with the average value being 35.64 out of 42. The average collectivism value is 20.13 (out of 42) with a standard deviation of 6.07. The average income is 1036 with a standard deviation of 969.63 since most students reported an income of 0, which is characteristic of being a student. Brand awareness for domestic products is significantly higher than for foreign ones (12.60 vs 6.13) which was expected from surveying a local population. Purchase intention for domestic brands is somewhat higher than for foreign brands, with the average value indicating that the respondents are indifferent to purchasing domestic brands but slightly averse to purchasing foreign brands (average values of 4.13 and 3.35, respectively).



**Table 10***The Correlation Matrix, Means, and Standard Deviations of Variables*

	CET	PAT	NAT	OPN	COL	AGE	EDUCATION	INCOME	CONSUMPTION	MAN	BR_AW_DOM	BR_AW_FOR	BR_EQ_DOM	BR_EQ_FOR	PI_DOM	PI_FOR
CET	1															
PAT	0.37***	1														
NAT	0.53***	0.3***	1													
OPN	-0.27***	-0.05	-0.4***	1												
COL	0.33***	0.29***	0.35***	-0.12*	1											
AGE	0.25***	0.28***	0.09	-0.17***	-0.02	1										
EDUCATION	0.14**	0.1	-0.02	-0.08	-0.07	0.43***	1									
INCOME	0.09	0.11*	0.02	0.05	-0.02	0.35***	0.19***	1								
CONSUMPTION	0.09	0.05	0.15**	-0.12*	0.06	0.13**	-0.01	0.13**	1							
MAN	-0.05	-0.07	0.07	-0.16**	0.21***	-0.2***	-0.18***	0.02	0.33***	1						
BR_AW_DOM	0.07	0.11*	0.06	0.08	0.22***	0.11*	0.04	0.07	0.21***	0.1	1					
BR_AW_FOR	0.11*	-0.03	0.08	-0.1	0.13*	0.22***	0.06	0.11*	0.25***	0.18***	0.26***	1				
BR_EQ_DOM	0.24***	0.27***	0.24***	-0.05	0.25***	0.02	0.12*	0.11*	0.05	0	0.44***	0.05	1			
BR_EQ_FOR	0.09	0.06	0.15**	0	0.16**	-0.07	-0.06	-0.11*	0.01	0.09	0.11*	0.19***	0.35***	1		
PI_DOM	0.11*	0.21***	0.01	0.13**	0.07	0.12*	0.02	0.08	0.15**	0.08	0.62***	0.11*	0.46***	0.13**	1	
PI_FOR	0.01	0.03	-0.01	0.12*	0.12*	0.11	-0.04	0.1	0.25***	0.22***	0.37***	0.41***	0.11	0.32***	0.46***	1
Mean	32.23	25.95	14.82	35.64	20.13	30.92	14.95	1036	2.93	0.41	12.60	6.13	14.26	10.01	4.13	3.35
Standard deviation	11.51	5.86	5.64	5.27	6.07	11.38	4.84	969.63	6.59	0.49	5.58	4.68	6.52	5.01	2.05	2.03

*Note.* Created by the authors. The table shows the correlation matrix of the variables. CET (consumer ethnocentrism scale value), PAT (patriotism scale value), NAT (nationalism scale value), OPN (openness scale value), COL (collectivism scale value), AGE (respondent's age), EDUCATION (respondent's years of completed education), INCOME (respondent's monthly income), CONSUMPTION (respondents monthly consumption of beer), MAN (dummy, value of 1 denoting male), BR\_AW\_DOM (brand awareness of domestic brands), BR\_AW\_FOR (brand awareness of foreign brands), BR\_EQ\_DOM (brand equity of domestic brands), BR\_EQ\_FOR (brand equity of foreign brands) PI\_DOM (purchase intention of domestic brands), PI\_FOR (purchase intention of foreign brands), "Mean" is the average value for each variable.

\*p <= .1. \*\*p <= .05. \*\*\*p <= .01.

#### **4.3. Regression analysis**

Two linear OLS models were developed where purchase intention is the dependent variable, and consumer ethnocentrism, patriotism, nationalism, collectivism, and cultural openness scale values are independent variables. Additionally included in the regression are the independent variables of brand awareness, brand equity, gender dummy, monthly beer consumption, years of completed education, monthly income, and age. The first model data set contains domestic, and the second foreign beer brand purchase intention (dependent), brand awareness, and brand equity (independent) variables. Two models were created to study how the before mentioned variables affect domestic and foreign beer brand purchase intention differently.

In the foreign regression model purchase intention together with brand awareness and brand equity were transformed to their natural logarithm values, since the distributions of those variables were severely skewed due to a high proportion of respondents reporting low foreign beer brand purchase intention, brand awareness, and brand equity values which introduced several issues with the assumptions of the OLS regression.

With a total of 239 observations in each of the regressions and 12 variables, the achieved events per variable ratio is 19.92.

#### 4.3.1. Model output analysis

Running linear OLS regression on the domestic data set yields (1) statistically insignificant (p-value of 0.12) consumer ethnocentrism effect (coefficient of 0.015) on purchase intention, (2) statistically significant (p-value < 0.05) patriotism effect (coefficient of 0.039), (3) statistically insignificant (p-value of 0.211) nationalism effect (coefficient of -0.029), (4) statistically significant (p-value < 0.05) cultural openness effect (coefficient of 0.045), (5) statistically significant (p-value < 0.05) collectivism effect (coefficient of -0.05), (6) statistically significant (p-value < 0.001) brand awareness and brand equity effects (coefficients of 0.183 and 0.082, respectively), (7) statistically insignificant male dummy, age, education, income and beer consumption (p-values of 0.122, 0.133, 0.198, 0.481, and 0.659, respectively) effects (0.374, 0.016, -0.032, 0.000, and 0.006, respectively). The results of this regression indicate that only brand awareness and brand equity control variables have a significant impact on domestic beer brand purchase intention with coefficients of 0.183 and 0.082, respectively, and the corresponding p-values < 0.001. The full regression output can be found in Table 11.

**Table 11**

#### *Domestic Model Output*

	Coefficient	SE	t-stat	p-value
(Intercept)	-1.144	0.910	-1.257	0.21
CET	0.015	0.010	1.559	0.12
PAT	0.039**	0.019	2.059	0.041
NAT	-0.029	0.023	-1.254	0.211
OPN	0.045**	0.018	2.504	0.013
COL	-0.05**	0.021	-2.403	0.017
BR_AW	0.183****	0.022	8.398	0.000
BR_EQ	0.082****	0.019	4.252	0.000
MAN	0.374	0.241	1.552	0.122
AGE	0.016	0.011	1.509	0.133
EDUCATION	-0.032	0.025	-1.290	0.198
INCOME	0.000	0.000	-0.705	0.481
CONSUMPTION	0.006	0.014	0.442	0.659

Adjusted R<sup>2</sup>: 0.45

F-statistic: 26.48 on 12 and 226 DoF, p-value:  $<2.2 \times 10^{-16}$

*Note.* Created by the authors. The table shows the domestic linear OLS model output with

White standard errors (SE) and heteroscedasticity robust F-statistic. CET: consumer

ethnocentrism, PAT: patriotism, NAT: nationalism, OPN: cultural openness, COL:

collectivism, BR\_AW: brand awareness, BR\_EQ: brand equity, MAN: dummy variable (1 =

male, 0 = female), AGE: respondent age, EDUCATION: years of completed education,

INCOME: monthly income, CONSUMPTION: average monthly beer consumption in liters.

T-stat: t-statistic, DoF: degrees of freedom.

\*\*p  $\leq$  .05. \*\*\*p  $\leq$  .01. \*\*\*\*p  $\leq$  .001.

The foreign data set regression yields (1) statistically insignificant (p-value of 0.993) consumer ethnocentrism effect (coefficient of 0.000) on purchase intention, (2) statistically insignificant (p-value of 0.858) patriotism effect (coefficient of 0.001), (3) statistically insignificant (p-value of 0.161) nationalism effect (coefficient of -0.013), (4) statistically significant (p-value  $<$  0.05) cultural openness effect (coefficient of 0.019), (5) statistically insignificant (p-value of 0.405) effect of collectivism (coefficient of 0.006), (6) statistically significant (p-value  $<$  0.001) brand awareness and brand equity effects (coefficients of 0.255 and 0.478, respectively), (7) statistically significant (p-value  $<$  0.05) male dummy, age, and beer consumption variable effects (coefficients of 0.186, 0.009, and 0.016, respectively), and (8) statistically insignificant education and income (p-values of 0.319 and 0.561, respectively) effects (coefficients of -0.009 and 0.000, respectively). The results of the foreign model, similar to the domestic model, indicate that logarithmic brand awareness and brand equity values have a statistically significant and positive impact on the purchase intention of foreign beer brands, with coefficients of 0.255, and 0.478, respectively, and p-values of less than 0.001. In addition and in contrast to the domestic model, the output suggests that being a male, being older, and consuming more beer leads to a higher purchase intention for foreign beer brands with coefficients of 0.186, 0.009, and 0.016, respectively with p-values of less than 0.05. The full regression output can be found in Table 12.

**Table 12**

*Foreign Model Output*

Coefficient	SE	t-stat	p-value
-------------	----	--------	---------

(Intercept)	-1.384***	0.444	-3.116	0.002
CET	0.000	0.004	0.009	0.993
PAT	0.001	0.008	0.179	0.858
NAT	-0.013	0.009	-1.407	0.161
OPN	0.019**	0.008	2.227	0.027
COL	0.006	0.007	0.834	0.405
log(BR_AW)	0.255****	0.067	3.825	0.000
log(BR_EQ)	0.478****	0.074	6.469	0.000
MAN	0.186**	0.092	2.030	0.044
AGE	0.009**	0.004	2.013	0.045
EDUCATION	-0.009	0.009	-1.000	0.319
INCOME	0.000	0.000	0.583	0.561
CONSUMPTION	0.016**	0.006	2.546	0.012
Adjusted R <sup>2</sup> : 0.31				
F-statistic: 9.89 on 12 and 226 DoF, p-value: 1.811*10 <sup>-15</sup>				

*Note.* Created by the authors. The table shows the domestic linear OLS model output. CET: consumer ethnocentrism, PAT: patriotism, NAT: nationalism, OPN: cultural openness, COL: collectivism, BR\_AW: brand awareness, BR\_EQ: brand equity, MAN: dummy variable (1 = male, 0 = female), AGE: respondent age, EDUCATION: years of completed education, INCOME: monthly income, CONSUMPTION: average monthly beer consumption in liters. SE: standard error, t-stat: t-statistic, DoF: degrees of freedom.

\*\*p <= .05. \*\*\*p <= .01. \*\*\*\*p <= .001.

#### 4.3.2. Model diagnostics

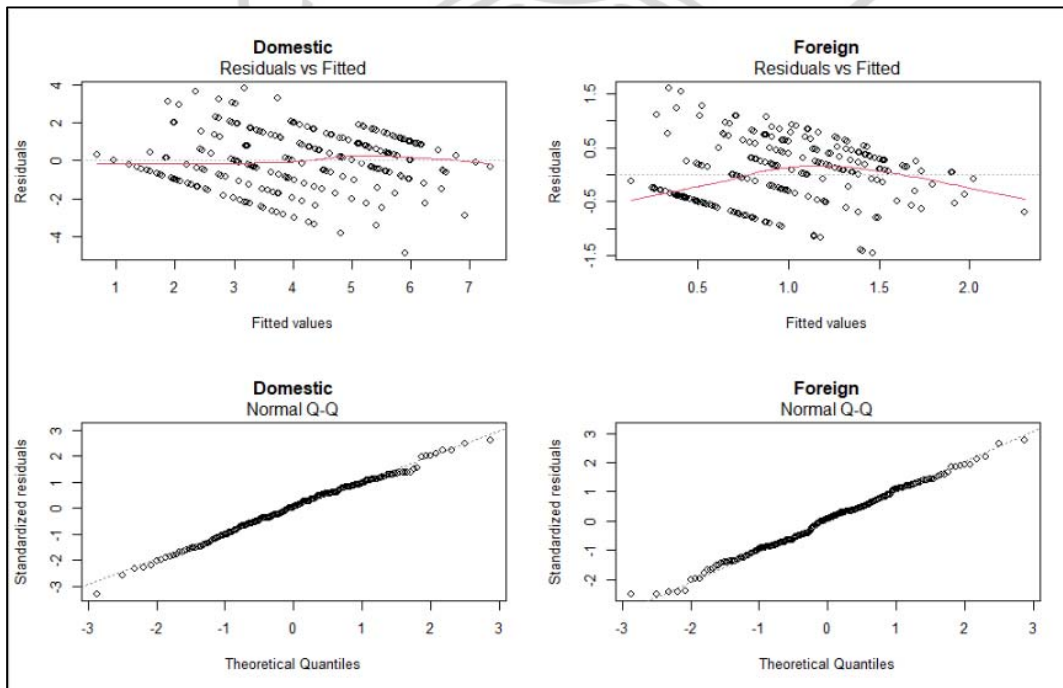
Various tests are performed to see whether the models meet OLS assumptions, namely, (1) linearity in parameters, (2) normality of residuals, (3) no autocorrelation of residuals, residual mean of 0, no residual correlation with independent variables, (4) no multicollinearity, and (5) homoscedasticity of residuals.

Firstly, linearity is checked by plotting the model residuals against fitted values. By visually examining the top two plots in Figure 2, it can be observed that the domestic regression exhibits no clear pattern and thus linearity assumption is satisfied.

However, the foreign regression plot shows some convexity, which points to the linearity assumption being violated. By changing the transformations of foreign regression in an unreported analysis by regressing the same right-hand side part of the equation on non-log values of purchase intention, this issue is resolved, however, it introduces non-normality of residuals, and residual autocorrelation. Examining the model output with and without natural logarithm transformation of purchase intention reveals that the statistical significance is almost the same for all independent variables. Therefore, the linearity assumption violation for foreign regression does not impact the inferences drawn from the model.

**Figure 2**

*Residuals-Fitted Value and Q-Q Plots for the Regression Models*



*Note.* Created by the authors in RStudio software. The figure shows residual-fitted value plots with the OLS lines for domestic and foreign regressions on the top part of the figure. On the bottom part are quantile-quantile plots for domestic and foreign regressions, plotting standardized residual quantiles against normal distribution quantiles.

Secondly, residual normality is assessed by creating quantile-quantile (Q-Q) plots. By inspecting Figure 2, the standardized residual quantiles align well with the normal distribution quantiles, which is an indication of a normal distribution of residuals.

To additionally test for residual normality, Shapiro-Wilk, Anderson-Darling, and Jarque-Bera tests are employed. The null hypothesis for these tests is that the data is normally distributed. The p-values for the tests are 0.34, 0.22, and 0.36 for the domestic model, and 0.52, 0.26, and 0.79 for the foreign model, respectively. Since none of the p-values meets the 0.05 threshold for statistical significance, the null hypothesis cannot be rejected for both models, which confirms that the residuals are distributed normally for both regressions.

Thirdly, the no residual autocorrelation, residual-independent variable correlation, and residual mean of 0 assumptions are tested. For this, the Durbin-Watson test is used for which the null hypothesis states that the residuals of a model are not correlated. The p-values of the Durbin-Watson test for domestic and foreign models are 0.44 and 0.11, respectively. Thus, the null hypothesis cannot be rejected for both models at the 0.05 p-value threshold. The mean of the residuals in both models was calculated to be effectively 0. The calculated correlations between the model residuals and independent variables are also 0, except for the brand awareness and brand equity variables whose correlations in the domestic model were -4.86% and 0.56% but in the foreign model 1.97% and -3.12%, respectively. Since the correlations are small and close to 0, this assumption was determined to be satisfied as well.

Fourthly, to test the no-multicollinearity assumption, the variance inflation factor (VIF) for each variable in both models was calculated. None of the VIF values in both models exceeded 1.72 which is well below the rule of thumb value of 10 which indicates a potential multicollinearity problem. Therefore, this OLS assumption is satisfied as well.

Fifthly, to detect any potential heteroscedasticity, the Breusch-Pagan test is performed. The null hypothesis of constant residual variance is satisfied in the foreign model, but not in the domestic one. The p-values of the Breusch-Pagan test for domestic and foreign models are 0.014, and 0.626, respectively. To mitigate heteroscedasticity in the domestic model, heteroscedasticity robust White standard errors are calculated and reported in Table 11.

The model diagnosis suggests that even though all the linear OLS regression assumptions are not met, inferences can be drawn with sufficient accuracy.

#### **4.4. Discussion**

The research on consumer ethnocentrism and its determinants' impact on purchase intention for domestic and foreign beer brands has yielded both expected and surprising results and makes a significant contribution to the academic discussion of the consumer ethnocentrism topic.

A summary of each hypothesis by the effect of each variable on the purchase intention of domestic and foreign beer can be found in Table 13.

**Table 13**

*Summary of Hypotheses and Results*

#	Variable	Hypothesis (effect on PI of domestic beer)	Result	Hypothesis (effect on PI of foreign beer)	Result
1	Consumer ethnocentrism	Positive	Supported	Negative	Supported
2	Patriotism	Positive	Strongly supported	Negative	Supported
3	Nationalism	Positive	Rejected	Negative	Supported
4	Cultural openness	Negative	Strongly rejected	Positive	Strongly supported
5	Collectivism	Positive	Strongly rejected	Negative	Rejected

*Note.* Created by the authors. PI – purchase intention. The support of a hypothesis or lack of it is divided into 4 categories: (1) "Strongly supported" indicates the expected direction of the effect as well as statistical significance, (2) "Supported" indicates the expected direction of the effect but statistical insignificance, (3) "Rejected" indicates an unexpected direction of the effect but statistical insignificance, and (4) "Strongly rejected" indicates an unexpected direction of the effect and statistical significance.

For H1, the detected relationship between consumer ethnocentrism and purchase intention is largely in line with the expectations – positive effect for domestic beer brands, but close to 0 for foreign beer brands, although the effects were statistically insignificant. A similar result was obtained by Erkaya (2019) who found consumer ethnocentrism to have a statistically significant negative effect on purchase intention of foreign goods. The present research paper’s findings are also somewhat in line with Han and Guo (2018) who find a statistically significant and positive impact of consumer ethnocentrism on domestic brand purchase intention but an insignificant effect on foreign brand purchase intention among



more collectivist consumers. This points to a relative empirical consensus in the academic literature about the effects of consumer ethnocentrism on domestic and foreign goods.

The contrast between significance levels of consumer ethnocentrism effect could be plausibly explained through the differences in study subject – the present study focuses on beers, however, Erkaya (2019) studies the impacts on purchase intention of foreign goods in general which is likely the reason for the contentious significance level, even with regards to the work of Han and Guo (2018). They, however, focus specifically on the purchase intention of smartphones and shoes, which is comparable in specificity to the present research paper. A pattern can be observed – as studies go from general to specific, the results of this study on the consumer ethnocentrism effect on purchase intention are more in line with already established findings.

Regarding patriotism, H2 is also mostly supported, and similar to the findings of Erkaya (2019). They found a statistically significant negative impact on foreign good purchase intention, while this study finds that the impact on foreign beer brands is rather close to zero and statistically insignificant. A statistically significant and positive impact of patriotism on domestic beer brand purchase intention reveals that the feelings of belongingness to the native country can and do impact the purchase intention of domestic beer brands, while foreign beer brands do not benefit from this factor in Latvia.

The results on the effect of nationalism are surprising with regards to the H3 – both for domestic and foreign beer brands the effect is negative and larger for domestic beer brand purchase intention, although statistically insignificant. One possible explanation could be that more nationalistic people, in general, consume fewer beer products, and thus their purchase intention for beer is lower, however, this idea contradicts one of the sample characteristics that nationalism and average monthly beer consumption correlation is 0.15 and statistically significant from 0. More research could be conducted on the effect of nationalism on the purchase intention of domestic and foreign goods, and on nationalism itself to gain more in-depth insight.

The H4 is also supported partially, cultural openness has a statistically significant and positive effect on foreign beer brand purchase intention, however, it is also the case for domestic beer brand purchase intention. This is fully in line with the findings of Erkaya (2019), who find the same effect on foreign goods. The positive effect of cultural openness on domestic beer brand purchase intention could be due to the scale that was chosen to represent cultural openness – examining the items in Table 3 suggests that it could also be described as a willingness to try out new things, which, coupled with the fact that the survey

respondents are not avid beer consumers and a significant proportion of the sample reported zero average monthly beer consumption, could be the reason for the results obtained in the present research paper.

H5 is not supported, and the obtained results are rather surprising. The statistically significant and negative collectivism effect on the purchase intention of domestic beer brands contradicts the expectation of a positive relationship. The same situation was faced by Han and Guo (2019), who, similarly, expected a positive collectivism impact on purchase intention for domestic goods and negative for foreign, but found an inverse relationship, although statistically insignificant for domestic goods, but significant for foreign.

With regards to the effects of the control variables on the purchase intention for domestic and foreign brands, both models revealed a statistically significant and positive effect of brand awareness and brand equity. This is intuitively understandable, as having a stronger brand and a wider awareness of it likely increases the willingness to purchase it.

A different set of results were obtained for other foreign model control variables. They indicated that being a male statistically significantly increases purchase intention for foreign beer brands. This might reflect the fact that males drink more beer in general, as is reflected by a 0.33 correlation between average monthly beer consumption and the male dummy variable in Table 10, and thus are more familiar with foreign brands and are more inclined to purchase them. This is also supported by the calculated correlation of 0.25 between average monthly beer consumption and foreign beer brand purchase intention.

Another statistically significant control variable was respondent age which indicates that older respondents are more likely to purchase foreign beer brands. The reason for this result might be similar to why males were more likely to indicate higher purchase intention for foreign beer brands – the correlation between age and foreign brand awareness is 0.22, and on top of that, the correlation matrix in Table 10 indicates a positive correlation of 0.13 between age and average monthly beer contribution which suggests that older people are consuming more beer and as a result are more familiar with foreign beer brands which leads to more favorable purchase intention.

Finally, the foreign model also exhibited a statistically significant relationship between average monthly beer consumption and foreign beer brand purchase intention, which might be the case due to previously mentioned reasons – people who consume beer more are more likely to be familiar with a wider variety of beer brands, including foreign ones, which consequently lead to a higher willingness to purchase them.

The differences between observed effects of variables and other studies are likely strongly impacted by the specificity of the sample – people in different countries with different cultural, historical, socioeconomic, and geopolitical backgrounds very likely develop different characteristics that are researched in this study. Additionally, due to the factors mentioned previously, the relationship between purchase intention and characteristics (variables in the present study) might have evolved differently. Moreover, the results are likely highly impacted by the specificity of the research subject – in the context of the present research paper it is the beer products, but other studies have been conducted on very different product groups, as in Han and Guo (2018), or in the case of Erkaya (2019), on foreign goods in general. Nevertheless, various points of convergence and similarities were observed between previous studies, and together with dissimilarities, this research paper meaningfully contributes to the academic discussion of consumer ethnocentrism and purchase intention.

One of the shortcomings of this study is the linearity assumption violation of foreign purchase intention OLS regression which resulted from a skewed distribution of respondent answers about foreign beer brands which could be solved by obtaining a targeted sample focusing on populations who are likely to drink beer more and thus be more familiar with a wider range of beer products, which would result in a more favorable distribution of purchase intention. An additional concern, albeit a common one among researchers, is the fact that a significant portion of the sample are students, which might produce different results than if the sample were drawn more randomly from Latvia's population.

Regarding the practicality of the results of this study, it could prove informative for beer distributors, wholesalers, and retailers in their beer product assortment decisions. The results from this research paper could be employed by distributors and wholesalers in their decisions about their beer product portfolio. The first takeaway from this study is that their sales likely would not be affected by consumer ethnocentrism which means a lower barrier to entry for imported beer brands. The results could also be informative for distribution strategy for distributors, wholesalers, and retailers. They suggest that more patriotic persons tend to have higher purchase intention for domestic beer brands, which, if they could estimate relative patriotism levels between Latvian regions (e.g., patriotism in Latgale could be lower than in Riga or Kurzeme), could also create a priority list of distribution regions that could guide their distribution execution and workforce focus. On top of that, they could further segment the priority list by gender proportion and age, as the results show that they are statistically significant and positive for foreign beer brand purchase intention. These

takeaways could potentially contribute to both the strategy of those companies and their bottom line.

The present study could be a stepping stone for more research regarding whether and how specifically nationalism impacts purchase intention of domestic and foreign products, not only in the alcohol category but, for example, food or pharmaceutical products, as these categories are sufficiently abundant with domestic goods.

Another way to gain a deeper insight into consumer ethnocentrism and purchase intention in Latvia would be to study the topic in the additional context of ethnicity, the relevance of which is made evident by the fact, also mentioned in the literature review, that 36.8% of Riga residents are ethnically Russian (Central Statistics Bureau of Latvia, n.d.), which might play a role in the relationship between purchase intention and consumer ethnocentrism, and other variables.

An additional avenue of further research is dissecting consumer ethnocentrism itself, to examine what it consists of, as has been done in other research papers in different countries. This kind of study could be done with the data obtained in the present study and could provide useful for any academic interested in the topic. More studies could be performed on different alcoholic beverage categories such as liqueurs, since the domestic brand “Rīgas Balzams” is prevalent in many retail stores, along with some foreign competitors. It would provide insight into how consumer ethnocentrism and its determinants affect different product types in the same category differently.

## **5. Conclusions**

Research shows that consumer ethnocentrism and its determinants have a significant and different impact on the purchase intention of domestic and foreign goods. Previous studies have been conducted both on domestic and foreign goods in general, and specific product categories, however, no studies have been conducted on beverage and more specifically, beer product purchase intention. In addition, research papers on consumer ethnocentrism are scarce in the Baltic states, and Latvia in particular, even though relevant academic discussions take place focusing on other regions.

This research paper attempts to fill this gap, and the purpose of this study was to identify the impact of consumer ethnocentrism and its determining factors on purchase intention between domestic and foreign beer brands in Latvia. The findings indicate that consumer ethnocentrism does not have a statistically significant impact on the purchase intention of domestic or foreign beer brands. However, a significant positive relationship was

found between patriotism, cultural openness, domestic beer brand purchase intention, and cultural openness and foreign beer brand purchase intention. Additionally, a statistically significant negative relationship between collectivism and domestic beer brand purchase intention was found. The study suggests that the average monthly beer consumption, alongside age and being a male also have a positive and statistically significant effect on foreign beer brand purchase intention.

This research paper contributes to the ongoing consumer ethnocentrism discussion taking place worldwide by analyzing how it and its determining factors impact domestic and foreign beer purchase intention in Latvia. The findings of this study can be used by distributor, wholesaler, and retailer organizations to guide their decisions on whether to include foreign or domestic beer brands in their portfolio and the optimal distribution strategy.

## 6. References

- Al-Sulaiti, K. I., & Baker, M. J. (1998). Country of origin effects: a literature review. *Marketing Intelligence & Planning*, 16(3), 150-199.
- Austers, I., & Silkane, V. (2021). A Patriot and a Nationalist Walk Into a Bar During the Covid-19 Pandemic – Who Survives? *A manuscript under review*.
- Balabanis, G., Diamantopoulos, A., Mueller, R. D., & Melewar, T. C. (2001). The Impact of Nationalism, Patriotism and Internationalism on Consumer Ethnocentric Tendencies. *Journal of International Business Studies*, 32(1), 157-175.
- Central Statistics Bureau of Latvia. (n.d.). *Latvijas Iedzīvotāju Nacionālais Sastāvs*. Retrieved November 27, 2021, from [https://www.csb.gov.lv/sites/default/files/data/Skoleniem/iedzivotaju\\_etniskais\\_sastavs.pdf](https://www.csb.gov.lv/sites/default/files/data/Skoleniem/iedzivotaju_etniskais_sastavs.pdf)
- Chakraborty, S., & Sadachar, A. (2020). Predicting Indian consumers' purchase intention from Western apparel brands. *Journal of Fashion Marketing and Management*, 25(3), 407-429.
- Erkaya, Y. (2019). Consumer Ethnocentrism, Cosmopolitanism, Patriotism, Collectivism, Cultural Openness, and Their Impacts on the Purchase Intention for Non-American Products. A Field Experiment in the USA. *KNUV*, 60(2), 101-113.

- Fischer, P. M. & Zeugner-Roth, K. P. (2017) Disentangling country-of-origin effects: the interplay of product ethnicity, national identity, and consumer ethnocentrism. *Marketing Letters*, 28(1), 189-204.
- Han, C. M., & Guo, C. (2018). How Consumer Ethnocentrism (CET), Ethnocentric Marketing, and Consumer Individualism Affect Ethnocentric Behavior in China. *Journal of Global Marketing*, 31(5), 324-338.
- Hui, C. H. (1988). Measurement of Individualism-Collectivism. *Journal of Research in Personality*, 22(1), 17-36.
- Kent, R., J., Allen, C., T. (1994). Competitive Interference Effects in Consumer Memory for Advertising: The Role of Brand Familiarity. *Journal of Marketing*, 58(3), 97-105.
- Kosterman, R., & Feshbach, S. (1989). Toward a Measure of Patriotic and Nationalistic Attitudes. *Political Psychology*, 10(2), 257-274.
- Parts, O. (2007). The measurement of consumer ethnocentrism and COO effect in consumer research. *Transformations in Business and Economics* 6(1), 139-154.
- Reierson, C. (1966). Are Foreign Products Seen As National Stereotypes? *Journal of Retailing*, 42(1), 33-40.
- Schooler, R. D. (1965). Product Bias in the Central American Common Market. *Journal of Marketing Research*, 2(4), 394-397.
- Schooler, R. D. (1971). Bias Phenomena Attendant to the Marketing of Foreign Goods in the U.S. *Journal of International Business Studies*, 2(2), 71-80.
- Schooler, R. D., & Sunoo, D. H. (1969). Consumer Perceptions of International Products: Regional vs. National Labeling. *Social Science Quarterly*, 49(4), 886-890.
- Schooler, R. D., & Wildt, A. R. (1968). Elasticity of Product Bias. *Journal of Marketing Research*, 5(1), 78-81.
- Sharma, S., Shimp, T. A., & Shin, J. (1995). Consumer Ethnocentrism: A Test of Antecedents and Moderators. *Journal of the Academy of Marketing Science*, 23(1), 26-37.
- Shimp, T. A., & Sharma, S. (1987). Consumer Ethnocentrism: Construction and Validation of the CETSCALE. *Journal of Marketing Research*, 24(3), 280-289.
- Vida, I., & Fairhurst, A. (1999). Factors underlying the phenomenon of consumer ethnocentricity: evidence from four central European countries. *The International Review of Retail, Distribution and Consumer Research*, 9(4), 321-337.
- Yoo, B., & Donthu, N. (2001). Developing and validating a multidimensional consumer-based brand equity scale. *Journal of Business Research*, 52(1), 1-14.

Yoo, B., & Donthu, N. (2002). The Effects of Marketing Education and Individual Cultural Values on Marketing Ethics of Students. *Journal of Marketing Education*, 24(2), 92-103.

Yoo, B., & Donthu, N. (2005). The Effect of Personal Cultural Orientation on Consumer Ethnocentrism. *Journal of International Consumer Marketing*, 18(1/2), 7-44.



---

SSE RIGA

## 7. Appendix

### *Appendix A. The survey instrument*

Please indicate to what degree you agree with the following statements

1. Latvian products first, and foremost.
2. We should purchase products manufactured in Latvia instead of letting other countries get rich off us.
3. Latvians should not buy foreign products, because this hurts Latvian business and causes unemployment.
4. It may cost me in the long run, but I prefer to support Latvian products.
5. Purchasing foreign-made products is un-Latvian.
6. A real Latvian should always buy Latvian-made products.
7. We should buy from foreign countries only those products that we cannot obtain within our own country.
8. Only those products that are unavailable in Latvia should be imported.
9. It is not right to purchase foreign products, because it puts Latvians out of jobs.
10. It is always best to purchase Latvian products.
11. Even if it would be more profitable to live in another country, I still choose to live in Latvia.
12. I am able to identify myself with one of the cultural and historical regions of Latvia – Vidzeme, Latgale, Kurzeme, Zemgale or Sēlija.
13. I am proud to belong to Latvia.
14. I love Latvia.
15. I feel closely connected with Latvia.
16. It is absurd to think that all nations are the same. Some nations are more, some less respectable.
17. It is not good to be too open to other nations.
18. All the great works are inspired by national feelings.
19. Placing your nation over others is not a bad thing, it is just an expression of love for your people.
20. The country's ethnic majority should always have greater political rights than minorities.
21. I would like to learn more about other countries.
22. I have a strong desire for overseas travel.



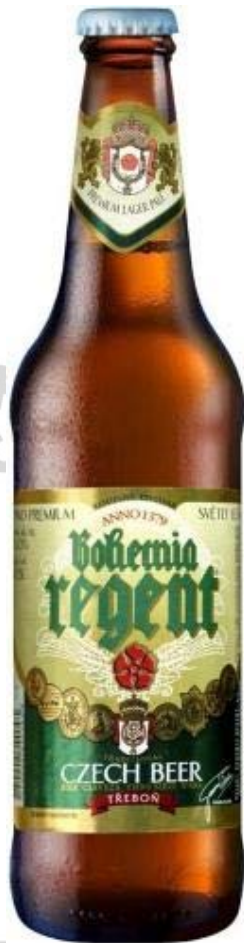
23. I would like to have opportunities to meet people from other countries.
24. I am very interested in trying food from different countries.
25. I am open-minded towards foreigners and their habits.
26. We should have a respect for traditions, cultures, and way of other nations.
27. Individuals should sacrifice self-interest for the group that they belong to.
28. Individuals should stick with the group even through difficulties.
29. Group welfare is more important than individual rewards.
30. Group success is more important than individual success.
31. Individuals should pursue their goals after considering the welfare of the group.
32. Group loyalty should be encouraged even if individual goals suffer.
33. I would buy this product.



1.

34. It makes sense to buy "Tērvete" instead of any other brand, even if they are the same.
35. Even if another brand has the same taste as "Tērvete", I will prefer to buy "Tērvete".
36. If there is another brand as good as "Tērvete", I prefer to buy "Tērvete".

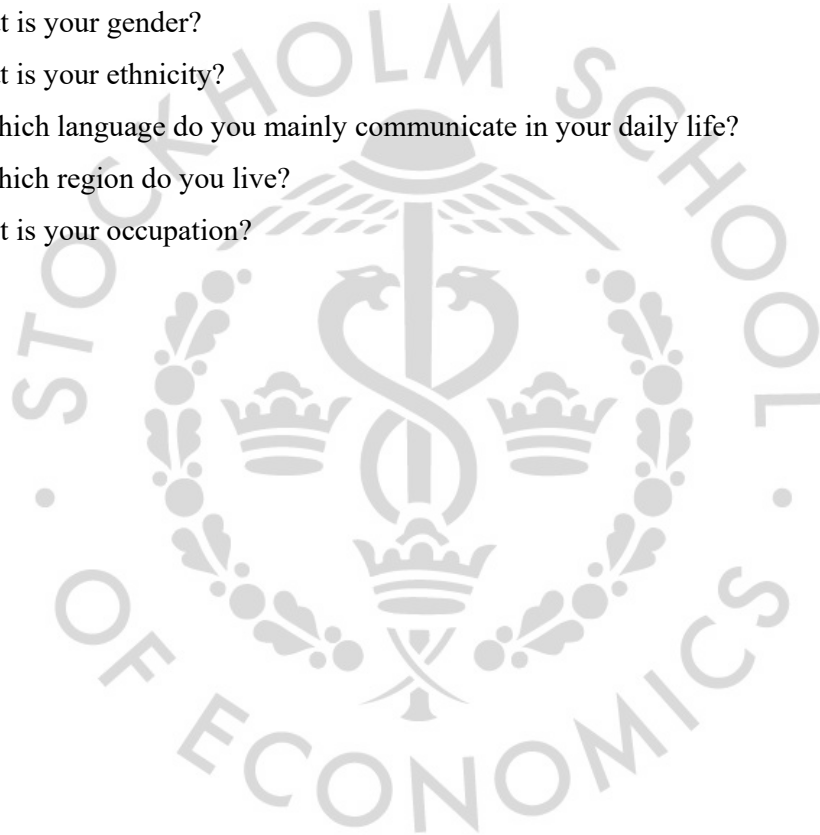
37. If another brand is not different from "Tērvete" in any way, it seems smarter to purchase "Tērvete".
38. "Tērvete" is a familiar brand to me.
39. I drink "Tērvete" brand beer.
40. I am knowledgeable about the "Tērvete" brand.
41. I would buy this product.



1.

42. It makes sense to buy "Bohemia Regent" instead of any other brand, even if they are the same.
43. Even if another brand has the same taste as "Bohemia Regent", I will prefer to buy "Bohemia Regent".
44. If there is another brand as good as "Bohemia Regent", I prefer to buy "Bohemia Regent".
45. If another brand is not different from "Bohemia Regent" in any way, it seems smarter to purchase "Bohemia Regent".
46. "Bohemia Regent" is a familiar brand to me.

47. I drink “Bohemia Regent” brand beer.
48. I am knowledgeable about the “Bohemia Regent” brand.
49. How much beer on average do you consume in a month (in liters)?
50. What is your age?
51. How many years of education (primary, secondary, tertiary, and higher) have you completed?
52. What is your average monthly income?
53. What is your gender?
54. What is your ethnicity?
55. In which language do you mainly communicate in your daily life?
56. In which region do you live?
57. What is your occupation?



---

SSE RIGA