



Ekonomická  
fakulta  
Faculty  
of Economics

Jihočeská univerzita  
v Českých Budějovicích  
University of South Bohemia  
in České Budějovice

# Proceedings of the 12th International Scientific Conference INPROFORUM

Innovations, Enterprises, Regions and Management





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Innovations, Enterprises, Regions and Management

2018



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Faculty of Economics

## **12th International Scientific Conference INPROFORUM**

*Innovations, Enterprises, Regions and Management*

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# Cross-Border Purchasing Behavior – Studies in the Czech-German Border Region

Dita Hommerová, Jan Tluchoř, Petr Janeček, David Kouba

**Abstract:** *European integration is increasingly becoming the current subject of a number of research studies. Much attention is devoted to the socio-economic aspects of integration. Even after a lengthy integration process, we can still find differences between the two sides of the border. The focus of this research paper is on the current state of knowledge of research into the cross-border region and cross-border activities, particularly in the Bohemia-Bavaria border region. Several research studies dealing with cross-border purchasing behavior have been conducted in recent years. This article attempts to summarize these research activities and studies. In terms of methodology, it is based on the desk research of secondary data sources. For example, this paper examines the methodology used, the methods in which the data were acquired (if relevant), the number of respondents, regional focus, the primary purpose and the focus of the study. Most research studies dealt with shoppers' motives for traveling across the border to do their shopping; some of them attempted to estimate the average length of travel, and several studies also took into consideration the expenses. Also worth mentioning is the fact that the majority of the research studies came into existence with the involvement of various chambers of commerce. This paper also contains selected research results.*

**Key words:** The Czech Republic · Purchasing behavior · Germany · Border region · Cross-border · Region

**JEL Classification:** D12 · F15 · M39

## 1 Introduction

One of the subjects which the Department of Marketing, Trade and Services at the Faculty of Economics of the University of West Bohemia in Pilsen deals with over the long-term is research into the Czech-German cross-border region with a focus on various aspects of the economy. Longitudinal research is used mainly in issues related to cross-border tourism. In 2017, the rich experience gained in these research studies was applied in research dealing with the labor market and education possibilities in a representative study prepared for the government of the Upper Palatinate (Regierung Oberpfalz).

The objective of this paper is to gain an overview of past studies into cross-border purchasing behavior (with a focus on the Czech-German border), the research methods they use, and the examined aspects of purchasing behavior. The specific aim of this article is to evaluate the motives for going shopping across the border.

## 2 Definitions

This research article deals with the Czech-German border region, so it is necessary to get the geographical terminology straight, as this cross-border region consisting of two neighboring countries is often referred to differently. Jeřábek et al. (2004) deals with the terminology associated with the area around the border. According to Jeřábek, the Czech terms “pohraniční region” (border region) or “příhraniční region” (region near the border) can be replaced with their single-word equivalents “pohraničí” and “příhraničí”. Heffner (1998) adds the adjectives “hraniční” (borderline) and “přeshraniční” (cross-border). These terms were partly the result of examining foreign terminology, for example, the German expressions Grenzregion, Grenzgebiet, and Grenzümgebung (in Jeřábek et al., 2004). Dokoupil et al. (2012) refers to the territory along the border also as “the border region”. This area on either side of the border forms a sort of zone, a specific region noticeably influenced by the border. The border is the most important factor that affects this economic area. Mauntz

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et al. (2009) talks about a border in general. He describes it as a physical, tangible and material line on a map used to distinguish between two different entities. Heger (2012) more accurately expands the political and administrative understanding of borders by cultural and communication (e.g., language) aspects. Heger (2012) also claims that the existence of a border has social implications and it cannot be understood as a mere line. It is more of a zone or a wider area with specific characteristics. In any case, it is an area of peripheral nature, where the central government plays a lesser role.

A state is traditionally understood as a tool to maintain sovereignty over a certain territory and society of people. However, in the modern world and especially on the territory of the European Union, this approach is outdated. Nowadays, we commonly see cross-border flows of capital, merchandise, people as well as ideas. For that reason, we need to think about the strict territorial arrangement differently (Popescu, 2008). Border regions are characterized by a number of economic barriers and inequalities which can be identified within one of the countries, or at the internal or external border of a bloc of countries. Regions vary from one another in various factors, such as (Greta & Lewandovsky, 2010):

- differences in the economic potential of the regions and how this affects their development;
- processes associated with employment in an industrialized society;
- increasing short-term innovations within industry development cycles;
- globalization and its impacts;
- new standards in the application of qualifications and skills.

The Bohemia-Bavaria border region is characterized by its large diversity of various types of economic activity, which goes hand in hand with the varied natural conditions. This region includes large rare and protected natural areas as well as areas that are intensely used by economic entities. There are a number of interested parties striving to develop this region. Some of these entities act in the public interest, others in their own, private interest. The impact of their activity on the region's development varies.

The Bohemia-Bavaria border region is part of the European Single Market, where the free movement of people, goods, services and capital is guaranteed. The European Union has long been trying to eliminate barriers (borders) within domestic trade and joint cross-border activities in general. One of the tools for achieving that is, for example, cross-border operational programs. The border in terms of the physical barrier between the Czech Republic and Germany currently does not exist; however, there are still noticeable differences between the two regions. Czechs and Germans speak a different language, have a different lifestyle, different traditions, education systems as well as a different mentality. There are also marked differences in important economic parameters (e.g., the GDP, nominal wages) between the two territories. These different factors are taken advantage of by consumers and are noticeable, for example, in their purchasing behavior.

According to Zelenka and Pásková (2012), cross-border tourism (visits) is a kind of tourism that takes place in areas close to borders with neighboring countries. These authors claim that international tourism may include various forms of "pseudo-tourism", for example, hiking, retail tourism, trips to the gas station, traveling abroad to have an abortion, sexual tourism or gambling tourism. "*Shopping tourism is a form of pseudo-tourism motivated by the possibility of purchasing goods more cheaply or purchasing goods that are otherwise unavailable in their own country*" (Zelenka and Pásková, 2012; p. 188). Palatková and Zichová (2011) note that this type of tourism concerns mainly two neighboring countries. Authors Palatková and Zichová point out that retail tourism takes advantage particularly of the price differences between the two countries. Sváta (2006) combines the two previous terms and speaks of cross-border shopping within the European Union. Cross-border shopping is a purchase made either in person or electronically by the residents of one country from retailers or service providers in another state.

Kuncharin and Mohamed (2013) mention several different approaches to the issue of cross-border shopping and its motivation. One of the explanations is based on the assumption that motivation is connected with a marketing mix. This concerns the product and its characteristics: the price of the product, its perceived quality, the services provided by the seller, the storage facility, the choice of various products in the target region, etc. The approach mentioned by these authors includes these types of motivation:

- there is either a lack of goods or a small selection in the shoppers' homeland;
- some goods are in limited quantity and can only be purchased far away from home;
- there is a significant difference in price levels between the two countries;
- the shoppers have a desire to purchase high-quality goods or products;
- the need to do one's shopping somewhere else other than in one's own home environment.

For example, Kratena and Wüger (1997) state the following typical (economic) reasons for shopping on the other side of the border: a relative difference in price (taking into consideration the costs of making the purchase and its volume); the quality of the products; the availability and existence of special/specific products; the range of selection; the store

business hours; the standard of living or the degree of regional integration. The following text contains an analysis of some of these factors. Macroeconomically, doing the shopping across the border represents non-participation in the macroeconomic cycle of one's own country.

One of the principal factors in shopping across the border that is mentioned in the literature on this topic is the price of products. This factor is affected by other factors, primarily finance. In his book, Timothy (2005) describes the first price push and pull factor – the exchange rate. People's motivation for cross-border shopping is highly elastic, therefore, even a small change in the exchange rate may result in a major difference in the demand for goods from across the border. Connected with the price and exchange rate, but also as a separate factor, is the form of payment for goods by visitors abroad. The price itself is also influenced by the state's tax policy. Timothy (2005) states that low taxes in the state across the border have a positive effect on the motivation for cross-border shopping. The following Table 1 shows the comparison between taxes in the Czech Republic and Germany. It clearly shows that Germany has a lower reduced VAT rate, which applies, for example, to groceries, but also a lower standard VAT rate. In the Czech Republic, there are lower taxes on gasoline and diesel fuel, while the tax imposed on beer is lower in Germany.

Other factors may include the cost-benefit ratio or the issue with dual quality goods. According to Timothy (2005), it has been verified that a higher-quality customer service on the part of retailers increases the motivation of shoppers from abroad to come and do their shopping in their stores. Timothy (2005) also states that the opening hours of retail stores can play a role in cross-border purchasing behavior. If stores are closed on Sundays or public holidays in one of the countries, or their opening hours are limited, this increases the motivation for cross-border shopping. Fassot (2007) adds that Germans are motivated by the stores' business hours, as there are restrictions imposed by law in this respect in Germany. According to Fassot (2007), the aforementioned factor does not apply if there isn't sufficient infrastructure available, or if the distance required to travel to do one's shopping is too large.

**Table 1** Comparison of selected differences in tax rates between the Czech Rep. and Germany

	<b>Czech Republic</b>	<b>Germany</b>
Reduced VAT rate (%)	10 or 15	7
Standard VAT rate (%)	21	19
Excise tax on gasoline in EUR (per 1,000 liters)	475	655
Excise tax on diesel fuel in EUR (per 1,000 liters)	405	470
Excise tax on beer in EUR (per hectoliter)	14.21	9.44

Source: Kouba (2018)

Timothy (2005) further expands the reasons for cross-border shopping by "mere entertainment". As an example, he mentions Canadian customers who travelled across the border into the United States just because they wanted to enjoy shopping in a different environment. These customers, particularly families, took day-long trips in search of a new experience. Apart from shopping, their trips included sightseeing, and using various services – eating out, going to the movies, attending events, etc.

### 3 Methodology

In terms of methodology, the key approach is the analysis of secondary data sources using desk research. The objective was to find and compare available research studies dealing with cross-border purchasing behavior in the geographical areas on either side of the Czech-German border. The following factors were used to make the comparison: author/client; locations and ways of survey data acquisition; data processing; the focus of the study; respondents' demographic structure and the number of respondents.

A total of nine research studies dealing with the issue of cross-border purchasing behavior were found. These studies are briefly characterized and sorted using a clearly-arranged table. For certain factors, the authors attempted to conduct a meta-analysis of the research studies' findings and aggregated selected output.

### 4 Results

Table 2 contains a comparison of the nine studies of cross-border purchasing behavior, or shopping tourism, which were conducted in areas near the Czech-German border before the end of 2017. The following text contains brief descriptions of these studies in the context in which they were carried out.

As far as the organizations that commissioned these studies, it needs to be said that these were often German chambers of commerce and industry. The main objective of these studies was to determine the potential of Czech customers for



German retailers. Other studies were then conducted by students as qualification papers, and the rest were realized with the support of EU subsidies.

### Förster (2007)

The 2007 study conducted by Corinna Förster of the University of Bayreuth paints a comprehensive picture of the Bohemia-Bavaria border region. Apart from the territorially political, geographic, demographic and historical aspects, it also deals with the economic aspects. The study contains information on cross-border consumer behavior: the shopping situation in Bohemia.

### IHK Regensburg (2009)

The study entitled “Grenzüberschreitender Einzelhandel zwischen Bayern und Tschechien”, that is, “Cross-border Retail Trade between Bavaria and Bohemia” was published in 2009 by the Regensburg IHK (Chamber of Commerce and Industry). This study describes Czech customers and their potential and expectations in the area of retail. This survey was carried out in towns close to the border, in the Bavarian district of Cham, and also in the Czech districts of Domažlice and Klatovy. 237 respondents took part in this research.

### Mizuňová (2011)

This bachelor thesis by a student at the University of Economics, Prague examined the phenomenon of cross-border shopping from the point of view of tourism. This study was conducted in 2001 and involved 230 respondents. The respondents were recruited from the sister cities of Litvínov and Olberna in Saxony, Germany.

### IHK Chemnitz (2012)

In collaboration between the Chemnitz University of Technology and the University of West Bohemia in Pilsen, a research study of cross-border tourism was conducted in 2012 for the benefit of the IHK Chemnitz. A total of 1,400 respondents on both sides of the border took part in this research. On the German side, the research was carried out in eleven towns of Southwest Saxony. On the Czech side, the respondents came from ten towns on the opposite side of the border (IHK Chemnitz (2012)). Results are presented in the following publications: Cimler, Hommerová, Potměšil (2012), “Grenzüberschreitender Besucherverkehr: (Tschechen in Sachsen - Erzgebirge und Vogtland)”, and Cimler et al. (2012), “Profil des tschechischen Handels und Kunden”.

**Table 2** Overview of cross-border studies focused on purchasing behavior conducted before the end of 2017

Author/ Client	Area	Location and manner of data collection	Data processing	Focus	Respondents	Number of respondents
Förster (2007)	CZ-BY (Cheb, Marktredwitz)	Analysis of car makes (outside the stores)	Descriptive statistics, cartographic representation	Motivation for shopping across the border, partially the distance	CZ, DE	
IHK Regensburg (2009)	CZ-BY (Cham, Domažlice, Klatovy)	At the point of sale, expert interviews	Descriptive statistics, cartographic representation, qualitative analysis	Motivation for shopping across the border, partially the distance	CZ	237
Mizuňová (VŠE, 2011)	CZ-SX (Litvínov, Olberna)	At the point of sale	Descriptive statistics		CZ, DE	230
IHK Chemnitz (2012)	CZ-SX (Vogtland, Krušné hory)	At the point of sale	Descriptive statistics	Motivation, distance	CZ, DE	1,400
IHK Dresden (2012)	CZ-SX (Zittau)	At the point of sale				
Köttl (2014)	CZ-BY (North-east Bavaria)	In households	Descriptive statistics	Motivation, estimated shopping volume		
Riedl et al. (2014)	CZ-BY (the northern part of the border region)	At the point of sale	Descriptive statistics	Motivation, distance	CZ, DE	1,009/958
IHK Regensburg (2015)	CZ-BY (The Pilsen Region, Upper Palatinate)	At the point of sale	Descriptive statistics	Motivation for shopping across the border, partially the distance	CZ	501

UWB (2017) for the Government of the Upper Palatinate	CZ-BY (The Pilsen Region, Upper Palatinate)	At the point of sale, CAWI	Descriptive statistics	Motivation for shopping across the border, partially the distance	CZ, DE	326/411
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Source: Authors' own elaboration, 2018 according to Kouba (2018), Segerer, Hommerová (2018)

### **IHK Dresden (2012)**

This research, conducted on November 17 and 18, 2011 in Zittau, focused on customers arriving from Bohemia. The objective of this survey, realized in the form of interviews on the premises of shopping centers and the surrounding areas, was to describe the purchasing behavior and motivation of 262 Czech respondents. The results are publicly accessible and compared against a similar research conducted by IHK Dresden in 2009.

### **Köttl (2014)**

This successful dissertation from the Marketing Department at the Technical University of Munich aims to describe the consumer behavior in the Bavarian border region from the point of view of Czech visitors. Its output lies in a recommendation for the cross-border protection of consumers.

### **Riedl et al. (2014)**

This publication presents a survey conducted in 2014. The guarantors of this research were the University of West Bohemia in Pilsen and the Hochschule Hof University of Applied Sciences, and it was carried out with the support of other partners: the University of South Bohemia in České Budějovice, the Cheb District Chamber of Commerce (NB now replaced by the Chamber of Commerce of the Region of Karlovy Vary), the town of Hof and the international association Access Marketing Management e.V. The researchers received answers from 1,009 Czech and 958 German respondents who came from the border areas of the Karlovy Vary and Pilsen Regions, Lower Bavaria, Upper Palatinate and Upper Franconia. 90% of the respondents come from areas within 100 km of the border.

### **IHK Regensburg (2015)**

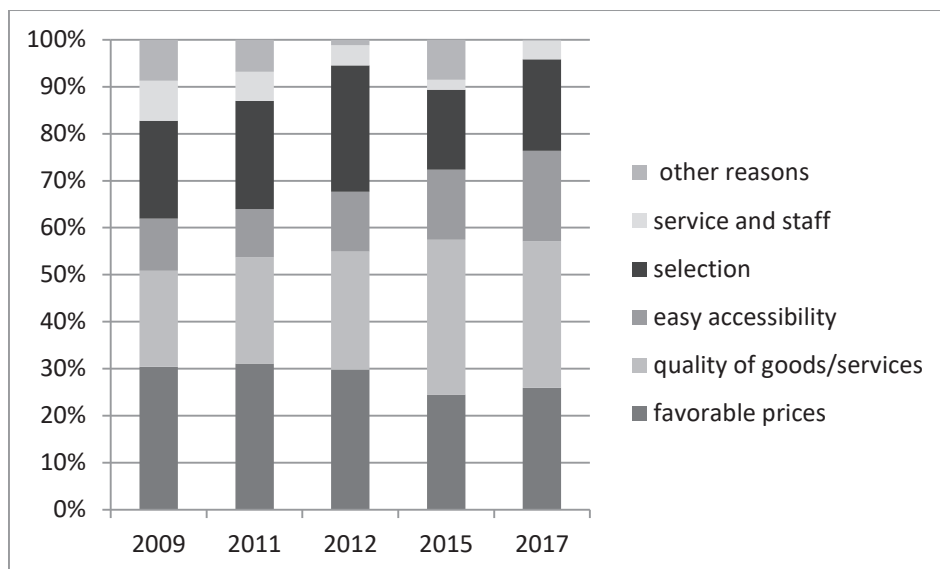
In 2015, the IHK Regensburg published “Tschechische Kunden – Chancen für Handel und Tourismus” (Czech Customers – a Chance for Trade and Tourism). This research study was a follow-up to the aforementioned study from 2009. This new survey was carried out among 501 Czech respondents, specifically from West Bohemia, who travel to Upper Palatinate to do their shopping.

### **UWB (2017)**

In June 2017, a bilateral Czech-German research study was conducted. It was commissioned by the government of Upper Palatinate and carried out by the University of West Bohemia. The study has not yet been published; however, the authors of this research article were involved in this study. Apart from cross-border shopping, this research also dealt with studying and working on the other side of the border. In terms of its geographical focus, this research targeted mostly residents of the border areas within the Pilsen Region and Upper Palatinate. The objective of the study was to determine the expectations of various segments of the population in terms of information on Upper Palatinate (mainly among residents of the Pilsen Region) or the Pilsen Region (mainly among residents of Upper Palatinate). Using both personal interviews as well as computer assisted web interviewing, the following three target groups were examined: (prospective) employees; (prospective) students and pupils or their parents; (prospective) visitors/tourists.

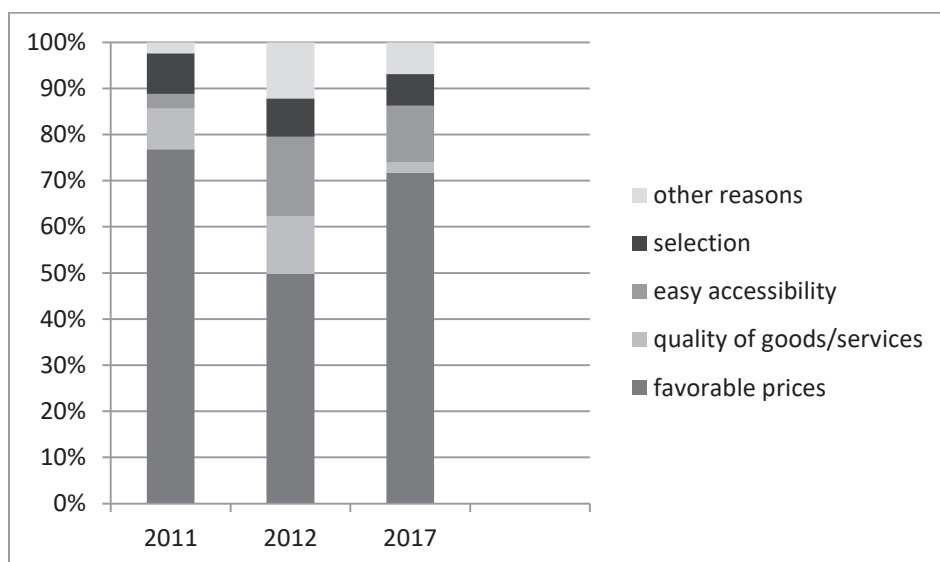
The questioning was designed to adopt a wider approach to reveal the reasons for people's need for information and to provide a more comprehensive context. At the same time, the websites of towns (districts, regions) in the Pilsen Region and Upper Palatinate was analyzed (desk research) in order to describe the status quo in terms of the availability of information for residents on the other side of the border. The websites were evaluated separately for each target group from the point of view of Czech and German respondents. The data itself were supplemented with other relevant secondary sources. A total of 1,074 questionnaires were collected and processed within this study (subdivided according to the following areas: “labor market” – 99 in the Czech Republic and 61 in Bavaria; “studies” – 105 in the Czech Republic and 72 in Bavaria; “visitors” – 326 in the Czech Republic and 411 in Bavaria).

**Figure 1** Motives for visiting the border region of Germany



Source: Authors' own elaboration, 2018

**Figure 2** Motives for visiting the border region of the Czech Republic



Source: Authors' own elaboration, 2018

One specific objective of this paper is to evaluate the motives for going shopping across the border. Based on the results of the presented research studies, the authors attempted a meta-analysis of the motives for shopping in the Czech Republic and Germany. The results of the research studies indicate that the key reasons for visiting the border regions of Germany are shopping, going on holiday or engaging in free-time activities. Other reasons are of minor significance. Figure 1 shows that there are two main motives for Czechs to do their shopping in Germany – favorable prices and the quality of products. Another important motive is the wide selection of products.

The reasons for visits to the Czech Republic are the same as the reasons for visiting Germany. These include mainly shopping and refueling and secondly free-time activities and recreation. Figure 2 shows the motives for shopping in the Czech Republic, where it is clear that German customers have one main reason – favorable prices.

**5 Conclusion**

The Czech-German border region is a specific type of economic area. There is the effect of the proximity of the border and in a way it can be referred to as a periphery, where the cross-border activity (mainly tourism) presents a major opportunity for economic growth. What is interesting is that this potential is studied more intensively by German entities, even though a larger economic potential, given the standard of living in Germany, is probably on the part of German consumers doing their shopping in the Czech Republic.

The majority of the studies were conducted at the point of sale by way of personal interviews. The key results of the studies examined can be summarized as follows: Cross-border shopping takes place on both sides of the border. Both Czechs and Germans find goods they are interested in. It is interesting that there is often an overlap in the type of merchandise that is frequently sought by consumers from the two countries (groceries, household products). The different tax rates also play a role (excise tax on fuel, alcohol, cigarettes, but also the different VAT rates). The relevant commute distance is up to 100 km (likely with a higher frequency of shopping trips from a smaller distance).

Future research may conduct a meta-analysis of other factors examined by the aforementioned studies. However, existing limitations will have to be dealt with. The various studies are not compatible for easy comparison. They often use different methods and cover different geographic areas. Also, the studies have varying degrees of representativeness. However, it is still possible to find common features and thus reveal other aspects of cross-border purchasing behavior, or tourism, in the Czech-German border region.

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