Study on territorial supply constraints in the EU retail sector

Final report

Written by: VVA & LE Europe

July 2020

EUROPEAN COMMISSION

Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs
GROW.DDG2.E - Services in the Single Market and Digitalisation
E4-Retail and Online Services
E-mail: GROW-E4@ec.europa.eu
European Commission
B-1049 Brussels

Produced by the Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs

Funded by the European Union in the frame of the Internal Market for goods and sectorial policies.

EUROPEAN COMMISSION

Study on territorial supply constraints in the EU retail sector

Final Report

Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs

Europe Direct is a service to help you find answers to your questions about the European Union.

Freephone number (*):

00 800 6 7 8 9 10 11

(*) The information given is free, as are most calls (though some operators, phone boxes or hotels may charge you).

Luxembourg: Publications Office of the European Union, 2020

PDF ISBN: 978-92-76-18938-1
DOI: 10.2873/59256
Numéro de catalogue: ET-02-20-367-EN-N

Table of contents

List of figures

List of tables

1 Introduction

This document forms the Final Report for the 'Study on territorial supply constraints in the EU retail sector'. This study has been commissioned by the Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs (DG GROW) of the European Commission, and it has been carried out by VVA Economics & Policy and London Economics. This study forms a fact-finding mission on the effects of Territorial Supply Constrains on the Single Market as announced in the 2018 Communication *A European retail sector fit for the 21st century*. The report focuses on providing the overall conclusions of the analysis that has been undertaken based on the various data collection tools.

This document is structured as follows:

- Chapter 2: Methodology;
- Chapter 3: Prevalence and nature of TSCs;
- Chapter 4: Roles and the situation of different actors in the supply chain as well as possible reasons for TSCs;
- Chapter 5: Impact of TSCs;
- Chapter 6: Role of digitalisation, in particular of multichannel retail;
- Chapter 7: Outcomes and conclusions;
- Annex I: List of sources consulted;
- Annex II: List of price data analysed;
- Annex III: Interview guidelines;
- Annex IV: Survey questionnaires;
- Annex V: List of selected products for the mystery shopping exercise and price data collection;
- Annex VI: Selection of shops for the mystery shopping exercise;
- Annex VII: Mystery shopping protocol; and
- Annex VIII: Econometric analysis (technical version).

2 Methodology

This chapter presents the methodology, firstly presenting the countries and product categories of focus, followed by the various data collection tools used and finally the model for the econometric analysis.

2.1 Country and product category selection

Although the study aims to provide EU-wide conclusions, for the main data collection tools a selection of 12 representative countries was made to focus the exercise. This was done based on the following criteria:

- Ensuring a balanced representation in terms of geographical spread, purchasing power of consumers and organisation of the retail market (e.g. in terms of concentration);
- Results of the scoping interviews with purchase managers of wholesalers and retailers (CATI, Computer-Assisted Telephone Interviewing);
- Preliminary literature review during the proposal and inception phases of the study; and
- Inclusion in the European Commission's Joint Research Centre (JRC) studies on Differences in Composition of Seemingly Identical branded Products (DC-SIP).

An overview of the selected countries is presented in the table below:

Table 1: Countries of focus

Country	Reasoning
Austria	• Results from the literature review suggest large price differences with the German market • Results from the literature review suggest that TSCs might be an issue
Belgium	• More information than for most other countries because of Benelux reports • Results from the literature review suggest large price differences with the Dutch market • Results from the literature review suggest that TSCs might be an issue
Croatia	• In top 12 of the CATI survey • Part of first phase of JRC study on DC-SIP
Czechia	• Part of first phase of JRC study on DC-SIP • Results from the literature review suggest that TSCs might be an issue
Denmark	• Part of first phase of JRC study on DC-SIP • Results from the literature review suggest that TSCs might be an issue
Estonia	• In top 12 of the CATI survey • Part of first phase of JRC study on DC-SIP
France	• Part of first phase of JRC study on DC-SIP • Results from the literature review suggest that TSCs might be an issue
Luxembourg	• In top 12 of the CATI survey • More information than for most other countries because of Benelux reports • Results from the literature review suggest large price differences with the German and French markets
The Netherlands	• More information than for most other countries because of Benelux reports • Part of first phase of JRC study on DC-SIP
Portugal	• Results from the literature review suggest that TSCs might be an issue
Romania	• Mentioned as problematic country in most literature • In top 12 of the CATI survey • Part of first and second phase of JRC study on SC-SIP
Slovakia	• In top 12 of the CATI survey • Part of first phase of JRC study on DC-SIP

Source: elaboration of the contractor (2020)

At the same time, the study focuses on six product categories (four food product categories and two non-food product categories. These product categories were selected using the following criteria:

- Ensuring a balanced representation in terms of types of fast-moving consumer goods and different characteristics relating to these;
- Results of the scoping interviews (CATI, Computer-Assisted Telephone Interviewing);
- Preliminary literature review during the proposal and inception phases of the study; and

- Inclusion in the European Commission's Joint Research Centre (JRC) studies on DC-SIP.

The results are presented in the table below.

Table 2: Product categories of focus

Category	Sub-categories	Reasoning
Breakfast cereals	• N/A	• Often mentioned in literature as problematic product category • Part of first and second phase of JRC study on DC-SIP
Confectionary	• Chocolate bars • Chocolate tablets	• In top 4 of food products in CATI survey • Often mentioned in literature as problematic product category • Part of first and second phase of JRC study on DC-SIP
Dairy	• Yoghurts • Milk	• In top 4 of food products in CATI survey • Often mentioned in literature as problematic product category • Part of first and second phase of JRC study on DC-SIP
Soft drinks	• Cola carbonates • Non-cola carbonates	• In top 4 of food products in CATI survey • Often mentioned in literature as problematic product category • Part of first and second phase of JRC study on DC-SIP
Household care	• Washing detergents • Washing-up liquids	• In top 2 of non- food products in CATI survey • Often mentioned in literature as problematic product category
Personal care	• Shampoos/shower gels • Soaps	• In top 2 of non- food products in CATI survey • Often mentioned in literature as problematic product category

Source: elaboration of the contractor (2020)

2.2 Data collection tools

The study makes use of the following main data collection tools:

- Literature review;
- Computer-Assisted Telephone Interviews (CATI) during the scoping phase of the study;
- Targeted interviews;
- Online survey;
- Survey of National Competition Authorities;
- Mystery shopping exercise in border regions;
- Data (prices, e-commerce, etc.) collection from the Euromonitor Passport Database;[1]
- Price data collection from individual retailers; and
- Input from the expert panel.

The methodology for each of these data collection tools are described in detail below.

2.2.1 Literature review

The general objective of this activity was to gather and analyse relevant and up-to-date information from secondary sources from the selected countries to map the prevalence of and nature of the TSCs. In terms of the scope of the data sources, publications have been understood in the widest sense, including official reports, academic research, legal texts, commercial communications, marketing materials, websites, position papers, commercial market research, expert blogs, news sources. In terms of fields of research, the above types of publications have been sought in the fields of European retail market, territorial supply constraints, wholesalers, supply quotas, banks, differentiation of products, dual pricing, differences in composition of seemingly identical branded products, availability of products, fast moving consumer goods and supply constraints, etc. As mentioned, the relevant literature concerning TSCs encompasses different type of studies, ranging from academic analyses concerning distortion in competition to applied research. All these possible

[1] While every attempt has been made to ensure accuracy and reliability, Euromonitor International cannot be held responsible for omissions or errors of historic figures or analyses.

sources are considered relevant to the scope of this study. Yet, their relevance and their contribution to the achievement of the underlying objectives may vary according to their features.

For each country of focus, a researcher speaking the national language has been put in charge of finding relevant literature (the aim was to reach up to 10 publications). The results from the literature review of each researcher have been organised into a literature review grid (Excel file) for further analysis. Chapters 4 – 6 of this report discuss the findings for each study part; findings from the literature review are presented in relevant sections of the report.

2.2.2 Computer-Assisted Telephone Interviews (CATI)

As part of the scoping phase of the study, CATI with purchase managers of wholesalers and retailers have been performed in the 27 EU countries. The number of interviews per country is reported in Table 3. The interviewees have been identified through relevant NACE and SIC Codes, after which the selected businesses were asked if they were subject to Territorial Supply Constraints by their suppliers. Only those that answered positively about facing TSCs were asked to complete the interview by answering more detailed questions on how and where these Territorial Supply Constrains play a role.

Table 3: Summary of CATI survey results

Country	Number of CATI carried out	Country	Number of CATI carried out
Austria	13	Italy	13
Belgium	22	Latvia	23
Bulgaria	10	Lithuania	22
Croatia	10	Luxembourg	27
Cyprus	52	Malta	26
Czechia	25	Netherlands	54
Denmark	32	Poland	8
Estonia	11	Portugal	21
Finland	15	Romania	31
France	11	Slovakia	25
Germany	17	Slovenia	16
Greece	52	Spain	23
Hungary	56	Sweden	6
Ireland	30		
Total			**651**

Source: CATI survey carried out by the contractor (13/03/2020)

As there were several issues related to the sampling process for these interviews (as reflected in the vastly differing number of interviews conducted per country in Table 3), the CATI have not been used as a main source of information for this study. However, the results were helpful in selecting the country and product category and, were relevant, the findings from the CATI have been compared to the input from other data collection tools in Chapters 4 – 6 of this report.

2.2.3 Targeted in-depth interviews

After the literature review was completed, researchers gathered qualitative information via stakeholder interviews. The direct consultation of relevant stakeholders has allowed to fill the gaps observed after the literature review and to explore the study objectives in more depth thanks to the stakeholders' expertise. The targeted group of stakeholders for these interviews were individual market operators: manufacturers, retailers and wholesalers (including market operators such as small discount chains that are involved in parallel trade).

In total, 46 individual interviews have been conducted, while several interviewees presented information for multiple Member States during their interviews. The table below presents the country coverage of the interviews conducted.

Table 4: Overview of conducted interviews

Country	Retailers	Wholesalers	Manufacturers	Total	Number of additional Member States in scope of the study covered during interviews
Austria	1	1		2	1
Belgium	1	1		2	2
Croatia	3	0		3	
Czechia	1	2		3	
Denmark	3	1		4	
Estonia	3	0		3	2
France	2	0		2	
Luxembourg	2	1		3	4
The Netherlands	2	0		2	5
Portugal	2	0		2	
Romania	2	2		4	
Slovakia	3	1		4	3
EU-wide			12		
Total	25	9	12	46	

Source: elaboration of the contractor (2020)

Most of the interviewed retailers are large operators with a strong position in the national market and often with operations in other Member States as well. In some countries (notably Romania, Czechia and Slovakia) most of such companies preferred not to be interviewed explaining that smaller retailers are more active in those countries and the issue of TSCs is less relevant there (as the discussion focuses on the DC-SIP issue, see also the inputs from the literature review for the relevant countries in Section 3.2.4), so in these countries instead a larger number of smaller operators has been interviewed. Since the main aim of the interviews was to map and analyse current commercial practices, interviews with manufacturers targeted sales executives and interviews with retailers and wholesalers have been conducted with purchase managers. Given the highly sensitive nature of the topic, in many companies the persons interviewed have been accompanied by legal counsels and/or compliance officers.

Annex III presents the final interview guidelines splitting the questions between manufacturers, wholesalers and retailers. Chapters 4 – 6 of the report discuss the findings for each study part; findings from the interviews are presented where relevant.

2.2.4 Online survey

The aim of the online survey was to increase the response base by offering stakeholders who could not take part in an in-depth interview the chance to have their say in written form. The survey also widened the response base to other countries than the 12 selected for in-depth interviews. The survey focused on individual operators (manufacturers, wholesalers and retailers) and aimed at collecting quantitative and quantifiable data. The results of the survey are used to confirm the main findings from the in-depth interviews.

The survey has been distributed through European trade associations (EuroCommerce,[2] Independent Retail Europe[3] for retailers and wholesalers and AIM-European Brands Association[4] for manufacturers). Moreover, information about the survey has been published in an article in the online newsletter of Politico for Pro subscribers for agriculture and food (600 subscribers consisting of experts and operators

[2] https://www.eurocommerce.eu/.
[3] https://www.independentretaileurope.eu/.
[4] https://www.aim.be/.

in these markets). Also, the Commission asked the national experts in the Services Directive Expert Group to help disseminate the survey in their countries. In response to this, several ministries indeed circulated the information to their stakeholders or published it on their websites.

For this survey, a total of 112 completed responses has been received. The tables below provide general information on the survey respondents: Table 5 presents the division of respondents between manufacturers, retailers and wholesalers as well as between the different company sizes, while Table 6 presents the division of respondents between manufacturers, retailers and wholesalers as well as between the Member States where the companies are based. Finally, Table 7 presents the division between the various product categories in the scope of this study covered by the respondents.

Table 5: Survey responses by stakeholder size

Size	Manufacturer	Retailer	Wholesaler	Total
Large enterprise (250 or more persons employed)	28	38	5	**71**
Medium-sized enterprise (50-249 persons employed)	7	3	6	**16**
Micro enterprise (less than 10 persons employed)	2	7	4	**13**
Small enterprise (10-49 persons employed)	6	1	5	**12**
Total	**43**	**49**	**20**	**112**

Source: Online survey carried out by the contractor (13/03/2020)

Table 6: Sample responses by stakeholder country and type

Countries	Manufacturer	Retailer	Wholesaler	Total
Austria	5	4		9
Belgium	14	7	3	24
Bulgaria		1		1
Croatia	1	4	2	7
Czechia	3	5		8
Denmark	1	4	1	6
Estonia	1			1
Finland		5		5
France	9	1	1	11
Germany	2	1	2	5
Greece	1			1
Hungary		1		1
Italy	2	2		4
Luxembourg	1	2	1	4
Netherlands	2	3		5
Poland		1		1
Portugal		1		1
Romania		1	6	7
Slovakia		2	1	3
Spain	1	1	2	4
Sweden		3	1	4
Total	**43**	**49**	**20**	**112**

Source: Online survey carried out by the contractor (13/03/2020)

Table 7: Sample responses by product categories

Product categories	Does your company sell those product categories?[5]
Dairy	18
Coffee	15
Tea	12
Confectionary	10
Breakfast cereals	12
Spread	8
Condiments and sauces	12
Rice and/or pasta	10
Canned, prepared and/or frozen food	10
Personal care products	17
Household care products	11
Others (e.g. consumer electronics, home appliances, clothing and alcohol)	16

Source: Online survey carried out by the contractor (13/03/2020)

2.2.5 Survey targeting national competition authorities

The aim of this survey was to gather information on whether the national competition authorities were aware of the issue of TSCs in each Member State and whether they had received any complaints. Furthermore, it investigates whether Member States have any special procedures in place to address the issue of TSCs, such as dedicated complaint channels. The survey was distributed through the European Competition Network of DG COMP of which all the national competition authorities are a part.

For this survey, 17 responses have been received in total, presented in the table below.

Table 8: Survey targeting national competition authorities: countries

Countries	Authority
Belgium	Belgian Competition Authority
Bulgaria	Commission on Protection of Competition (CPC)
Czechia	Czech Competition Authority

[5] The reason why the total numbers for this table differ from the total numbers in the table above is that answering the question at the basis of this table was not mandatory (while the questions at the basis of the tables above were mandatory) and respondents could select multiple product categories for the question at the basis of this table.

Countries	Authority
Cyprus	Commission for the Protection of Competition
Czechia	Office for the Protection of Competition
Denmark	The Danish Competition and Consumer Authority
Finland	Finnish Competition and Consumer Authority (FCCA)
France	French Competition Authority
Hungary	Hungarian Competition Authority (GVH)
Latvia	Competition Council of Latvia
Lithuania	Competition Council of the Republic of Lithuania
Malta	Malta Competition and Consumers Affairs Authority
The Netherlands	The Netherlands Authority for Consumers and Markets (ACM)
Norway	Norwegian Competition Authority
Slovakia	Antimonopoly Office of the Slovak Republic
Spain	National Commission on Markets and Competition (CNMC)
Sweden	Swedish Competition Authority

Source: Survey targeting national competition authorities (31/03/2020)

2.2.6 Mystery shopping exercise in border regions

The aim of the mystery shopping exercise was to collect information on products in **three** border regions (on both sides of the border in all three cases) which are likely to be subject to TSCs. The objective was to be able to assess whether TSCs explain differences in observed consumer prices after controlling for other factors such as the competitive environment of the retail market, consumers' willingness to pay, price elasticity and supermarket business model. Prices of A brand products, national brand products and private label brand products were collected.

In the general framework of the study, the data collected in the mystery shopping exercise has the advantage of being relative *regional* (the Euromonitor price measurements are national averages), and in this way can fill gaps in the other datasets being analysed. Thus, the exercises provide further quantitative information for the study. The price collection was done for products from each of the six product categories of focus for this study as well as for other categories of FMCG. The 31 products for which data were collected are presented in Annex III.

Border region selection and shops identification

The selection of the three border regions was done according to several criteria:

- Identification of TSCs and awareness on TSCs in the local retail sector based on preliminary data collection through interviews and the survey;
- Presence/non-presence of language clustering and other regulatory barriers (e.g. higher environmental requirements or dietary requirements); and
- Geographical spread and the scope of the study (12 countries of focus).

In the following table, the definitive list for the three border regions is presented.

Table 9: Overview of border regions of the mystery shopping exercise

Countries	Region
Belgium – France	Lille – Tournai
Croatia – Hungary	Nagykanzsa – Cakovec
Austria - Germany	Salzburg – Freilassing

Source: Elaboration of the contractor

In each of the border regions, the researchers visited 10 different stores, five for each side of the border, except in the Lille-Tournai region where only six stores (three on each side) were visited and the price collection exercise could not be completed due to the Covid-19 crisis. Thus, 26 shops were visited in total. The selection of the stores has been done in advance based on a careful desk research on the regions under analysis to match the shops in the sample on both sides of the border considering the following criteria:

- The focus was mainly on **supermarkets** and **hypermarkets** – smaller grocery shops were in general not visited because larger shops tend to offer more competitive prices and are easier to compare cross-border;
- Where possible, the researchers visited shops of the **same international-based chain on the two sides of the border** (e.g. Carrefour for France/Belgium); and
- Researchers kept a balanced sample on both sides of the borders, where possible, in terms of number of shops (**five in each country**) and in terms of type of shops (i.e. one discount-chain shop on one side of the border has been balanced by one discount-chain shop on the other side).

The selection of shops that have been visited for the exercise can be found in Annex IV.

2.2.7 Price data collection

A first major source of information for the analysis of the impact of TSCs are three types of price information, namely:

- Average national retail prices of selected A-brand products in the different product categories by retail channel (hypermarket, supermarket, etc). This information was obtained from Euromonitor;
- Average prices of selected A-brand products in border regions (see discussion under section 2.2.6); and
- Purchase prices of selected A-brand products in EU Member States obtained from several retailers.

All three price sources have been used to establish a rough magnitude of price differences attributable to TSCs. More precisely, these were used to:

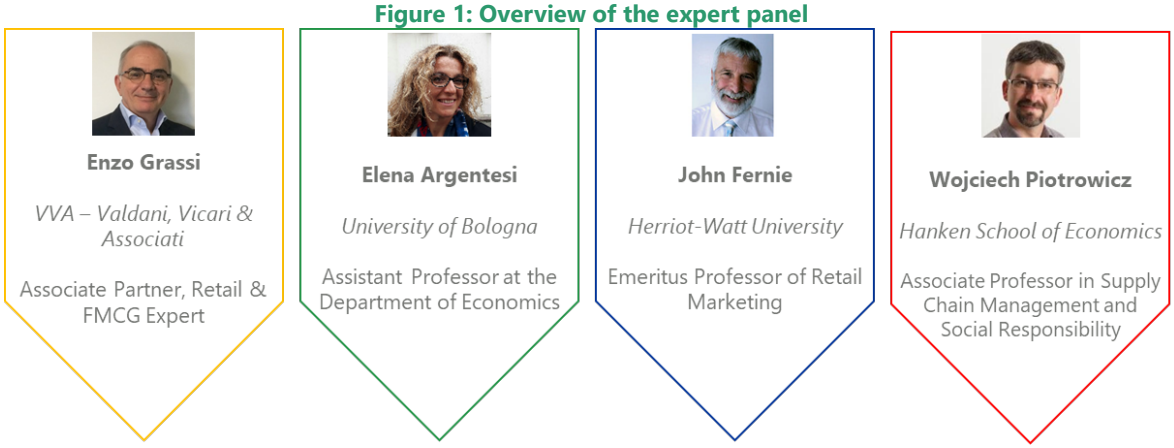
- Establish the extent to which retail prices of selected products vary across Member States, once different distribution channels/shop sizes and small variations in unit size/weight/volume have been considered;
- Assess econometrically the extent to which standard variables used in economic models can explain differences in retail prices which cannot be explained by other factors (e.g. competitive environment of the retail market, consumer willingness to pay, price elasticity and supermarket business model). This allowed for an assessment of the extent the unexplained part of the observed price differences being potentially due to the existence of TSCs; and
- Triangulate this information at a high level against the information about differences in purchase prices received from retailers.

This information was then triangulated with the analysis of the impact of TSCs from the literature review (see section 2.2.1) and the survey results (see Section 2.2.4).

2.2.8 Input from the expert panel

To verify the results of the data collection, input from an expert panel with specific knowledge related to the topic of TSCs was used. In particular, their insights were used during the inception phase when designing the methodology, to provide quality assurance on the deliverables and to discuss the final outcomes of the study to contextualise these. The experts participated through written feedback on all study deliverables as well as conference calls with all experts together to discuss their feedback in more detail. The figure below presents the experts and where their specific expertise lies:

Figure 1: Overview of the expert panel



2.3 Econometric model

The econometric analysis aims to explain differences across Member States in observed retail prices (using two different price data sets) by various economic variables used typically in similar empirical analysis (such as GDP per capita, the unemployment rate, population density, labour cost, VAT rates, market size, competition among food and groceries manufacturers and competition in the food and groceries retail sector) and differences in retailer purchase prices.

More details on the econometric model are presented in **Section 5.2 together with the results of the analysis (impacts of TSCs**) and in Annex VIII.

3 Prevalence and nature of TSCs

The first part of the study discusses the prevalence and nature of TSCs. The first section describes the aims and objectives of this chapter (3.1.) followed by the analytical results (3.2) and a chapter synthesis (3.3.).

3.1 Aims and objectives

This chapter presents and explains to what extent TSCs are present within the Single Market and how they can be characterised.

The main results of the literature review are provided together with qualitative results of targeted interviews with stakeholders and the online survey. Please refer to Section 5 for a quantitative analysis on the impact of TSCs in the countries and product categories within the scope of the study.

3.2 Results

The results are presented according to the following topics: definition and symptoms of TSCs, types of practices, prevalence of TSCs across countries and in the different product categories covered by the study.

3.2.1 Definition and symptoms of TSCs

Territorial Supply Constraints were mentioned in the 2009 Communication, "A better functioning food supply chain in Europe" where in order to remove obstacles and end practices that fragment the Single Market, the Commission stated that it will assess measures to address territorial supply constraints.[6] The 2010 Report "Towards more efficient and fairer retail services in the internal market for 2020"[7] emphasises the existence of considerable price differences within the Single Market and concludes that the Single Market is still fragmented. Furthermore, beyond features such as income, VAT, competitiveness and the regulatory framework, factors related to commercial practices, such as territorial supply constraints or obstacles to parallel trade, were found to also play a role in the fragmentation of the Single Market. The 2010 report concluded that better consumer information on retail offers (beyond their local shopping area, including offers in other countries), could help to reduce these disparities.[8] Several studies emphasised the role that TSCs play in shaping different price levels for the same products between countries. In 2013, the Green Paper 'On Unfair Trading Practices In The Business-To-Business Food And Non-Food Supply Chain In Europe' defined Unfair Trading Practices (UTPs) as practices which "grossly deviate from good commercial conduct and are contrary to good faith and fair dealing". TSCs are included as a type of UTPs and were defined as "a prohibition for suppliers to sell to resellers, which by themselves seek to source from the supplier. It is not considered to be a territorial supply constraint when, for instance, a distributor that has been given an exclusive territory in a certain geographic area is protected from active sales of other distributors into this area".[9]

For the purpose of this study, Territorial Supply Constraints are understood as barriers imposed by private operators (suppliers) in the supply chain, which can affect retailers or wholesalers. These may

[6] A better functioning food supply chain in Europe, (COM(2009) 591, 28 October 2009)

[7] European Commission, Retail market monitoring report "Towards more efficient and fairer retail services in the internal market for 2020", 2010, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52010DC0355

[8] Communication from the Commission 'Europe 2020 - A strategy for smart, sustainable and inclusive Growth', COM(2010) 2020 final

[9] *Green Paper on unfair trading practices in the Business-to-Business food and non-food supply chain in Europe*, (COM(2013) 37, 31 October 2013)

impede or limit the retailers' or wholesalers' ability to source goods in other EU countries than the one they are based in, and/or prevent them from distributing (i.e. reselling) goods to other EU countries than the one in which they are based. Typically, retailers or wholesalers subject to TSCs are referred to a specific national subsidiary of the supplier. For example, they can be barred from being supplied from abroad or the products may be differentiated to make cross-border supplying impossible.[10]

Under EU competition law, restrictions on active sales by distributors into other territories are, under certain conditions[11], recognised as legitimate. The Vertical Block Exemption Regulation (VBER) gives a block exemption from Article 101(1) TFEU to vertical agreements which fulfil certain requirements. These agreements may, for instance, help a manufacturer to enter a new market, or to avoid the situation whereby one distributor 'free rides' on the promotional efforts of another distributor or to allow a supplier to depreciate an investment made for a particular client.[12] If a manufacturer wants to operate an exclusive distribution system, the exclusive distributors can be protected against each other's active sales (i.e. they can be required not to actively approach, for example by direct e-mail or visits, customers in each other's exclusive territories and/or not to specifically target by advertising, in whatever media, customers in each other's exclusive territories). However, passive sales (i.e. sales in response to unsolicited orders including delivery) must always remain free.[13] The VBER and its guidelines are currently under ongoing evaluation by the European Commission, supported with a study by VVA Economics & Policy, LE Europe, WIK Consult and WIFO.[14] As preventing active sales may be permitted under certain conditions, the present study focuses on TSCs preventing passive sales.

It is important to point out that any practice that leads to a fragmentation of the Single Market is seen, in principle, by the European Court of Justice to run counter to the very idea of the Treaty and its goal to eliminate national barriers: 'an agreement between producer and distributor which might tend to restore the national divisions in trade between Member States might be such as to frustrate the most fundamental objectives of the EU. The Treaty, whose preamble and content aim at abolishing the barriers between States, and which in several provisions gives evidence of a stern attitude with regard to their reappearance, could not allow undertakings to reconstruct such barriers.'[15] Attention to Territorial Supply Constraints has recently increased, giving the Commission incentive to act in order to allow retailers and wholesalers to purchase products from whom and where they want within the Single Market[16].

A concrete recent example of TSCs is an investigation opened by the Commission (DG COMP) in 2016 into TSCs used by AB InBev, the world's biggest beer company[17]. The investigation led to the adoption

[10] Please note that situations where suppliers agree to sell products to wholesalers or retailers from abroad under the condition that they collect the products themselves directly from the supplier, are not considered a TSC.

[11] Provided this does not restrict the customers of such distributors.

[12] The key requirements are: that 'the agreement does not contain any of the 'hardcore' restrictions set out in the regulation; there must be a market share cap of 30% for both suppliers and buyers; and the regulation contains conditions relating to three specific restrictions.'
Source: https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=LEGISSUM:cc0006&from=ET

[13] https://ec.europa.eu/competition/international/multilateral/2013_feb_online_sales_en.pdf

[14] https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/1936-Evaluation-of-the-Vertical-Block-Exemption-Regulation.

[15] https://ec.europa.eu/competition/antitrust/cases/dec_docs/40134/40134_2872_5.pdf

[16] See for instance: Parliamentary question, Question for written answer E-001577-18, 14 March 2018. Available at: http://www.europarl.europa.eu/doceo/document/E-8-2018-001577_EN.html;
European retailers lobby the EU to combat territorial supply constraints, Consumer Hub, 8 June 2018. Available at: https://consumerhub.eversheds-sutherland.com/stories/retailers-lobby-the-eu-080618; and
Urgent action needed against territorial supply constraints, Retail Detail, 23 May 2018. Available at: https://www.retaildetail.eu/en/news/general/%E2%80%9Curgent-action-needed-against-territorial-supply-constraints%E2%80%9D.

[17] Antitrust: Commission opens formal investigation into AB InBev's practices on Belgian beer market, European Commission - Press release, 30 June 2016. Available at: http://europa.eu/rapid/press-release_IP-16-2361_en.htm;

on 13 May 2019 of a decision by the Commission imposing a fine of EUR 200,409,000 on AB InBev for breaching EU competition rules.[18] They argued that AB InBev abused its dominant position on the Belgian beer market by hindering cheaper imports of its Jupiler beer from the Netherlands into Belgium to maintain higher prices in Belgium. At first, AB InBev used supply quotas and it refused to sell certain essential products unless the retailer agreed to limit its imports of less expensive Jupiler beer from the Netherlands to Belgium, while conditioning promotions to prevent imports of its beer products from the Netherlands to the Belgian market – see Figure 2 for a visual overview of the system. Moreover, the case drew public attention as it concerned a major brand which is very popular with many consumers. The case showed that TSCs can also be implemented in highly subtle and automatic ways. In 2014, the Belgian supplier changed the packaging in the Netherlands of its most popular beer brand to make it harder to sell in Belgium, notably by removing the French version of mandatory information from the label, as well as changing the design and size of beer cans. In this way it differentiated products that previously were exactly the same which is important because this enables suppliers to make parallel imports impossible and to create differentiated markets where they can charge different prices based on local circumstances leading to higher prices in Belgium.

Figure 2: AB InBev business practices
Source: European Commission (2017)

While the legal proceedings concluded that the company had violated EU competition rules (Article 102 TFEU), the experience of this case also highlights a potential enforcement gap in the Single Market. Indeed, the outcomes of the case were driven by AB InBev's dominant position in the market. In fact, in case of non-dominant suppliers, unilateral practices, such as packaging changes, cannot be addressed under EU Competition rules by the European Commission or by the National Competition Authorities (NCAs).

This study looks into the gap left by competition rules, which because of their overall structure (prohibition of abusive unilateral behaviour and anti-competitive agreements) do not catch instructions given by non-dominant, vertically integrated manufacturers to their national subsidiaries through which they distribute their products.

3.2.2 Prevalence of TSCs

The survey with National Competition Authorities (NCAs) conducted during this study shows that currently none of the NCAs that responded are dealing with any cases related to TSCs. Most of the 17 NCAs surveyed were not able to provide any in-depth input regarding Territorial Supply Constraints understood as barriers imposed by private operators in the supply chain which can affect retailers or wholesalers. In fact, most of the NCAs have not conducted any investigations relating to Territorial Supply Constraints as such, and they have not received any official complaints either. However, this lack of official cases is because NCAs only consider cases falling under the remit of national or EU competition law as mentioned in the previous paragraph.

On the other hand, parties could also seek remedies under provisions relating to unfair trading practices in their national legislation: for example, this is the case of the French *Lurel* law[19] and Belgian law

Antitrust: Commission sends Statement of Objections to AB InBev for preventing cheaper imports of beer into Belgium, European Commission - Press release, 30 November 2017. Available at: http://europa.eu/rapid/press-release_IP-17-5041_en.htm https://www.lesoir.be/127041/article/2017-11-30/ab-inbev-suspecte-dabus-de-position-dominante-les-belges-ont-sans-doute-paye

[18] Antitrust: Commission fines AB InBev €200 million for restricting cross-border sales of beer, European Commission – Press release, 13 May 2019. Available at: https://ec.europa.eu/commission/presscorner/detail/en/IP_19_2488

[19] Law n°2012-1270 of 20 November 2012 on Economic Regulation in French overseas territories. This law introducing Article L. 420-2-1 in the French Code of commerce, prohibits exclusive import agreements into the French overseas territories since 2013,

provisions in Book VI of the Code of Economic Law. For instance, in France, the NCA took decisions about TSCs, some of which concerned the food sector or more broadly, the fast-moving consumer goods sector. The decisions sanctioning TSCs were not based upon the abuse of a dominant position under Article 102 TFEU, but on the prohibition of anticompetitive agreements under Article 101 TFEU. In 2012, the French Competition Authority sanctioned three pet food manufacturers for bans on passive sales between France and Belgium[20] and in 2012, the FCA sanctioned several French and German flour manufacturers for limitations of imports of packaged flour through quotas to and from France and Germany.[21]

Due to a lack of scientific literature in this field, the desk research found most of the indication of the prevalence of TSCs through news articles, legal initiatives and studies from national and international authorities. At EU level, a handful of studies form the main theoretical and methodological framework for analysing TSCs across Europe. Notably, the results of the European Central Bank Study on Grocery Prices in the Euro Area illustrate the presence of significant cross-border effects, as prices vary substantially more across countries than within countries. The study concludes that, in addition to consumer habits, structural features, specifically the competitive situation at the producer and retail levels, have an impact on prices and price dispersion. However, after accounting for all explanatory factors, a significant price difference remains which is hypothesised as being caused by TSCs. In terms of factors determining price level differences across countries, the ECB study presents strong indications of market segmentation. The study shows that, in addition to consumer habits, structural features, specifically the competitive situation at the producer and retail levels, have an impact on prices and price dispersion.[22] Another key reference, the Benelux study on 'Territorial Supply Constraints in the Retail Trade in Belgium, The Netherlands and Luxemburg' drew similar conclusions. The study defines TSCs, in line with the Green Paper issued by the European Commission on unfair trading practices[23], as limitations imposed by suppliers of products which restrict retailers' ability to source centrally and distribute across the EU, or purchase in the country of their choice and shows that, according to the retailers surveyed, it is widespread in retail trade across all Benelux countries.[24]

The interviews conducted with retailers and wholesalers for this study confirmed these observations, given that in most of the analysed markets, interviewees claim pressure coming from the upstream part of the value chain (e.g. manufacturers, brand owners and exclusive distributors) to limit cross-border transactions in the downstream part of the value chain (e.g. retailers and wholesalers,) and to keep national markets segmented. The claim of the retailers and wholesalers is that often this is done through product differentiation.

Indeed, in supplying national markets, most of the multinational suppliers owning brands that are distributed in more countries are organised with a subsidiary model where a parent company owns subsidiaries in each national market, or alternatively has one, *de-facto* exclusive, distributor for each country. Manufacturers argued during interviews that this is due to the fact that brand-owners have a customer-centric approach: products need to adapt and adhere to consumers' wide and changing tastes and trends as well as the competitive environment, both at supplier and retail levels. Moreover, they argued that product differentiation is actually beneficial to consumers, as it is driven by innovation, while

in order to address the specific challenges encountered by these territories, among which the fact that, in most cases, local retailers could only purchase imported fast-moving consumer goods from a single wholesale importer

[20] Decision n°12-D-10 of 20 March 2012 regarding practices implemented in the pet food sector.

[21] Decision n°12-D-09 of 13 March 2012 regarding practices implemented in the packaged flour sector.

[22] ECB (2015). Grocery Prices in the Euro Area: Findings from The Analysis of a Disaggregated Price Dataset. ECB Economic Bulletin (Issue 1). Available at: https://www.ecb.europa.eu/pub/pdf/other/art01_eb201501.en.pdf

[23] Green Paper on unfair trading practices in the Business-to-Business food and non-food supply chain in Europe, (COM(2013) 37, 31 October 2013)

[24] Secretariat of the Benelux Union (2018), Territorial Supply Constraints in The Retail Trade in Belgium, The Netherlands and Luxemburg, General Secretariat of the Benelux Union, Brussels, February 2018. Available at : http://www.benelux.int/fr/rto ; www.benelux.int/files/9215/2696/9988/616-TSC-EN-draft3.pdf

its main goal is to adapt products to consumer preferences, local market traditions and cultures. According to them, differentiating products is necessary to meet a perceived (local) consumer demand and/or to distinguish their offerings from those of their competitors.

The vast majority of interviewed manufacturers explained that they are organised at national level through own subsidiaries or distributors: in all cases, this comes with a specific offer for each country based on consumer preferences, competitive environment, local language and minor regulatory aspects. The aspect of the reasoning behind TSCs is discussed in more detail in Section 4.2.1. As can be seen from Table 10, most of the manufacturers said in the online survey that they differentiate their offer across countries.

Table 10: Product differentiation by manufacturers

MANUFACTURERS If your company supplies wholesalers and retailers in other countries that the one you are based in, do you differentiate your offer across countries?	Responses
Yes	33 (77%)
No	8 (18%)
Do not know	2 (5%)
Total	**43**

Source: Online survey carried out by the contractor (13/03/2020)

However, according to interviewed wholesalers and retailers this product differentiation results in the fact that manufacturers limit possibilities of retailers and wholesalers to seek cross-border supply. In the opinion of stakeholders expressed in several interviews, retailers and wholesalers have limited opportunity to resell products in other countries also due to product differentiation. It is important to point out that product differentiation in itself does not constitute TSCs and it may be based on legitimate business and marketing reasons. However, they also argued that product differentiation can be a tool used alongside TSCs. This way manufacturers could prevent parallel imports by not allowing retailers and/or wholesalers to sell products from one (national) market in another (national) market.

As Table 11 shows, around half of the retailers and wholesalers confirmed in the survey that they found themselves in a situation where they tried to source products in another EU country and they were refused based on their geographical location (i.e. that they faced TSCs imposed by manufacturers). The prevalence of TSCs seems to also relate strongly to the different size of the markets and the likelihood to engage in cross border trade by retailers, which is further described in section 4.2.3. The interviews highlight that in general smaller retailers are less likely to face TSCs as they often do not engage in cross-border supply. This also lowers awareness of TSCs within the smaller retail chains, while the retail chains commonly face restrictions that resemble TSCs.

Table 11: Prevalence of TSCs as reported by retailers and wholesalers

RETAILERS AND WHOLESALERS Were there any instances where you tried to source products in another EU country where you were refused based on your geographical location?	Responses
Yes	34 (49%)[25]
No	21 (31%)
Do not know	14 (20%)
Total	**69**

Source: Online survey carried out by the contractor (13/03/2020)

The interview findings confirm the results of the online survey stating that approximately half of retailers and wholesalers mentioned instances where they were refused based on their geographical location when trying to source products in another EU country. The qualitative findings from the interviews

[25] It should be noted that it can be assumed that the share of retailers actually affected by TSCs as reported above (49%) could be lower due to selection bias of the sample: companies affected by TSCs have a higher likelihood to participate to the online survey compared to the ones that are not affected as they probably have a lower interest in the topic.

provide further insights into how these restrictions affect particular types of retailers differently. Specifically, the prevalence and effects of TSCs seem to depend on the size of the retailers/wholesalers and size of the market these operate in. For a more detailed discussion, see Section 4.2.3.

3.2.3 Types of TSCs and related practices

Based on the Terms of Reference of the study and revision throughout the implementation of the project, the types of TSCs and related practices under consideration in this study are the following:

- Refusals to supply (i.e. suppliers refuse to sell a certain product in a certain country to a domestic or a foreign buyer, since they assume it would be sold in another country);
- Quantitative limitations (i.e. supplier imposes supply quotas and other limitations on the quantity sold of a certain product since they assume it would be sold in another country);
- Restrictions to supply promotions (i.e. restrictions on promotions of certain products under the condition that they will be distributed only in a certain territory);
- Destination obligations (i.e. products are sold under the condition that they will be distributed only in a certain territory);
- Obligation of no reselling (i.e. products are sold under the condition that they will not be resold to other wholesalers or retailers);
- Differentiation of products in terms of content/composition (i.e. differences in composition of seemingly identical branded products across national markets, which is not a TSC per se, but a related practice possibly making TSCs possible);
- Differentiation of products in terms of packaging (i.e. national language labelling and/or refusal to put multi-language labels, different packaging size, which are not a TSC per se, but a related practice possibly making TSCs possible).

It is important at this point to distinguish between types of TSCs such as refusals to supply and destination obligations and TSC-related practices which can be used alongside TSCs, such as product differentiation. While these related practices may be partly based in regulatory barriers, such as differences in national requirements for language labelling, these practices do hinder, or at least discourage, cross-border sourcing of retailers and the perception of retailers and wholesalers is that at least in some instances manufacturers use these differences in national requirements to introduce further TSCs.

Table 12 presents findings from the survey with retailers and wholesalers on the prevalence of the various types of TSCs and related practices. It shows that the most prevalent type of TSCs and related practices are refusal to supply, followed by packaging differentiation (including labelling and packaging size), destination obligation and composition differences.

Table 12: Prevalence of types of TSCs and related practices or their symptoms

RETAILERS AND WHOLESALERS What types of TSCs is your company facing? (multiple answers possible)	Responses
Refusals to supply certain products	32 (46%)
Differentiation of products in terms of packaging (e.g. national language labelling and/or refusal to put multi-language labels, packaging size)	21 (30%)
Destination obligation (i.e. obligation to limit the supply to only a certain market/area)	20 (29%)
Differentiation of products in terms of content	19 (27%)
Quantitative limitations (including supply quotas and others)	17 (24%)
Restrictions to supply promotions/Restrictions on promotions of certain products (please provide examples)	11 (15%)
Other types of TSCs	5 (7%)
Total	**69**

Source: Online survey carried out by the contractors (13/03/2020)

In comparison, Figure 3 shows which practices were most often mentioned during the CATI survey. The results were in line with the findings from the survey: the most relevant types of TSCs or their symptoms mentioned are differentiation in terms of packaging, quantitative limitations and refusal to supply.

Figure 3: CATI survey - answers to the question: What types of TSCs and related practices or their symptoms is your company facing? (n = 651)

Source: CATI carried out by the contractor (13/03/2020)

The interviews with retailers and wholesalers confirm the survey and CATI result that usually cross-border imports are hindered or discouraged through refusal to supply, quantitative restrictions and product differentiation. In addition, some individual retailers interviewed also raised more minor and individual complaints. This list includes contractual terms and conditions that limit the retailers' ability to buy or sell products cross border, a lack of EU-wide catalogues and the complete unavailability of some products for particular markets. Similarly, interviewed retailers voiced numerous concerns about practices which producers use if the retailer attempts to avoid restrictions (for example by supplying outside the designated distribution channels), which often means introduction of higher prices, quantitative quota or plain refusal to supply. Across the 12 countries within the scope of the study, it was found that TSCs are usually implemented orally: practices such as refusal to supply are rarely communicated in a written form (i.e. via e-mail).

Firstly, the most prevalent type of TSCs is discussed here in more detail: refusal to supply. This practice can take different forms. As expressed during interviews with retailers and wholesalers, in most of the cases the refusal to supply is not expressed explicitly. For example, retailers and wholesalers that try to source from other countries often receive no written answer in their attempt to source in a foreign country. On the other hand, refusals to supply are reported to have been expressed orally on the phone so that no written evidence exists. Refusal to supply is also likely to have a relevant impact because, as opposed to the other types of TSCs, these can result in the buyers being deprived of access to specific versions of the product (as opposed to a partial access in the case of quantitative limitations for example). Indeed, cross-border sourcing, according to interviewees in multiple countries, is often done through purchasing groups or intermediaries that work around this issue and retailers thus avoid direct contact with the manufacturers themselves.

Differentiation of products in terms of packaging may be related to TSCs but it may also be a purely marketing practice. According to their manufacturers, branded goods (meaning identical products under the same brand sold across different countries) are often differentiated for different markets, most commonly in terms of language labelling (when there is a legal obligation to sell products with a label

in the local language[26]) and package size according to local preferences. A well-known case of a manufacturer imposing TSCs through different labelling is the AB InBev case.[27] However, in most cases it is difficult to distinguish legitimate business practices from TSCs-related practices. Different packaging cannot be considered a practice related to TSCs, if retailers and wholesalers can sell the product with packaging targeted for one (national) market in another (national) market. However, multiple retailers claim that TSCs are supported by ad-hoc packaging differences leading to price discrimination based on the country of establishment of the buyer. An analysis of the Euromonitor data used for this study (for a more detailed description, see Annex II) shows that when looking at 211 branded products sold across two or more countries, product differentiation across countries most often takes the form of variations in package size. Table 13 provides a few examples of products that exhibit minor variations in package size across countries, while accounting for vastly differing prices.

Table 13: Variation in package size across countries

Countlines – Kit Kat			Drinking Yoghurt – Activia			Concentrated Powder Detergents - Persil		
Country	Package size	Price	Country	Package size	Price	Country	Package size	Price
Slovakia	40	13.75	Austria	300	3.3	Portugal	2,990	2.34
Croatia	40	16.52	Slovakia	310	2.55	France	3,150	3.68
Denmark	41	35.84	Czechia	310	2.7	United Kingdom	3,180	2.34
Romania	41.5	10.63	Belgium	320	2.72	Portugal	3,410	2.64
Portugal	41.5	21.45	Romania	320	1.87	Slovakia	3,500	2.57

Source: Elaboration of the contractor (2020) based on Euromonitor data
Note: Price is given per package size

A full analysis of the Euromonitor data can be found in Section 5.2.3.1. This analysis shows that, in total, 54 observations have a package size that is within 15% of the average package size of the same product, while 53 observations are sold in more than one country with the identical package size.

Differentiation of products in terms of content is heavily related to the problem of Dual Composition of Seemingly Identical Products (DC-SIP).[28] The interviewed retailers, wholesalers and manufacturers had contradictory statements regarding how the topics of DC-SIP and TSCs interrelate. Manufacturers considered that standardised production has economic advantages and the rationale behind DC-SIP was ruled out by them although they admitted that there may be differences in composition due to the different sourcing of base ingredients. On the other hand, some retailers claimed different product composition is being used by manufacturers to support TSCs, especially differentiating between lower-priced and higher-priced (national) markets. A more detailed discussion on this, based on the recent JRC work, is presented in Section 4.2.1.

Destination obligations especially affect retailers and wholesalers operating in more countries for which the most convenient way to buy products would be to source these centrally. These practices ultimately prevent them from buying products outside official distribution channels or selling these outside the designated market. In France, some instances of destination obligation were found in a written form, where manufacturing companies were explicitly stating that their own products were meant to be sold exclusively on the local market (please refer to the paragraph on France in Section 3.2.4 below).

[26] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:02011R1169-20180101

[27] https://ec.europa.eu/competition/antitrust/cases/dec_docs/40134/40134_2872_5.pdf

[28] Until recently, this issue was mostly referred to as 'dual quality of food'. This topic has received much attention from journalists in several, predominantly Eastern European, countries as well as consumer organisations and politicians from those countries. The claim essentially relates to the perception that major brands sell products with lower quality in lower-income Member States. However, with the recent publications of the JRC (Differences in composition of seemingly identical branded food products: Impact on consumer purchase decisions and welfare, 2020) this is judged to be no longer justified as there is no evidence of actual dual quality, but rather dual composition based on different sourcing of component ingredients.

Lastly, quantitative quota and promotion limitations are used to discourage cross-border imports to fix prices for retailers and oblige them to source products locally. Examples of this practice can be found in the AB InBev case[29] and in the French packed flour case.[30]

3.2.4 TSCs across countries

To recall, at EU level almost half of the interviewed retailers and wholesalers expressed in the online survey that they face TSCs. Information on the prevalence of TSCs across the countries within the scope of the study has been collected through literature review, stakeholder survey and stakeholder interviews (both CATI during the inception phase of the study and in-depth interviews during the fieldwork of the study) as well as the NCAs survey.

Firstly, the sourcing markets of TSCs are discussed here based on the countries from where retailers/wholesalers stated they faced TSCs. In the in-depth interviews, operators (retailers and wholesalers) that actively engage in cross-border sourcing mentioned that they usually find better opportunities in larger Member States with more competitive markets and thus lower prices. The pattern that can be found is that operators from smaller (and higher-priced) countries actively seek sourcing opportunities in larger (and lower-priced) countries and that they are from time to time prevented from doing so by their suppliers.

Figure 4 shows the countries which are most often mentioned as the origin of TSCs when trying to source abroad in the CATI survey. The countries that were most often mentioned are the biggest markets: Germany, Italy, France, Poland and Spain.

Figure 4: Answer to the question: From which EU countries have you tried to source products when you faced these TSCs (number of times mentioned in the survey)?

Source: CATI survey carried out by the contractors (13/03/2020)

Figure 5 presents the EU countries from which retailers and wholesalers faced TSCs most often when trying to source products. The country mentioned most often is Germany (largest market in Europe with low retail price and reference market the whole EU), followed by Austria (reference market for Eastern European countries), France and Netherlands (both sourcing markets for countries in the Benelux area).

[29] https://ec.europa.eu/competition/antitrust/cases/dec_docs/40134/40134_2872_5.pdf
[30] Decision n°12-D-09 of 13 March 2012 regarding practices implemented in the packaged flour sector.

Figure 5: Country of origin of TSCs as expressed during the survey

Source: Online survey carried out by the contractor (13/03/2020)

This seems to suggest that the issue is not exclusively linked to the size of the countries, but more to the price level of FMCG, which ultimately relates to several characteristics linked to competition in the market as explained below.

In almost all the EU countries, retailers claimed to be subject to TSCs, with this information coming from both the in-depth interviews and the survey results. The table below presents detailed information from the survey per country on the question of whether retailers and wholesalers reported to have faced TSCs.

Table 14: Incidence of TSCs by country

RETAILERS AND WHOLESALERS Were there any instances where you tried to source products in another EU country where you were refused based on your geographical location?	Yes	No	Do not know	Total
Austria	3	1		4
Belgium	7	1	2	10
Bulgaria	1			1
Croatia	2	2	2	6
Czechia	4	1		5
Denmark	1	4		5
Finland	5			5
France	1		1	2
Germany	2	1		3
Hungary	1			1
Italy		1	1	2
Luxembourg	1	1	1	3
Netherlands	1	2		3
Poland	1			1
Portugal		1		1
Romania		4	3	7
Slovakia	1		2	3
Spain	1		2	3
Sweden	2	2		4
Total	**34 (49%)**	**21 (31%)**	**14 (20%)**	**69**

When considering product price levels, the descriptive analysis of Euromonitor data showed that some countries (e.g. Austria, Belgium and Denmark) tend to have higher prices for products of each category in comparison to the other countries. There are also the countries in which, according to some retailers, purchase prices are much higher than in neighbouring countries. On the other hand, products are relatively cheap in Romania and France, where the observed prices have been the cheapest in more than 60% of the observed cases for both countries. There thus seems to be a correlation between purchase price levels for retailers and consumer price levels with some countries clearly being cheaper in both instances. Section 5.2.3 provides the full analysis on the cross-country comparison of 53 identically branded products by product category (i.e. confectionary, dairy, personal care products, household care products and breakfast cereals).

Table 15: Price level across countries in scope of the study[31]

Country	Average unit price branded products *Indexed the cheapest observation per brand at 100* (Euromonitor)	Food and non-alcoholic beverages index price *EU28 = 100 (Eurostat 2018)*
Austria	137,1	125
Belgium	130,0	114,3
Croatia	140,5	97,5
Czechia	115,7	83,8
Denmark	223,2	129,9
Estonia	134,2	95,1
France	106,2	114,8
Luxembourg	Not available	124,9
Netherlands	Not available	101
Portugal	159,7	98,8
Romania	103,6	65,7
Slovakia	119,7	93,7
United Kingdom	117,8	94,4

Source: Contractors on Euromonitor and Eurostat data

Table 15 provides an overview of the price levels across countries within the scope of the study. After general information on the prevalence of TSCs across countries from the online survey, CATI and stakeholder interviews, a summary is presented of the main findings from the quantitative and qualitative data collection for each of the countries within the scope of the study. The results from the literature review have been used to triangulate the results from the survey and interviews and together this provides a context to analyse the quantitative findings for each country.

Austria

Austria is one of the countries with the most developed retail sector in terms of retail sales area per capita in Europe (together with Belgium and the Netherlands).[32] The price level in the Austrian market lies significantly above the European average, being the second most expensive market in the EU for food and non-alcoholic beverages, according to Eurostat data, and it is among the most expensive countries in the price comparison on same products sold across different countries based on Euromonitor data. Based on Euromonitor passport data, the five biggest grocery retailers in Austria have a combined 77.7% market share.

In Austria, there are several news stories of retailers being confronted with TSCs on branded goods of multinational suppliers.[33] In particular, there are allegedly problems faced by retailers when trying to source from the neighbouring German market. Indeed, the study finds that the German market has lower prices compared to those in Austria and together with an absence of a linguistic barrier (and no relabelling requirements for most products), the occurrence of parallel imports is lower than one would expect under a scenario without any Territorial Supply Constraints.

These findings from the literature review were confirmed during the data collection exercise with stakeholders (survey and interviews) which both show that Austrian retailers and wholesalers complain more than average about problems connected to TSCs. Several local retailers stated that they encountered difficulties through refusals to supply, where they were redirected to the national supplier/brand-owner, while potential German, or other foreign business partners, are refusing to

[31] Euromonitor: The average unit price index is calculated as the average of the normalised prices for all identically brands across each country. The prices are normalised by indexing the cheapest observation per identical brand at 100.

Eurostat: The price level is measured for food and non-alcoholic beverages in 2018 and is indexed at 100 for the EU28.

[32] https://www.statista.com/statistics/451485/sales-area-per-capita-in-europe-by-country/

[33] Retail Report (2018), Geschäfte ohne Geoblocking, 02.08.2018. Available at: https://retailreport.at/spar-geoblocking-einkauf

supply. Quantitative limitations to retailers' imports were also mentioned during the interviews for Austria, together with possible measures from the manufacturer side if retailers try to work around TSCs.

Belgium

Belgium has the largest sales area per capita out of the Member States.[34] It is also one of the highest priced markets for grocery shopping as it is the eighth most expensive Member State for foods and non-alcoholic beverages, according to Eurostat. Moreover, prices of branded products, in the Euromonitor data, are much higher compared to its neighbouring country France. Based on Euromonitor passport data, the five biggest grocery retailers in Belgium have a combined 65.3% market share.

Belgium is one of the countries where there is more information from the literature review and desk research on limits imposed by manufacturers on cross-border sourcing. In fact, many sources are referring to barriers imposed by suppliers and preventing traders from freely purchasing a product where and from whom they wish. Territorial Supply Constraints have been a subject of interest for the Belgian authorities since the sector inquiry into supermarket prices published in 2012. In analysing why goods sold in Belgian supermarkets were systematically and significantly more expensive compared to neighbouring countries (i.e. between 7.5% and 10%), most supermarket chains highlighted that the wholesale prices were higher in Belgium, and that it was difficult (or impossible) for them to source their branded products abroad.[35]

Following the AB InBev case, which resulted in a more than EUR 200 million fine from the European Commission, the awareness of local authorities, stakeholders and public opinion regarding the issue of TSCs increased. Specifically, the literature discusses, among other things, minimum volume offers or labelling that is not adapted to certain countries as shown in the AB InBev case.[36] A 2018 study from the *Institut des Comptes Nationaux* found that for identical products in supermarkets, Belgian consumers paid in 2017 on average 13.4% more than in Germany, 12.9% more than in the Netherlands and 9.1% more than in France.[37] The Benelux study on 'Territorial Supply Constraints in the Retail Trade in Belgium, The Netherlands and Luxemburg' shows that TSCs are widespread in the retail trade in all Benelux countries. The study provides a definition of TSCs as illegitimate restrictions imposed by suppliers of products which restrict retailers' ability to source centrally and distribute across the EU, or purchase in the country of their choice. According to a Benelux survey conducted in 2018 of 66 Belgian, Dutch and Luxembourg retail companies, 88% say they are confronted with TSC practices and 77% say that TSCs lead to higher consumer prices. Many of the respondents to that survey consider that TSCs have a negative impact on the scope of the product range on offer, as well as on product quality and delivery times. Regarding relevant regulation, the study found that Benelux countries still have their own specific rules on labelling, promotional communication and bottle return systems, making it easy for manufacturers to effectively divide the market and adjust the price levels of their products to the purchasing power of local consumers and to the level of competition in a given retail market in each individual Benelux country. The study also highlights how tearing down these barriers within the Benelux

[34] https://www.statista.com/statistics/1100962/europe-sales-area-provision-2018/

[35] FOD/SPF Economie (2012), Niveau de prix dans les supermarchés, FOD/SPF Economie, E1-432/0310-12, Bruxelles, 2012. https://www.abc-bma.be/sites/default/files/content/download/files/20120213-etude_niveaux_prix_supermarches.pdf

[36] Senat de Belgique (2018), Question écrite n° 6-1889 de Lode Vereeck (Open Vld) au vice-premier ministre et ministre de l'Emploi, de l'Economie et des Consommateurs, chargé du Commerce extérieur, 31/5/2018. Available : https://www.senate.be/www/?MIval=/Vragen/SVPrintNLFR&LEG=6&NR=1889&LANG=nl
Sudinfo.be (2019), Écarts de prix entre pays: le Benelux interpelle la Commission, 20 Août 2019. Available at: https://www.sudinfo.be/id136577/article/2019-08-20/ecarts-de-prix-entre-pays-le-benelux-interpelle-la-commission
http://www.agraalimentation.fr/commerce-de-d-tail-les-distributeurs-d-noncent-les-contraintes-territoriales-d-approvisionnement-dans-le-benelux-art446081-1.html

[37] Institut des comptes nationaux (2018), Analyse des prix Rapport Annuel 2017 de l'Institut des comptes nationaux, SPF Economie, Brussels, 13 mars 2018. https://economie.fgov.be/fr/publications/analyse-des-prix-2017-icn-2

and the EU would significantly lower the sourcing costs of branded products for retailers and how this would ultimately benefit consumers across the Benelux.[38]

A further increased awareness of TSCs in Belgium and other Benelux countries may be due to the aforementioned studies and the resulting multiple claims of retailers claiming that they encounter TSCs in Belgium and Luxembourg, especially in border areas with Germany and France, countries where prices are lower than in the Benelux countries.[39] This increased awareness also becomes clear from the fieldwork results, where retailers and wholesalers more frequently mentioned that they are subject to TSCs. This is, for instance, the case for the survey where 7 out of 10 Belgian retailers and wholesalers surveyed confirmed that they had faced TSCs when trying so source abroad.

This also becomes clear from interviews with Belgian retailers and wholesalers. Stakeholders in the in-depth interviews and in the survey confirm that TSCs affect a wide range of product categories including all the categories within the scope of the study. According to these interviews, TSCs are especially evident when attempts have been made to source cheaper products across the border for which there is already a local supplier. Retailers and wholesalers reported to have tried to source the product cross-border through third-party companies, but often face manufacturers trying to block orders or limit quantities by retracing orders and asking the third party not to supply those retailers and wholesalers anymore. TSCs are especially common, according to interviewed retailers, with large, international companies that try to build local markets to maximise profits. What is mentioned often in the interviews is the potential measures that suppliers could apply, often in an indirect form, such as future quantitative limitations and less advantageous contractual conditions, when retailers would try to work around TSCs. Especially for international retail chains based in multiple countries, interviewees mentioned that they do not source centrally across countries since they face destination bans. Some of the practices mentioned are like those used in the AB InBev case: promotional offers were made conditional to the fact that the product would be sold only in each country. In the case where the retailer was trying to source in another country other than the one agreed, the reaction was to stop the promotional campaign and limit the volume supplied.

Croatia

The price level of food products in the Croatian market is close to the average of the EU28 with the Croatian retail market development in terms of retail sales area per capita also close to EU average. However, Euromonitor data shows that prices of branded products are among the highest in Europe (it is the third most expensive country). High prices in the country could be a symptom of how TSCs are prevalent to the extent of which retailers are not able to source in other countries due to TSCs. Based on Euromonitor passport data, the five biggest grocery retailers in Croatia have a combined 56.7% market share.

The lack of previous research on TSCs in the country can be interpreted as a lack of awareness on the topic. Consequently, no relevant information has been found from the literature review and desk research. Instead, the debate in the country on FMCG seems to be entirely centred around the issue of Dual Composition of Seemingly Identical Products (DC-SIP).

Equally, the stakeholder consultation in Croatia faced a low level of awareness from stakeholders and consequently a low interest in the topic. The results of the survey give no clear answer on the prevalence of TSCs faced by operators in the country: for the question on whether they faced TSCs, out of the six replies there were two positive replies, two negative replies and two 'don't know' replies. The in-depth interviews covered both local retailers and wholesalers as well as local branches of international

[38] Secretariat of the Benelux Union (2018), Territorial Supply Constraints in The Retail Trade in Belgium, The Netherlands and Luxemburg, General Secretariat of the Benelux Union, Brussels, February 2018. Available at : http://www.benelux.int/fr/rto ; www.benelux.int/files/9215/2696/9988/616-TSC-EN-draft3.pdf

[39] http://www.agraalimentation.fr/commerce-de-d-tail-les-distributeurs-d-noncent-les-contraintes-territoriales-d-approvisionnement-dans-le-benelux-art446081-1.html

operators. Retailers and wholesalers do source international brand products through the local branch of the manufacturer or more often through the exclusive distributor for the brand products. Retailers and wholesalers reported having experienced TSCs and difficulties in sourcing cross-border to avoid these local distributors. Cross-border sourcing in these cases was unsuccessful due to refusal to supply and quantitative limitation. This has had the effect of a reduced range of products available in Croatia compared to other neighbouring markets together with a limited availability of certain branded products. According to the desk research, in the Croatian market exclusive or non-exclusive distributors of branded products play a bigger role than in other markets due to the small dimension of the country. None of these distributors of international brands have agreed to be interviewed in the context of this study, which made their role in enforcing TSCs difficult to assess.

Czechia

The Czech market is below the EU average in terms of market development defined as retail sales area per capita[40] and it holds the sixth lowest consumer prices for food products in the EU, as of Eurostat data, and second lowest price for branded products France according to Euromonitor data. The Czech grocery retail market can be characterised by the fact that it is mainly composed of hypermarkets and discounters, with Kaufland, Ahold Delhaize and Tesco the three largest by annual revenues[41]. Based on Euromonitor passport data, the five biggest grocery retailers in Czechia have a combined 71.7% market share.

For Czechia, no relevant information has been found on TSCs during the literature review, apart from multiple articles and other secondary sources regarding the DC-SIP issue.[42] As mentioned by the Czech NCA during the survey with them, the issue of TSCs was recently connected with the transposition of the Directive (EU) 2019/633 on Unfair Trading Practices (UTP) in business-to-business relationships in the agricultural and food supply chain, which must be implemented by 1 May, 2021.[43] A draft of this transposition law[44] includes a new amendment concerning territorial supply constraints as an unfair trading practice. The wording of this practice has been drafted as follows: "the supplier must not prevent the buyer from buying or selling food on the market in Czechia which the supplier is intended to sell on the market in another Member State of the European Union". With this draft of the transposition law, the Czech NCA would be able to address potential TSCs also through amendments to the national implementing legislation.

The in-depth interviews were carried out with both local retail chains and local wholesalers as well as international retail companies. Most surveyed stakeholders faced some type of TSCs (four out of the total of five Czech answers). Prevalence of TSCs can vary according to the size of the retailers/wholesaler, where international based chains more often face TSCs. Local players, instead, are not facing any TSCs directly, as these are only smaller players on the Czech market and they do not supply from abroad but instead through wholesalers and local subsidiaries of big brands for reasons of convenience: hence the impact on them could be indirect since they would face higher prices paid by wholesalers and intermediaries. Big brands are mostly operating with subsidiaries in Czechia: the country is often mentioned in the interviews as a procuring market for other neighbouring markets such as Slovakia.

[40] https://www.statista.com/statistics/1100962/europe-sales-area-provision-2018/

[41] https://www.statista.com/statistics/1019156/revenues-of-grocery-retailers-in-czechia/

[42] http://eagri.cz/public/web/file/634075/Prezentace__Zofin_16._10._2019.pdf
SZPI (2016), Press release "Research: the Czech consumer demands the same quality food as the European one", 02/18/2016. Available at : https://www.szpi.gov.cz/clanek/tz-2016-vyzkum-cesky-spotrebitel-zada-stejne-kvalitni-potraviny-jako-evropsky.aspx

[43] https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019L0633&from=EN

[44] Návrh zákona, kterým se mění zákon č. 395/2009 Sb., o významné tržní síle při prodeji zemědělských a potravinářských produktů a jejím zneužití, ve znění pozdějších předpisů. Available at: https://www.psp.cz/sqw/sbirka.sqw?cz=395&r=2009.

Interviewed stakeholders mentioned that they especially faced TSCs when trying to avoid sourcing from the Czech subsidiary of branded products.

Denmark

Denmark is the most expensive EU market in terms of consumer prices, as it has the highest price level in the EU for food and non-alcoholic beverages according to Eurostat data and Euromonitor data based on branded products, where the Danish price level is by far the highest in the EU. Moreover, the country has a highly developed retail market in terms of retail sales area per capita.[45] It is particularly interesting that the retail market is heavily dominated by two retail chains (Salling Group and Coop), each holding a share of around 35% of the total retail market.[46] Based on Euromonitor passport data, the five biggest grocery retailers in Denmark have a combined 78.7% market share.

In Denmark, there are multiple literature sources discussing cross-border shopping of Danish consumers across the border with Germany.[47] This is because consumer prices are considerably higher in Denmark compared to Germany, partly due to the fact that Denmark has a tax structure in which VAT and excise duties play a significant role.[48,49] On the other hand, the literature review found no information regarding the prevalence of TSCs in the Danish market: on the contrary, there are some market operators that base their business model exclusively on cross-border imports.[50]

The high-price level is a strong incentive to actively seek for cross-border opportunities to ensure cheaper imports for the Danish market. The Danish NCA receives, on an ongoing basis, queries from businesses within the retail sector regarding possible vertical constraints that in certain situations can be used to restrict parallel imports and support TSCs. During the interviews, Danish retailers were very aware of sourcing opportunities cross-border, and in fact, all the interviewees engage in parallel imports. Most of the interviewees mentioned facing some types of TSCs such as refusal to supply as well as other TSCs and related practices posing barriers to parallel importing such as different types of promotion, different types and sizes of packaging between countries and different labelling requirements (companies are thus actively relabelling their cross-border imports). Out of the five companies surveyed, four mentioned that they face no TSCs, while only one reported that it has done.

Estonia

Despite its small size, the Estonian market is one of the most developed ones in Europe in terms of retail sales area per capita with a total area which is similar to that of France.[51] The consumer prices remain under the EU28 average according to Eurostat data and 40% of the Estonian retail sales are made in supermarkets.[52] Based on Euromonitor passport data, the five biggest grocery retailers in Estonia have a combined 74.9% market share.

For Estonia, no relevant information has been found on TSCs through the literature review.

The interviewed retailers and wholesalers confirmed that usually, given the small size of the Estonian market and small size of its local retail chains, most of the products are bought through local distributors

[45] https://www.statista.com/statistics/1100962/europe-sales-area-provision-2018/

[46] https://www.statista.com/statistics/565747/market-share-of-selected-grocery-retailers-in-denmark/

[47] Tvsyd (2012), Mad overhaler spiritus i grænsebutikker. 20. February 2012. Available at : https://www.tvsyd.dk/sydslesvig/mad-overhaler-spiritus-i-graensebutikker

[48] Thelocal.dk (2019), Denmark is EU's most expensive country for buying groceries, 25 June 2019. Available at : https://www.thelocal.dk/20190625/denmark-is-eus-most-expensive-country-for-buying-groceries

[49] Susanne Bygvrå (1998) The road to the Single Market as seen through the Danish retail trade: Cross-border shopping between Denmark and Germany, The International Review of Retail, Distribution and Consumer Research, 8:2, 147-164, DOI: 10.1080/09593969800000003.

[50] CPH Post (2016), Danish discount retailer Normal to expand abroad: Fast-growing chain plans to invest 400 million kroner in new stores next year. December 13, 2016. Available at : http://cphpost.dk/news/business/danish-discount-retailer-normal-to-expand-abroad.html

[51] https://www.statista.com/statistics/1100962/europe-sales-area-provision-2018/

[52] https://import-export.societegenerale.fr/en/country/estonia/market-distribution

limiting the amount of TSCs they face. Local distributors are also preferred due to the shorter supply chain, that can deliver the products within days. Sourcing cross-border often means a longer logistics chain, which means delivery only on weekly or monthly basis. Consequently, more than 50% of the Estonian retail market is owned by local chains. Moreover, translation, relabelling and negotiation costs plus the increase in logistics costs make cross-border sourcing unfeasible economically for many Estonian operators. However, according to local stakeholders, TSCs are common between Nordic countries and Baltic countries, where brand owners try to keep the markets differentiated and segmented in terms of pricing and contents. Despite the similarities between Nordic markets, especially between the Finnish and Estonian markets, the regulatory barriers (e.g. of bottle deposit systems) are likely to restrict the supply. However, interviewed retailers suspected that producers preferred to supply the more expensive Nordic markets leading to supply refusals in the cheaper Estonian market.

France

The French retailer market is averagely developed in terms of retail sales area per capita [53] and has above EU28 consumer prices, according to Eurostat data. The market is largely dominated by hypermarkets, which command a combined market share of 41.6%.[54] Based on Euromonitor passport data, the five biggest grocery retailers in France have a combined 53.9% market share.

In France, desk research did not find sources regarding TSCs, apart from news regarding the Benelux study. However, there is some awareness of the dominant role of a few retailers and their relationship with suppliers.[55] In a decision of 2012, the French Competition Authority sanctioned three pet food manufacturers for bans on passive sales.[56] Because of the practices, French retailers could not purchase from wholesalers located in another Member-State (Belgium in most cases), where prices were lower, even though delivery would not have been an issue since the wholesalers and the retailers were in some cases only a few miles apart. It should be noted that the decisions sanctioning TSCs were not based upon the abuse of a dominant position under Article 102 TFEU, like for the AB InBev case, but on the prohibition of anticompetitive agreements under Article 101 TFEU.

Interviews with retailers and wholesalers showed that parallel imports only play a marginal role for the major French retailers interviewed. In fact, most of the large retailers in France have a direct commercial relationship with manufacturers on a national or regional level with French entities (national/regional branches of international based brands). In most cases, retailers are sourcing through these French entities and hardly consider negotiating with other entities. However, the interviews indicate that there is thus a very efficient market partitioning that keeps the French market separated from other national markets which is a practice that is generally being accepted by the retailers and wholesalers. In fact, for a number of suppliers (large multinational companies with a French affiliated company), being able to negotiate only the local level and not the EU level seems to be a prerequisite: this results in the fact that their products are still restricted to the French market. This is confirmed by the documents coming from the proceeding against the newly created buying group (Eurelec), where some major brands in several fields (from soft drinks to frozen food) say that they sell a specific range of products exclusively in France.

Luxembourg

Luxembourg has some of the highest consumer prices in the EU according to Eurostat data, and the fourth most developed market in terms of retail sales area per capita[57].

[53] https://www.statista.com/statistics/1100962/europe-sales-area-provision-2018/

[54] https://www.statista.com/statistics/778911/division-sales-volume-distributors-food-by-circuit-france/

[55] https://www.lesechos.fr/industrie-services/conso-distribution/negociations-commerciales-amendes-pour-carrefour-systeme-u-et-intermarche-1170762

[56] Decision n°12-D-10 of 20 March 2012 regarding practices implemented in the pet food sector.

[57] https://www.statista.com/statistics/1100962/europe-sales-area-provision-2018/

There is also an increasing awareness of high prices[58] and the related issue of TSCs[59]. Part of this rising awareness might be due to the Benelux study on TSCs[60] and a similar study performed in Luxembourg which show evidence of the prevalence of restrictions imposed by suppliers preventing the reseller from obtaining supplies freely from other countries[61]. The Luxembourg study is based on a survey of 68 companies (65 SMEs and three large companies with more than 250 employees) both in the retail and non-retail sectors. Out of the 44 retail companies, 31.8% of the companies indicated that suppliers did not give any specific reason for imposing TSCs. Reasons that were mentioned by the suppliers that did provide a specific reason include logistical optimisation of distribution for the products concerned (31.8%), different demand compared to other countries (15.9%), higher cost level on the market where the firm is active (15.9%) and a different tax system in Luxembourg (9.1%).[62] In the Benelux study, the results are similar as 30% did not specify a reason, while explanations that were mentioned include the logistical optimisation of distribution for the products concerned (33%), the market in which their company is active involves higher costs (e.g. due to higher labour, transport or advertising costs and labelling requirements) compared with neighbouring countries (23%), the demand in their country is different (e.g. as a result of consumer preferences, variations in living standards, the position of the brand in the market) (21%), the tax system varies from that of the neighbouring countries (20%) and other reasons (23%). Moreover, a study from the Conseil de la Concurrence of Luxembourg mentions TSCs and further deals with vertical restrictions and agreements in general.[63] It mentions that the retail sector expressed concerns about the supply conditions in the country compared to its neighbours. Among other things, retailers mentioned the issue of territorial supply exclusivity: retailers, when trying to obtain supplies from other Member States, explain that they are redirected to the purchasing group in charge of their country, or national wholesalers. The study puts this down to the fact that most of the manufacturing companies have the main supply office in Belgium and a subsidiary in Luxembourg which a relationship of dependence. Some stakeholders mention this as limiting their choice for supply, resulting in increased prices. However, the study found that there was no direct evidence of TSCs, or of retailers/wholesalers, not being able to organise their supply freely in Luxembourg; the study was mainly based on interviews with retailers.

The in-depth interviews with Luxembourg retailers and wholesalers conducted for this study give some more specific insight on this market. In fact, international brands in Luxembourg are often part of the portfolio of multinational companies that are settled in Belgium, and Luxembourg retailers are thus often asked to work with the Belgian branch of the manufacturer. In contrast to Belgium, where bilingual labelling is required, Luxembourg permits labelling in either French or German. This could provide possibilities of parallel imports from Germany or France by using the packaging from these two countries. However, interviewed retailers mentioned that they are usually required to buy products from

[58] Le Quotidien (2019), Manger coûte plus cher au Luxembourg, 23/09/19. Available at : https://www.lequotidien.lu/luxembourg/manger-coute-plus-cher-au-luxembourg/

[59] Agra Alimentation (2018), Commerce de détail: les distributeurs dénoncent les contraintes territoriales d'approvisionnement dans le Benelux, 30 May 2018. Available at: http://www.agraalimentation.fr/commerce-de-d-tail-les-distributeurs-d-noncent-les-contraintes-territoriales-d-approvisionnement-dans-le-benelux-art446081-1.html

[60] Secretariat of the Benelux Union (2018), Territorial Supply Constraints in The Retail Trade in Belgium, The Netherlands and Luxemburg, General Secretariat of the Benelux Union, Brussels, February 2018. Available at : http://www.benelux.int/fr/rto ; www.benelux.int/files/9215/2696/9988/616-TSC-EN-draft3.pdf

[61] Ministère de l'Économie du Grand-Duché du Luxembourg, Observatoire de la formation des prix (2018), Etude 4 Frontières, Analyse comparative des prix de produits identiques dans les grandes surfaces alimentaires au sein de la Grande Région. Available at : https://odc.gouvernement.lu/fr/publications/rapport-etude-analyse/rapports-observatoire-formation-prix/rapport-thematique-ofp/rt-ofp-009.html.

[62] https://odc.gouvernement.lu/fr/publications/rapport-etude-analyse/rapports-observatoire-formation-prix/rapport-thematique-ofp/rt-ofp-009.html

[63] Conseil de la concurrence (2019), Rapport d'enquete dans le secteur de la grande distribution au Grand-Duche de Luxembourg. 18 January 2019. Available at: https://concurrence.public.lu/dam-assets/fr/avis-enquetes/enquetes/2019/Rapport-enquete-2019-1-18.pdf

the Belgian branch of the manufacturer and if they, for instance, try to contact the German supplier they will be redirected towards the Belgian one. Hence, like what happens in the other countries, cross-border sourcing, according to interviewees, is done mostly through intermediaries so that retailers avoid direct contact with the manufacturers themselves.

The Netherlands

The Netherlands is among the most developed EU retail market in terms of retail sales area per capita and has consumer prices close to the EU28 average for food and non-alcoholic beverages. The retail market is dominated by two retail chains holding a combined market share of over 55% (Albert Heijn and Jumbo).[64] Based on Euromonitor passport data, the five biggest grocery retailers in the Netherlands have a combined 62.9% market share.

For the Netherlands, the literature review only found sources that are the same as those already described for the other Benelux countries. Like for those countries, there is a higher awareness of the topic among the public, which is thought to be due to the landmark Benelux study on the topic.

The in-depth interviews with retailers and wholesalers find that most of the retailers interviewed are reporting to face TSCs from brands suppliers. They mentioned instances of cross-subsidisation, where products that cannot easily be imported are made more expensive. The most common practices mentioned are higher purchase prices, restrictions to supply certain products, restrictions to promotions, differentiation of products in terms of content/composition and differentiation of products in terms of packaging, especially for language labelling and packaging size.

Portugal

The Portuguese retail market is fourth least developed in the EU in terms of retail sales area per capita, with below average consumer prices. However, the prices of branded products according to Euromonitor data are the second highest after Denmark. The market is rather fragmented as no retailers hold over 25% share of the retail market.[65] According to the interviews, the retail market is considered remote in terms of supply chains outside the Iberian Peninsula. Based on Euromonitor passport data, the five biggest grocery retailers in Portugal have a combined 59.8% market share.

Based on interview and survey findings, Portugal seems to be the only country that is not affected at all by TSCs. A possible explanation, based on the literature review and input from the interviews, is that this might be due to its location and the geographical distance from other countries (i.e. that sourcing internationally would not compensate the costs in transport and the potential extra costs of relabelling in Portuguese), while the market with Spain is very much integrated already. Interviewed retailers explained that they source mostly in Portugal and Spain.

Romania

The Romanian retail market has the lowest price level in the EU for food and non-alcoholic beverages according to Eurostat, with the lowest development in terms of retail sales area per capita[66]. Based on Euromonitor passport data, the five biggest grocery retailers in Romania have a combined 45.3% market share.

In Romania, no relevant information has been found during the literature review on TSCs specifically, apart from multiple articles and other secondary sources regarding the Differences in Composition of Seemingly Identical branded Products issue which was also the subject of a legislative initiative in 2019.[67]

[64] Distrifood.nl, Marktaandelen 2019 https://www.distrifood.nl/food-data/marktaandelen?_ga=2.1401912.846705871.1584367519-1784503500.1584367519

[65] https://www.sonae.pt/en/sonae/comunicados/click.php?id=1177

[66] https://www.statista.com/statistics/1100962/europe-sales-area-provision-2018/

[67] EU Food Law (2019), Romanian Senate adopts legislation on dual food standards, 30 Oct 2019. Available at: https://iegpolicy.agribusinessintelligence.informa.com/PL222007/Romanian-Senate-adopts-legislation-on-dual-food-standards

Interviews carried out with Romanian stakeholders covering local retail chains and local wholesalers as well as international retail companies indicate a low level of awareness from stakeholders and a low interest in the topic. Only a few large retail chains that can source cross border mentioned TSCs as an issue, while local operators did not consider these an issue at all. Similarly, the results of the survey suggest that TSCs are not an issue for Romanian stakeholders. On the question of whether they faced TSCs, out of seven replies there were four negative replies (stating that they do not face TSCs) and three replied stating that they do not know.

Slovakia

Slovakian consumer prices for food are lower than the EU28 average, according to Eurostat data: the average unit price in Euromonitor dataset is slightly higher (119,7017) compared to the UK (117,75), while the market is also below average in terms of market development defined as retail sales area per capita. Based on Euromonitor passport data, the five biggest grocery retailers in Slovakia have a combined 77.8% market share.

In Slovakia, no explicit mention of TSCs has been found during the literature review, apart from multiple discussions on the Differences in Composition of Seemingly Identical branded Products issue in relation to the Austrian market.[68]However, there is a certain awareness in Slovakia of the higher grocery prices compared to neighbouring countries: this issue is often presented in the media as a consequence of the dominant role of foreign retail chains and their competitiveness on the retail market.[69,]

The in-depth interviews back this impression, as some of the retailers interviewed mentioned that they are facing TSCs. For some products which are available abroad and are not available in Slovakia, retailers and wholesalers are refused to supply products since they were not intended to be sold in the Slovak market. Some of the restrictions were considered especially harsh for the smaller retailers and wholesalers due to their competitive disadvantage. The national landscape is also affected by Act no. 152/1995 on foodstuffs, which Slovakia amended in 2019 to require advertisement promoting food products to include at least 50% of Slovak domestic products. The decisive factor in the legislation is the product origin: this limitation is very particular for the Slovak market, which is already very highly dominated by some brands.

3.2.5 TSCs across product categories

The interviews have found that most complaints from retailers and wholesalers relate to international brands (A-brands) which are well known in multiple countries and to products that can be easily traded. On the other hand, national brands and regional brands do not seem subject to TSCs since these, in general, are not exported to other countries nor sourced from other countries. In other words, the interviews showed that, in accordance with the Benelux study, TSCs affect mostly the 'must-have branded products', where consumers are more loyal to the brand than to the retailer. This implies that consumers switch to another store when a retailer does not provide such a product. Such products are indispensable from the retailers' perspective, which means that retailers are more likely to accept the TSC (for instance they will accept to buy from the local branch to which they are redirected) and continue to purchase the product.

In terms of product categories affected by TSCs, Table 16 presents the number of interviewees who mentioned that they face TSCs in each of the product categories and their countries.

[68] European Council (2017), Agriculture and Fisheries Council meeting on 6 March 2017 Experience of certain EU Member States with dual quality of foodstuffs in free movement within the EU, 6716/17, Brussels, 27 February 2017. Available: http://data.consilium.europa.eu/doc/document/ST-6716-2017-INIT/en/pdf

[69] https://www.aktuality.sk/clanok/604358/potraviny-na-slovensku-su-v-ramci-v4-najdrahsie-tvrdi-analyticka/ https://www.aktuality.sk/clanok/519650/top-potravinove-retazce-v-ktorych-najviac-minaju-slovaci-svoje-peniaze/

Table 16 Prevalence of TSCs by product category

Product category	Number of respondents	Countries
Soft Drinks	20	Austria, Belgium, Czechia, Croatia, Estonia, France, the Netherlands, Slovakia, Romania
Confectionery	14	Austria, Belgium, Czechia, Croatia, Denmark, Luxembourg, Romania,
Personal Care	14	Austria, Belgium, Czechia, Estonia, France, Luxembourg, Romania, Slovakia
Food Items in general and/or other food items	13	Austria, Belgium, Czechia, Denmark, France, Luxembourg, Slovakia,
Detergents/household products	11	Austria, Belgium, Denmark, Slovakia, France, Croatia, Netherlands
Dairy	7	Austria, Romania, Czechia, Denmark, Belgium, Slovakia
Coffee	5	Austria, Belgium, Czechia, Denmark, France, Romania
Cereals	4	Austria, Slovakia, Romania
Others (e.g. consumer electronics, home appliances, clothing and alcohol)	11	Austria, Belgium, Estonia, Slovakia, the Netherlands

Source: In-depth interviews carried out by the contractor (13/03/2020)

Some interviewed retailers and wholesalers agreed that a wide range of product categories are affected by TSCs. Interestingly, most product categories mentioned by retailers and wholesalers to have a higher prevalence of TSCs are characterised by having a long shelf life. Most products that were mentioned most often relate to shelf-stable food, while interviewees further mentioned that fresh products face fewer TSCs due to the shorter shelf life as well as the limited possibility to transport these products. This is confirmed by the fact that a lower prevalence of TSCs in the dairy product category has been reported in the survey results. Finally, interviewed retailers and wholesalers also mentioned other product categories, not covered by this study, and outside the near-food product categories such as consumer electronics and home appliances as being subject to TSCs.

TSCs are also dependent on the logistic costs of the various product categories. As research has shown, the value-to-weight ratio has a great impact on the logistic costs of the products, which is even more crucial for low-value-to-weight products.[70] The conducted interviews confirm this point, highlighting that the logistic costs are partly the reason for more fragmented production of especially low value-to-weight products. This has multiple effects on the product availability as well as on cross-border product import prices.

Interviews with retailers and wholesalers have also shown that they do have issues with manufacturers segmenting markets along national lines for these kinds of products. They stated that they preferred dealing with local producers and local subsidiaries of international brands for several reasons, which effectively limited their supply for these product categories. Such local sourcing is more convenient for fresh food products with a shorter shelf life or cheap and heavy products which have larger logistics costs compared to their profit margins; both types of products require shorter supply chains. Another reason is that they may have existing and well-functioning logistic arrangements for the different parts of supply chain from raw materials to end product for these categories of products.

Finally, TSCs are reported by retailers and wholesalers to be more present for well-known brands that are available in most of the Member States. The relationship between market penetration of brands and TSCs is further analysed in Section 4.2.1.

In comparison, Figure 6 shows the incidence of TSCs across product categories from the online survey, again pointing towards soft drinks as the most problematic product category. In general, the findings from the interviews carried out with retailers and wholesalers and the results of the online survey are in

70 https://www.researchgate.net/publication/303488019_The_Impact_Of_Cost_Of_Logistics_In_Pricing_Of_Goods_For_Global_Markets_A_Pricing_Framework

alignment. These findings are also aligned with the literature review as it points to product categories where international brands are the strongest and have the highest market shares.

Figure 6: Incidence of TSCs across product categories

Source: Online survey carried out by the contractor (13/03/2020)

Due to the limited size of the data collection tools it is not possible to provide a cross-analysis in quantitative terms comparing the different practices between countries and product categories and thus no patterns can be distinguished. Moreover, no interesting examples have been found to explain this aspect qualitatively.

3.3 Summary of the findings

For the purpose of this study, Territorial Supply Constraints are understood as barriers imposed by private operators (suppliers) in the supply chain, which can affect retailers or wholesalers. These may impede or limit the retailers' or wholesalers' ability to source goods in other EU countries than the one in which they are based, and/or prevent them from h distributing (i.e. reselling) goods to other EU countries than the one in which they are based. All NCAs stated that they currently have no ongoing cases regarding such practices since they can only consider cases falling under the remit of EU competition law (both Art. 101 and Art. 102 TFEU).

An existing body of literature has found that price differences between Member States are greater than within Member States and that part of these are hypothesised to be caused by TSCs. Moreover, around half of the retailers and wholesalers reported in the online survey, as well as in-depth stakeholder interviews, that they faced TSCs imposed by their suppliers (in this case manufacturers).

Next to TSCs, there are certain related practices such as price discrimination and product differentiation. It is important to point out that these related practices do not constitute TSCs and these may be based on legitimate business practices. However, these related practices can be a vehicle used to support TSCs practice where manufacturers would prevent parallel imports by not allowing retailers and/or wholesalers to sell products sold by the manufacturer in one (national) market in another (national) market.

Refusal to supply, quantitative restrictions, destination obligations and differentiation of products in terms of packaging and labelling requirements are the most prevalent barriers faced by retailers and wholesalers when attempting to source cross border. The interviewed manufacturers denied the use of TSCs but other practices such as differentiation of products in terms of packaging, quantitative quota and promotion limitations have been found to be used to discourage cross-border imports and to fix prices for retailers.

Retailers and wholesalers that are actively seeking opportunities for cross-border sourcing usually find better opportunities in Member States with more competitive markets and thus lower prices. This is also exactly the possible trade direction where most TSCs are encountered: for example, Austria and Belgium were found to be the countries with the most prevalence of TSCs. The usual pattern found is that operators from smaller and higher-priced countries are actively seeking sourcing opportunities in larger and lower-priced countries that are often neighbouring countries (i.e. Germany-Austria, Czechia-Slovakia, Belgium-France, and Belgium and the Netherlands) and from time to time prevented from doing so by their suppliers.

TSCs have found to be most prevalent for branded products that are particularly popular with consumers and that are sold in multiple countries. In general, product categories where international brands are the strongest and have the highest market shares are the most affected by TSCs. Based on these factors, the product categories where TSCs are more prevalent are soft drinks and confectionary. Interestingly, most product categories with a higher prevalence of TSCs are characterised by long shelf life and longer retail chains.

4 Roles and the situation of different actors in the supply chain as well as possible reasons for TSCs

4.1 Aims and objectives

The aim of this chapter is to analyse the roles played by different actors (manufacturers, retailers and wholesalers) in the area of TSCs and related practices and to analyse the reasoning provided by suppliers (manufacturers and wholesalers) for their possible use of TSCs or related practices. It thus investigates the economic rationale for TSCs, and related practices as raised by different stakeholders (e.g. costs, economies of scale, efficiency, market entry strategy, etc.). It also explains the role of specific market features (e.g. regulatory requirements and private label products) in the prevalence of TSCs. Due to the qualitative nature of the topic, these results are primarily based on in-depth interviews with retailers, wholesalers and manufacturers, supported where possible by quantitative analysis and findings from previous research.

4.2 Results

The results of the analysis cover the following topics: the role of manufacturers, the role of wholesalers, the role of various types of retailers, regulatory requirements and TSCs, and private label and TSCs.

4.2.1 Manufacturers

The analysis provided above clearly shows that TSCs and related practices are a concern for some retailers and wholesalers but that not all retailers and wholesalers are affected by it in the same way. Therefore, in this chapter an analysis is made of the economic reasons for manufacturers to engage in behaviour which may be perceived as TSCs and for which type of products and market conditions these reasons apply more than for others.

During interviews, retailers and wholesalers claimed that especially multinational manufacturing companies with brand portfolios that are particularly popular with consumers, engage in practices that limit retailers' and wholesalers' sourcing. In their view, TSCs are often more relevant for the products these companies sell, as the value chains of such products are already part of global value chains. These goods are also often sold in multiple countries and are likely to be sold at different prices in different countries.

Any of those perceived TSCs, however, can also be traced back to legitimate market behaviour of manufacturers, as argued by manufacturers during interviews. Both manufacturers and retailers acknowledged that product availability is partly due to logistics and consumer preferences, which can lead to restricting certain products from entering new markets. It should also be noted that manufacturers often organise their sales and distribution on a national basis for practical reasons, which may further limit cross border supply. All these factors make 'big brand' goods more interesting for parallel trade and thus more likely to face TSCs.

Moreover, additional factors make the overall situation of the FMCG supply chain complex. Manufacturers pointed out in interviews that regulations, such as for labelling, are different across Member States and that this is an important reason for organising their distribution on a national basis. This national organisation in turn can then be interpreted as TSCs by retailers. On the other hand, the interviewed retailers said that they believe that not all restrictions are due to external reasons beyond the control of manufacturers. They see evidence that manufacturers try to segment the national markets to maximise profits and that purchase price differences go well beyond differences in logistics costs or other external factors beyond the control of manufacturers and thus constitute TSCs.

Despite the contradictory understanding of the reasons for perceived TSCs, there seems to be a common understanding among retailers and manufacturers of where these TSCs are most likely to occur. For both groups of stakeholders, brand recognition and brand value is at the heart of the argument meaning that big brands with high brand recognition make it more likely that manufacturers try to control the distribution channels (manufacturer argument) and provide them with the market power to do so (retailer argument).

In conclusion, brands, regulations and market conditions could be important drivers of the perceived TSCs; each will be discussed in more detail below.

Brands and brand recognition

The retailers interviewed for this study who claimed to have faced TSCs also claimed nearly unanimously that these are introduced by large multinational manufacturers. They claimed that this is partly due to their market position, which gives retailers less negotiation power. This situation is even more prevalent with the largest manufacturers that have significant share of the market. Many of the brands with high market penetration rates are owned by even larger companies. For example, Knorr, Lipton and Dove are all owned by Unilever, while Kinder and Nutella are owned by Ferrero, and Maggi and Nescafé by Nestlé. According to the interviewed retailers, these conglomerates thus hold significant power in the market beyond individual brands. High market penetration rates can also add to their negotiation power as those manufacturers are usually the sole producers of popular products, which often have no direct substitutes. It is also worth noting though that other factors also influence the relative power of retailers in the negotiations. Retailers that purchase large volumes (i.e. retailers in big markets) or retailers that have a strong market position in their markets have a better negotiation position towards even those big brand manufacturers. The penetration rates of major brands can differ significantly between countries

Structural and external factors affecting practices of manufacturers

As mentioned above the interviewed manufacturers claimed that observed refusals to supply and quantity limitations are due to certain structural and external factors. They claim that those external reasons make a national organisation of their sales more effective. For example, certain products that have been either acquired or specifically developed for a specific market by the company might have short shelf life, high transportation costs and/or developed local raw material network that would be hard to replicate or extend to another country.

The division of the operational functions of the manufacturers can indeed have an impact on product availability. According to the information provided by manufacturers, it is often the national office that organises sales in particular national markets, which often includes deciding the product availability and pricing. Manufacturers stated that they often have a local subsidiary or selective/exclusive distribution network in each country. This structure reflects the differences across different national markets due to local market characteristics as well as consumer preferences, which is best known by the specialised national distributors who hold an understanding of the product preferences, quantitative preferences and composition preferences of the products. These distributors have the experience to assess the risks of introducing new products and product formats to their markets.

Manufacturers' distribution networks are most often organised through country specific offices that oversee the sales for each country or area. They often operate independently regarding the distribution of the products in the selected market while other functions, such as R&D, can be centralised around the main office of the manufacturer. In practice, manufacturers explained that products are often sold in different formats/quantities or with different packaging and often with different characteristics in terms of ingredients in the different EU countries. The interviewed manufacturers stated that product catalogues available to retailers are national and that there are no EU-wide catalogues available. The

manufacturers considered these unnecessary as according to them cross border supply approaches are rare.

Manufacturers often have different local/national brands alongside the main well-known brands that are sold in more than one Member State. The local product brands of the larger producers are also produced for particular markets only, as some of these brands have been acquired when local producers have been incorporated into the international structure of the manufacturer, or some have been specifically developed for the national market by the national branch of the manufacturer. The factories for the local products are based on the territory of those specific markets, which further limits the availability of certain products to certain markets. Moreover, marketing activities, as stated by interviewed manufacturers, are organised at national level by the branch offices together with different promotions and a different calendar of release of new products and market entry of new brands. These marketing activities are usually based on consumer research, which again is also carried out nationally or locally.

Practices of the manufacturers that maintain this differentiated system of distribution can make parallel imports very complicated and costly for retailers and wholesalers, as they reported during interviews, but seeing the price differences observed (see Section 5) and the uniform perception of retailers that some sourcing restrictions seem to exist (see Section 3), more parallel imports and lower price differences seem to be possible despite these external factors.

Consulted retailers and wholesalers identified most of the TSCs to originate from manufacturers but actual evidence on TSCs, however, is far from conclusive. For product differentiation and different packaging options, retailers and wholesalers believe that some of the practices engaged in by manufacturers in this area are not due to consumer preferences but only a way to apply TSCs that are mainly price driven. The opinion of most of the interviewed retailers and wholesalers is that these practices seem to justify lower prices in lower-priced markets (e.g. Bulgaria) but that this is not the case for markets with higher prices and larger amounts of retail space per capita (e.g. Belgium, France, Germany and the Netherlands). Their argument is that the price in the lower-priced markets are closer to the 'natural' price, while manufacturers are keeping the prices artificially high in the higher-priced markets.

The economic rationale for TSCs

A reasoning on the economic rationale for segmenting national markets (which could be a possible justification for imposing TSCs, although it does not necessarily need to lead to the actual imposing of TSCs) is described in the RBB Economics study from 2013.[71] The first reason for differentiating markets mentioned in this study is to keep incentives to offer lower prices and promotional campaigns since, according to the paper, "whenever a supplier wishes to cut prices in a particular national market, the supplier would need to take account of the risk of retailers in other countries also seeking to take advantage of this". Secondly, the study argues that suppliers will find it less attractive to sell identical products in multiple countries. The study argues that selling similar products would effectively reduce the pricing freedom in any of the countries where the product is sold as retailers could source it from the lowest price country. Lastly, the study argues that without dividing national markets effectively, negative effects could arise in terms of suppliers' investments since they are affected by free-riding on promotional expenses and on brand value from the retailers that are sourcing cross border together with more difficulties in the market launch of products in new markets.

The recent JRC study on DC-SIP provides important insights into the economic rationale for manufacturers to engage in product differentiation and, by extension of the argument, their possible

[71] RBB Economics (2013), Territorial supply constraints: the economic arguments. April 2013

rationalities behind imposing TSCs.[72] According to the study, the main rationale is profit maximisation as manufacturers want the optimal product composition for each separate market. This phenomenon is known as the optimal variety choice theory in the scientific literature and it leads to producers offering multiple products even within the same consumer or product segment to gain competitive advantage or increase consumer loyalty.[73] What constitutes the ideal product composition, leading to the maximum profit for each market, is influenced by several additional factors: demand and consumer preference, cost structure including cost minimisation, the competitive environment, technological constraints and institutional rules (i.e. regulation). In addition, all manufacturers face the choice between going international and going local when designing their strategy on how to enter (new) markets.

According to the JRC study, when facing this dilemma, most manufacturers make the choice to go local. This in turn leads to even more localisation of the product offer based on product differentiation and adapting to the local markets owing to difference in culture, consumer preference (e.g. in terms of taste), competitive environment, law and regulation, demand (e.g. based on consumer income) and demography of the consumers. Together profit maximisation and localisation form the main rationale for manufacturers to differentiate their products and to impose TSCs to protect this differentiated offer.

Finally, according to both interviewed retailers and producers, the proximity of the producing factories especially affects products that require shorter supply chains, such as fresh and frozen products, limiting their availability due to expiry dates and the high costs of the logistics. The logistics costs also contribute to the obstacles, as products with lower price-to-weight ratios have generally lower profit margins as logistics form a larger proportion of their price. This makes these certain products even less likely to be introduced in multiple markets due to the costs of logistics.

4.2.2 Wholesalers

The information that has been collected for this study shows that wholesalers seem to be affected by TSCs and related practices in largely the same way as retailers. In-depth interviews with wholesalers suggest that they face TSCs as often and under largely the same conditions as retailers. The main reason for this is that market conditions for smaller and larger wholesalers seem comparable to those for smaller and larger retailers. However, the reasoning behind the question why wholesalers are being affected by TSCs might be different compared to retailers. For example, the difference in market prices due to competition was found to be less relevant for wholesalers compared to retailers. This can be partly explained by the fact that wholesalers are presumed to be more consolidated, and larger in general, than retailers.[74,75] These differences may also be caused by the different customer base, as wholesalers sell their products mostly to businesses (such as restaurants), while retailers almost exclusively sell directly to consumers by definition. In fact, interviewed wholesalers considered that their customer base makes the wholesale sector more vulnerable to the effects of TSCs. The reason for this is that wholesalers also supply, for instance, the hospitality industry and, compared to individual consumers, these might turn more easily to other supply chains (including cross-border supply, where possible) in cases where TSCs increase the selling prices of products.

[72] JRC Technical Reports (2020), Analyses of economic rationale behind differences in the composition of seemingly identical branded food products in the Single Market.

[73] Kaiser, U., & Reisinger, M. (2019). Strategic Product Variety Choice: Theory and Empirical Evidence. Paper presented at DRUID19 Conference, Frederiksberg, Denmark.

[74] The wholesale sector has approximately half of the total amount of companies of the retail sector.

Source: https://ec.europa.eu/docsroom/documents/20210/attachments/7/translations/en/renditions/native.

[75] There were approximately 3.6m retail companies and 1.8m wholesale companies in the EU in 2014. The retail sector turnover is €2.77tn compared to €5.97tn of the wholesale sector. Source: https://www.eurocommerce.eu/media/87967/eurocommerce_study_v2_hd.pdf

On the other hand, the interviewed retailers did not mention wholesalers using TSCs towards retailers on their own account; they only mentioned instances where wholesalers passed on TSCs from manufacturers to retailers. One claim came from a retailer, according to whom manufacturers have limited distribution arrangements with wholesalers, leading to TSCs. Another retailer claimed that producers have the power to deny wholesalers the possibility to sell to certain retailers. At the same time, retailers claimed to have encountered instances where they experienced manufacturers imposing TSCs on them when they tried to avoid geographical limitations by buying products meant for other markets from wholesalers located abroad. In all these cases, the wholesaler seems to be passing through TSCs imposed by the manufacturer.

4.2.3 Various types of retailers

As mentioned before, through the various means of data collection (specifically, the in-depth interviews and the online survey), about half of the retailers stated that they see themselves being affected by TSCs. However, TSCs seem to not be affecting all retailers to the same extent and in the same way. This section discusses the following aspects: retailer size and market position, the competitive environment and retailer business models.

Retailer size and market position

Larger retailers, which have more negotiation power and alternative suppliers, most often report being affected by TSCs, while smaller retailers often rely on more local supply chains and purchase their products from local wholesalers. The hypothesis related to this is well known in the literature and claims that larger retail chains are more affected by TSCs as these are more able to source internationally compared to smaller shops.[76] The key difference is that large and small retailers operate with different models of supply. While larger international retail chains have the networks and experience to seek cross-border supply routes to avoid TSCs they may face, smaller retailers often rely only on national producers and do not have the capacity to seek foreign alternatives. Smaller retailers are often based in one (domestic) market only, which is one of the core factors behind their reliance on local supply chains even further limiting their ability to avoid TSCs. Larger international manufacturers and retailers can either pose or avoid barriers more effectively due to their negotiating power and ability to engage with cross-border supply chains.

Information collected from retailers during interviews is in line with this and suggests that parallel imports are economically interesting only for larger retailers. For smaller retailers, the costs of setting up alternative supply chains as well as costs related to relabelling and other costs incurred by sourcing abroad seem to outweigh the possible benefits. Interviews with the smaller operators have shown that they focus on local supply chains either because they do not think it is economically beneficial (i.e. they cannot bear the investment costs of transport and re-labelling) or because they think it is not possible in the first place to carry out parallel imports. This finding is supported by a more granular analysis of the survey data, which suggests that a large proportion of the retailers that said they are not facing any TSCs and that do not even try so source abroad, are formed by smaller operators based only in one country.

Another factor to consider is that retailers operating smaller shops stated in the interviews that they usually have less storage capacity, which affects their supply needs. This makes them more vulnerable to some TSCs, such as quantitative restrictions (i.e. limitations of the minimum purchase of products or obligations to buy products as a collection of multiple products), as their limited storage adds economic risks due to product expiry dates. Smaller retailers also often rely on smaller producers, as they are more flexible regarding the supply stock volume and can provide additional products based on the needs of the retailer. However, it is worth noting that smaller retailers can be affected too if they buy from national

[76] Findlay A. M. & Sparks L., Retailing: Comparative and international retailing, 2002

wholesalers affected by TSCs or if they form retail alliances, which both would make parallel importing (without TSCs) economically advantageous for them while this is not the case for them acting individually.

Large and international retail chains are also the actors that often try to centralise their sourcing across different countries, or they form retail alliances to source jointly. Indeed, according to manufacturers, retailers are forming joint purchasing groups to gain powerful leverage when negotiating with the producers. Retailers confirmed such practices, explaining that they form such purchasing groups as an attempt to gain an equal footing during the negotiation process with large manufacturers.

Like the findings from the interviews, the online survey results suggest that larger retailers are most prone to facing TSCs. See Table 17 for a detailed overview of the prevalence of TSCs by size of stakeholder based on the results from the online survey.

Table 17: Prevalence of TSCs by size of stakeholder

RETAILERS AND WHOLESALERS Were there any instances where you tried to source products in another EU country where you were refused based on your geographical location?	Do not know	No	Yes	Total
Large enterprise (250 or more persons employed)	6	12	25	43
Medium-sized enterprise (50-249 persons employed)	2	3	4	9
Small enterprise [77] (10-49 persons employed)	2	3	1	6
Micro enterprise (less than 10 persons employed)	4	3	4	11
Total	14	21	34	69

Source: Online survey carried out by the contractor (13/03/2020)

Competitive environment

Another factor that plays a role in the prevalence and effects of TSCs between different retailers is the competitive environment of the retail market. Specifically, the retail competitive environment depends on the level of market concentration as well as on the local competition among retailers that are located within a consumer's catchment area.

In simple terms, retailers and wholesalers with a strong market position are less dependent on their suppliers, as their competitive position in the retail market is less affected by the loss of a limited number of brand products, as long as these do not fall within the category of must-have products. This might be the reason, for instance, why TSCs have been reported only to a limited extent in a country like Denmark, where a small group of retailers dominate the market. However, it should be noted that consumers still pay very high prices in this country, possibly due to other reasons, such as high VAT rates or labour costs.

More specifically, larger retailers for which it would be economically interesting to engage in parallel imports, but that do not have a strong market position are the actors most easily impacted by TSCs. These companies do not have a strong negotiation position towards manufacturers due to the stronger competition that they face from other retail chains in their market. Thus, retailers/wholesalers whose size would make it possible and economically valid for them to engage in parallel imports, but whose market position is not strong enough and makes them dependent on their suppliers, seem to be the actors most affected by TSCs.

[77] It should be noted that especially the representation of SMEs in the online survey is very limited and a large part of SMEs did not know whether they were facing TSCs. The smaller retailers can understate the existence of TSCs, as they mostly rely on local supply chains for products they sell. This, together with a low awareness of TSCs as a phenomenon in general, can cause underreporting of TSCs by smaller retailers.

An issue related to the competitive environment of the different retail markets that interviewed manufacturers mentioned is that larger retailers can, to a certain extent, use their significant market power to block product access to their market as dominant retail chains have a strong ability to define the availability of different consumer products in their market. This is more likely to take place in a less fragmented market where a few major retailers dominate the market, such as in Denmark where two retailers hold a combined market share of more than 70%,[78] the Netherlands where only two retailers have a combined market share over 55%[79] or Portugal where the two largest retailers hold a combined market share 48% of the market while the rest of the retailers have a market share of less than 10% each.[80] In larger markets, the market is often much more fragmented, as for example in France there are six retailers holding market shares between 10% and 25%.[81] However, it should be noted that the market share itself might not describe the situation of individual retail chain in one country, as some retail chains can form part of larger international families, while others operate solely on a single national market. Moreover, there is the issue of volumes, as having a smaller segment of a larger market might mean more overall trade volume asked for by a retailer compared to having a larger segment of a smaller market and the volumes often define the position of retailers towards manufacturers.

Retailer business models

The business model used by retailers also influences how much they are affected by TSCs. For instance, supermarkets may be more affected by TSCs than hypermarkets which have a more diverse product offer and can compensate losing money because of TSCs for certain must-have brands with other, more profitable products (also non-FMCG products). This is even more relevant as there are differences between EU Member States in terms of average shop floor sizes vary greatly across countries making markets with larger shop floor sizes more popular for larger packaging sizes. For example, in France hypermarkets dominate the retail market with a market share of 41.6%, while in Germany hypermarkets only generate 16.3% of the total market revenue.[82]

Interviews with retailers also highlighted the effect of different buying strategies. They mentioned that buying strategy are often linked to the overall market strategy of the retailer, which can be mostly divided into two approaches: either a 'high & low' strategy which is a promotion-led single product strategy with more expensive overall prices or an 'everyday-low-price' strategy, which is used by retailers that are less expensive for all products. The strategy chosen by a retailer translates into the size of stocks that they buy from producers. The interviewed retailers claimed that companies which have larger stocks and rely on high & low strategy are more prone to suffer from quantitative restrictions and restrictions of product promotions.

Some of the interview findings confirmed also the existing issues related to consumer and market references. In line with what manufacturers stated, some of the retailers saw the differentiation of products in terms of format, quantity or ingredient mix to be justified by market reasons in line with local consumer tastes to a certain extent. Moreover, the current and long-established relationship with the local supplier/subsidiary may be a strong incentive to avoid sourcing products from other EU countries since products are sold in different formats/quantities or packaging. They may also differ according to other characteristics (such as ingredient mix). Another issue might be that local brands are missing, product codes are different, discount prices and promotions are different, or the timing for the release of new products differs across borders. However, it should be noted that this view was not unanimous as a slightly larger number of retailers considered the differentiation as an artificial attempt to limit product availability.

[78] https://www.statista.com/statistics/565747/market-share-of-selected-grocery-retailers-in-denmark/
[79] https://www.statista.com/statistics/589618/leading-companies-in-food-retail-netherlands/
[80] BIP, Equity Research – Portuguese Retail, 2014, https://www.bpiequity.bpi.pt/others/PDF.aspx?id=62221
[81] France Agrimer, IMPACT DES NOUVELLES FORMES DE COMMERCE SUR LES ENTREPRISES AGROALIMENTAIRES, 2019, https://www.franceagrimer.fr/content/download/61214/document/FranceAgriMer%20ECOMMERCE%20IAA%202019.pdf
[82] https://www.statista.com/statistics/778911/division-sales-volume-distributors-food-by-circuit-france/

4.2.4 Regulatory requirements

Firstly, it is important to point out the difference in regulatory requirements between food products and non-food products (including the two covered by this study: personal care and household care products). On the one hand, regulatory requirements for food products are subject to EU regulation and mostly harmonised, especially through the Regulation on the Provision of Food Information to Consumers.[83] On the other hand, for non-food products, this is not the case and wide differences exist between Member States.

Differing regulatory requirements may discourage retailers and wholesalers from sourcing products cross-border or even make this impossible for them. Some interviewed retailers and wholesalers suspected that regulatory barriers provide a platform conducive to the introduction of TSCs. These interviewees mentioned that especially in personal care and household care products (the near-food products), there is reason to think that differences in regulatory requirements are used by manufacturers to support TSCs; this is in line with the observation above on the lack of harmonisation between Member States on rules for this group of product categories.

The fact that differing regulatory requirements may be problematic is confirmed by the Benelux study. It states that because the Benelux countries still have their own specific rules on labelling, promotional communication and bottle return systems, it is relatively easy for manufacturers to effectively divide the market and adjust the price levels of their products to the purchasing power of local consumers and to the level of competition in a given retail market in the Benelux. The study recognised that the separate rules would also raise the costs naturally affecting the selling prices, yet the interviews conducted with retail stakeholders considered that this would not be an adequate explanation for the full price difference.

The most important regulatory requirement distinguished in the literature and mentioned by interviewed stakeholders relates to labelling, and therefore, most of this section is dedicated to this aspect. The most important aspect of labelling relates to the languages used on the labels as this to a large extent determines in which Member States consumers would be interested in buying the product. Operators selling products to final consumers are obliged to ensure that the relevant information is available on the label and that it is compliant with national requirements. In practice, this means that usually there are only a few languages available on any given label, so if retailers want to engage in parallel importing, they bear the costs of translating these labels. A minority of interviewed retailers pointed to the fact that languages chosen by manufacturers to appear together on a label were official languages of countries that were located in different parts of Europe, which would make the possible transportation of the products between those countries much less attractive economically. Or the labels clearly excluded languages of countries close to the country for which the product had been designated. This is the exact practice used by the manufacturer in the AB InBev case.

Despite the occasional difference in national rules, interviewed manufacturers and retailers generally found that language requirements are not restricting cross-border sourcing in markets with the same languages. This, among other issues related to competition, partially explains why many retailers, wholesalers and manufacturers organise their cross-border operations in markets that share the same

[83] Regulation (EU) No 1169/2011, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:02011R1169-20180101

Although a lot of harmonisation has taken place already and there is a European Chemicals Agency (ECHA), not all national regulations are homogeneous across the EU27 and some ingredients are banned in certain countries. One example of differences between regulations found during the literature review is the food additive E171, which is not recommended for use by French Authorities but not by authorities in any other Member States (https://www.anses.fr/en/content/food-additive-e171-anses-reiterates-its-recommendations-consumer-safety
https://www.anses.fr/en/system/files/ERCA2019SA0036EN.pdf) Similar practices were flagged by the interviewed retailers and manufacturers, which were also aware of similar legislative requirements such as the French ban of glyphosate or a previous ban on taurine.

languages, such as in Benelux countries, French and Belgium, and Austria and Germany. Similar arrangements can be seen in countries with similar and mutually understandable languages, such as in the Scandinavian market.

A related obstacle is formed by the different labelling practices regarding other aspects than language, such as eco-labels, which might cause additional labelling costs; these issues can also be relevant for food products. Individual interviewed retailers also claimed that producers are unwilling to re-label products, shift the re-labelling costs to the retailer or otherwise use regulatory requirements as an undescribed refusal for supply.

Another example of regulatory requirements that interviewed manufacturers mentioned as forming the basis for practices that might look like TSCs is formed by national regulations concerning alcohol as a reason for product differentiation. Different tax brackets that depend on the alcohol content of beverages were stated to impact the content differentiation by the producers of alcoholic drinks. Moreover, other legislation impacting alcoholic drinks, such as the state monopoly for drinks above certain alcoholic content in the Nordic countries, was identified as one of the reasons for producing market specific versions of the same brand. The restrictions on alcohol sales have been further explored in the study on operational restrictions to EU retail, which was carried out for the European Commission.[84] These reasons, however, should not be confused with different consumer preferences, which were also quoted by interviewed manufacturers as a major reason for product differences.

Another type of regulation that has been mentioned by manufacturers as forming the basis for practices that might look like TSCs is the lack of harmonisation on national container-deposit systems. This caused additional costs and was specifically mentioned by producers of drinks and some retailers. According to organisations specialised in the issue, in early 2019 there were 10 different European systems (i.e. in Croatia, Denmark, Estonia, Finland, Germany, Iceland, Lithuania, the Netherlands, Norway and Sweden).[85] The return rates range from 82.7% in Estonia to 98.4% in Germany. These regulations are national, which means that products need to be adjusted before they can enter the national market.

A specific group of regulatory requirements is formed by operational restrictions in the retail sector (i.e. differing national/regional or local rules regulating the operations of shops).[86] A study carried out for the European Commission in 2018 identified numerous restrictions, ranging from opening hours and limitations of the distribution of certain products (e.g. alcohol and tobacco) to restrictions of promotional activities and sourcing. It should be noted that labelling requirements were not considered operational restrictions, as the study methodology aimed to identify the barriers based on legal frameworks rather than stakeholder experience. Interviews with 162 retailers identified the 10 most problematic operational restrictions, see Table 18.

Table 18: The 10 most problematic operational restrictions faced by retailers in the EU28 and Norway

Ranking of restrictions	Total number of points	Explanation/Comment
1	573	Financial restrictions/In most Member States, the retailers also considered financial restrictions to be important even though the restrictions they identified fall outside the scope of this study (e.g. local fees, property taxes and other fees).
2	486	Product-specific sales restrictions/Such restrictions apply to alcohol, medicine and tobacco.
3	402	Regulation of shop-opening hours/Restriction on selling at weekends and sometimes not-in- scope labour regulation
4	398	Restrictions on sales below cost
5	393	Restrictions on discounted sales

[84] European Commission, Operational Restrictions in the Retail Sector, 2018, https://op.europa.eu/en/publication-detail/-/publication/401417dc-43aa-11e8-a9f4-01aa75ed71a1/language-en

[85] Government Europa, Deposit return schemes: resolving plastic waste, January 2019, https://www.governmenteuropa.eu/deposit-return-schemes-plastic/91699/

[86] Operational Restrictions in the Retail Sector, a study carried out for the European Commission, 2018, https://op.europa.eu/en/publication-detail/-/publication/401417dc-43aa-11e8-a9f4-01aa75ed71a1/language-en

Ranking of restrictions	Total number of points	Explanation/Comment
6	361	Restrictions on end-of-season sales
7	297	Restrictions on advertising/Restrictions on advertising specific products (i.e. alcohol, tobacco, pornographic products, explosive substances and energy drinks)
8	291	Restrictions on sourcing
9	248	Restrictions for end-of-business sales/The restrictions define for example the occasion and the products that can be sold in an end-of-business sales.
10	190	Restrictions on sales below cost (online channel

Source: European Commission in the study on Operational restrictions in the retail sector.

4.2.5 Private label and TSCs

As most TSCs seem to relate to products from big multinational manufacturers (see Section 3.2.2 for a detailed discussion), an important and complementary parallel would be to research TSCs and related practices for private label products. Interviewed retailers were adamant about the fact that TSCs for private label products would be completely illogical, as in their opinion, it is impossible for companies to restrict themselves. However, the collected information shows that for private label products available from large multinational retailers there are also large pricing difference between Member States, which seems to suggest that retailers engage in some of the related practices that they accuse manufacturers of engaging in. This price discrimination follows the same patterns as for the manufacturers, namely higher prices in less competitive markets and lower prices in more competitive markets.

In fact, this price discrimination by retailers on private label products, as also suggested in previous research[87], puts pressure on pricing policies of branded products of manufacturers. Manufacturers perceive that these practices of retailers carry a risk that private label products disrupt competition and dominate the supply of certain products in a way like larger manufacturers with a dominating market position. However, there is a key difference when comparing price discrimination between retailers and manufacturers. Crucially, there are no actual TSCs for private label products as no requests to supply are refused and this practice only relates to a business strategy within one company. There are thus no other companies negatively affected and the retailer owning the private label can price discriminate between the different Member States where it sells its private label products without having to use TSCs. However, from the perspective consumers these practices are still problematic as retailers engage in some of the practices that are considered related to TSCs when done by manufacturers.

In terms of product composition, retailers stated that there are fewer differences for private label products compared to A-brand products. As explained before, different composition can be used as practices related to TSCs. However, retailers explained that this is not the case and they try to avoid differences in composition as much as possible to simplify the production process; a similar argument used by manufacturers against the possibility of composition differences for their products. The JRCs study on DC-SIP, however, did find differences also in private label products, even though the study specifically states its findings cannot be generalised to all European private label products.[88] Nevertheless, it should be noted that for international retail chains, their private label products are not subject to an EU-wide strategy, but usually produced by different local suppliers according to the interviewed retailers. One retailer estimated that only 15% of private label products are produced abroad. Some interviewed retailers did mention slight differences in the content of private label products due to the use of different base ingredients from various producers.

[87] See, for instance: European Central Bank, 2015 https://www.ecb.europa.eu/pub/pdf/other/art01_eb201501.en.pdf

[88] European Commission, Results of an EU wide comparison of quality related characteristics of food products, 2019, https://ec.europa.eu/jrc/en/publication/results-eu-wide-comparison-quality-related-characteristics-food-products

Another interesting finding is that TSCs might be less significant for those product categories where private label products generate a significant proportion of sales. This can also differ from country to country. For example, research shows that the overall volume share of private label products ranges from below 20% in Italy to above 40% in Spain.[89] The proportion of private label product varies also from one product group to another. For example, in Italy the private label share is the highest in fruit and vegetables (33.3%), followed by frozen foods (29.7%), fresh food (26.6%), home care (22.9%), personal care (13.9%) and beverages (8.1%).[90] The situation is very different in Belgium, where private label products have often more than twice the market share compared to Italy.[91] However, across product categories, the same patterns are visible as in Italy: it is most common in fresh products (71.9%), followed by frozen products (56.8%), bakery products (53.9%), dairy (41.9%), undefined groceries (38.1%), hot beverages (35%), non-alcoholic beverages (24.6%) and alcoholic beverages (9.7%), suggesting that private label has stronger market position usually in the same product groups in different markets. The analysis of price data collected in selected border regions, which is presented in section 5.2.3, seems to support the finding that TSCs are not used for private label products, as their prices differ to a lesser extent, or the differences follow different patterns than for branded products.

4.3 Summary of the findings

The different actors along the value chain have different perceptions and understanding of what constitute TSCs and what the effects of these are. According to retailers, most TSCs originate from large international manufacturers with strong market positions and popular products of which they are the sole producers, and which often have no direct substitutes. For these products, retailers and wholesalers are heavily dependent on the manufacturers as there is a high brand loyalty from consumers. Most importantly, retailers and wholesalers consider producers to engage in practices related to TSCs for these products (e.g. price discrimination and product differentiation in terms of composition and packaging); the main rationale behind this is profit maximisation for the manufacturers by tailoring their offer to each separate market (this is known as the optimal variety choice theory in economic literature).

The qualitative assessment shows that operators further downstream in supply chain (retailers and wholesalers) are most affected by TSCs. Smaller retailers engage with cross-border supply very limitedly making TSCs less relevant for them. As soon as retailers and wholesalers reach a certain size, which makes it economically viable for them to engage in parallel imports (i.e. they can bear the costs for relabelling and related activities), TSCs pose barriers to different actors disproportionately. Retailers and wholesalers with a weaker market position and facing more competition often have less negotiating power with manufacturers and, consequently, operate mostly in more localised supply chains, which makes them more vulnerable to TSCs. On the other hand, retailers and wholesalers with stronger market positions and facing less competition have stronger negotiating competition or can set up alternative supply channels to avoid most TSCs

Overall, wholesalers reported to be subject to TSCs in the same way as retailers and the interviews did not provide examples of wholesalers using TSCs of their own towards retailers unless they are required to apply TSCs on behalf of the manufacturer. The manufacturers denied posing TSCs when directly asked the question. As the products of large manufacturers are often sold by national distribution offices the

[89] https://www.statista.com/study/45155/the-market-for-private-label-in-western-economies/
Belgium: Gondola, The Big Picture: Aller Over Belgische Consumptie in cijfers, 2017, https://www.gondola.be/nl/academy/nieuws/big-picture-alles-over-belgische-consumptie-cijfers
https://www.statista.com/statistics/516574/store-brands-market-share-in-germany/
[90] https://www.statista.com/statistics/869237/private-labels-market-share-by-segment-in-italy/
[91] https://www.statista.com/statistics/893574/private-label-market-share-in-belgium-by-product-category/

product availability can vary due to sales practices. The market conditions and customer preferences also heavily shape the availability of products, which was also acknowledged by other stakeholders.

Some aspects of TSCs can be also explained by regulatory requirements which differ widely between Member States. National labelling and language requirements are the most common regulatory issues that impact cross-border product flows. However, some retailers claim that these regulatory barriers provide a platform conducive to the introduction of TSCs. All stakeholders did acknowledge that labelling regulation does limit cross-border supply even without using it to impose TSCs. In addition to product information requirements, some manufacturers and retailers identified other regulatory barriers in specific product groups, which limit the cross-border product availability. For example, a lack of harmonisation in non-food product information, or specific national requirements as to the composition of certain products (e.g. alcohol beverages) can cause product differences or hinder retailers' cross-border purchases. Similarly, differing container return schemes cause packaging differentiation, which may be used by manufacturers to apply TSCs.

Finally, based on the collected information, no relation between TSCs and private label products can be distinguished. On the one hand, retailers claim that they do not restrict sourcing within their own company, while on the other hand, the collected information shows that they differentiate their private label products across countries, in terms of prices or other aspects (i.e. these are practices considered related to TSCs when performed by manufacturers).

5 Impacts of TSCs

The chapter focuses on the impact of TSCs in the FMCG segments and the likely impact of the withdrawal of the TSCs. The next section sets out the aims and objectives for this chapter. The second section presents the results of the analysis undertaken to assess the impact of TSCs and the third section provides a summary of the main findings.

5.1 Aims and objectives

This chapter assesses:

- The impact of existing TSCs on retailers, wholesalers and consumers using information collected through the stakeholder survey, data from Euromonitor, Eurostat and price data collected specifically for the present study;
- The impact of the removal of TSCs on retailers, wholesalers and consumers using information collected through the stakeholder survey; and
- The impact of the removal of TSCs on the environment using information collected through the stakeholder survey.

5.2 Results

5.2.1 Examples from the literature

Before discussing the study's findings on the impact of TSCs, it is worth noting that a study from the Belgian Prix Observatory published in 2018 found that for identical products in supermarkets, Belgian consumers paid in 2017 on average 13.4% more than in Germany, 12.9% more than in the Netherlands and 9.1% more than in France[92]. Among the different sources of price differentiation, it was found that TSCs could play a role with respect to less favourable purchase prices paid by retailers. Such practices could lead to market segmentation and result in significant differences in wholesale prices between countries, in turn resulting in higher consumer prices[93]. Based on the evidence of the latter study and of the Benelux Study in 2018, the Belgian Central Economic Council in a position paper refers to the restrictions supposedly being imposed in the Belgian market by suppliers preventing resellers from obtaining supplies freely in the countries of their choice. The Council urged for increased attention to be given to these practices, which it says are contrary to the rules of the Single Market[94].

The results are presented for the impacts of existing TSCs on retailers, wholesalers and consumers, impacts of TSCs on consumers and potential impacts of eliminating TSCs.

5.2.2 Impacts of existing TSCs on retailers, wholesalers and consumers

The present section provides qualitative information on the impact of TSCs drawn from the responses of the survey participants (manufacturers, retailers and wholesalers) and in-depth interviews (manufacturers, retailers and wholesalers). In total, 46 in-depth interviews have been performed and 56 (out of 112) survey participants completed the part of the survey focusing on the impact of TSCs, including 30 retailers, nine wholesalers and 17 manufacturers. The breakdown by number of respondents form each stakeholder group and for each survey question is provided in Table 19.

Overall, the results of the stakeholder survey suggest that the TSCs impact mainly on product price and availability (Table 19).

[92] Institut des comptes nationaux (2018), Analyse des prix Rapport Annuel 2017 de l'Institut des comptes nationaux, SPF Economie, Brussels, 13 mars 2018.

[93] https://news.economie.fgov.be/164578-produits-de-marque-plus-chers-dans-nos-supermarches

[94] https://www.ccecrb.fgov.be/dpics/fichiers/2019-07-16-11-43-19_doc191256fr.pdf

A large majority of the retailers and wholesalers having responded to the stakeholder survey are of the view that:

- The prices of products subject to TSCs are higher than they would be without TSC (28 out of 39 survey respondents); and
- The products subject to TSCs are not available to retailers (26 out of 39 survey respondents).

Moreover, a small majority is of the opinion that:

- Consumers in border regions cross the border to buy products subject to TSCs in their country (22 out of 39 survey respondents).

Finally, less than half of the survey respondents believe that:

- The composition of the products subject to TSCs that you sell in your country differs from that of the same products sold elsewhere in the EU (17 out of 39 survey respondents);
- The packaging of the products subject to TSCs that you sell in your country differs from that of the same products sold elsewhere in the EU (17 out of 39 survey respondents);
- Consumers choose to buy online from abroad products subject to TSCs in their home country (16 out 39 survey respondents);
- The products subject to TSCs are sold by fewer retailers (14 out of 39 survey respondents); and
- There is less product innovation in categories subject to TSCs (11 out 39 survey respondents).

Table 19: Impact of TSCs from online survey

		Retailer	Wholesaler	Total
The prices of products subject to TSCs are higher than they would be without TSC				
	No answer	7	1	8
	Do not know	0	1	1
	No	2	0	2
	Yes	21	7	28
	Total	30	9	39
The products subject to TSCs are not available at retailers				
	No answer	6	0	6
	Do not know	1	1	2
	No	3	2	5
	Yes	20	6	26
	Total	30	9	39
There is less product innovation in categories subject to TSCs				
	No answer	7	0	7
	Do not know	5	3	8
	No	9	4	13
	Yes	9	2	11
	Total	30	9	39
The products subject to TSCs are sold by fewer retailers				
	No answer	10	0	10
	Do not know	6	1	7
	No	5	3	8
	Yes	9	5	14
	Total	30	9	39
The composition of the products subject to TSCs that you sell in your country differs from that of the same products sold elsewhere in the EU				
	No answer	9	1	10
	Do not know	6	1	7
	No	3	2	5
	Yes	12	5	17
	Total	30	9	39
The packaging of the products subject to TSCs that you sell in your country differs from that of the same products sold elsewhere in the EU				
	No answer	10	1	11
	Do not know	**3**	**1**	**4**
	No	**4**	**3**	**7**
	Yes	**13**	**4**	**17**

	Total	**30**	**9**	**39**
Consumers in border regions cross the border to buy abroad products subject to TSCs in their country				
	No answer	8	1	9
	Do not know	4	2	6
	No	2	0	2
	Yes	16	6	22
	Total	30	9	39
Consumers choose to buy online from abroad products subject to TSCs in their home country				
	No answer	9	0	9
	Do not know	9	3	12
	No	2	0	2
	Yes	10	6	16
	Total	30	9	39

Source: Online survey carried out by the contractor (13/03/2020)

All types of TSCs and related practices that enable TSCs are perceived by retailer and wholesaler stakeholders as impacting product prices. For example, in the case of each TSC/practice covered by the stakeholder survey, a majority of retailer and wholesaler survey respondents reported that prices of products subject to TSCs are higher than they would be without TSC (Table 20). The same pattern is observed in the case of the TSCs impact on "products subject to TSCs are not available at retailers" and the type of TSCs identified by retailer and wholesaler survey participants (Table 21).

Table 20: Number of survey respondents indicating that prices of products subject to TSCs are higher than they would be without TSCs by type of TSC they identified in the survey

		Retailer	Wholesaler	Total
Refusals to supply certain products				
	No answer	5	1	6
	Do not know	0	0	0
	No	2	0	2
	Yes	16	2	18
	Total	23	3	26
Quantitative limitations (including supply quotas)				
	No answer	1	0	1
	Do not know	0	0	0
	No	0	0	0
	Yes	8	3	11
	Total	9	3	12
Restrictions to supply promotions/restrictions on promotions of certain products				
	No answer	2	2	4
	Do not know	0	0	0
	No	0	0	0
	Yes	5	5	10
	Total	7	7	14
Destination obligation (i.e. obligation to limit the supply to only a certain market/area)				
	No answer	0	1	1
	Do not know	0	0	0
	No	1	0	1
	Yes	11	3	14
	Total	12	4	16
Differentiation of products in terms of content				
	No answer	5	0	5
	Do not know	0	0	0
	No	1	0	1
	Yes	7	3	10
	Total	13	3	16
Differentiation of products in terms of packaging (e.g. national language labelling and/or refusal to put multi-language labels, packaging size)				
	No answer	2	0	2
	Do not know	0	0	0
	No	2	0	2
	Yes	12	3	15
	Total	16	3	19

Source: Online survey carried out by the contractor (13/03/2020)

Table 21: Number of survey respondents indicating that the products subject to TSCs are not available at retailers by type of TSC they identified in the survey

		Retailer	Wholesaler	Total
Refusals to supply certain products				
	No answer	3	0	3
	Do not know	1	0	1
	No	1	0	1
	Yes	18	3	21
	Total	23	3	26
Quantitative limitations (including supply quotas)				
	No answer	1	0	1
	Do not know	0	0	0
	No	2	0	2
	Yes	6	3	9
	Total	9	3	12
Restrictions to supply promotions/restrictions on promotions of certain products				
	No answer	2	0	2
	Do not know	0	0	0
	No	1	0	1
	Yes	4	0	4
	Total	7	0	7
Destination obligation (i.e. obligation to limit the supply to only a certain market/area)				
	No answer	0	0	0
	Do not know	0	0	0
	No	3	0	3
	Yes	9	4	13
	Total	12	4	16
Differentiation of products in terms of content				
	No answer	3	0	3
	Do not know	1	0	1
	No	1	1	2
	Yes	8	2	10
	Total	13	3	16
Differentiation of products in terms of packaging (e.g. national language labelling and/or refusal to put multi-language labels, packaging size)				
	No answer	2	0	2
	Do not know	1	0	1
	No	2	1	3
	Yes	11	2	13
	Total	16	3	19

Source: Online survey carried out by the contractor (13/03/2020)

Interestingly, the retailers' and wholesalers' views about the impact of TSCs on prices, product availability and consumer cross-border shopping is independent of whether or not these stakeholders tried to source products in another EU country but were refused based on their geographical location (Table 22).

Table 22: Number of survey respondents reporting various TSC impacts and having been unable to obtain supplies outside their home country

Were there any instances where you tried to source products in another EU country where you were refused based on your geographical location?				
The prices of products subject to TSCs are higher than they would be without TSCs		No	Yes	Total
	No	0	1	1
	Yes	8	17	25
	Total	8	18	26
The products subject to TSCs are not available at retailers	No	3	1	4
	Yes	5	18	23
	Total	8	19	27
Consumers in border regions cross the border to buy abroad products subject to TSCs in their home country	No	0	2	2
	Yes	5	12	17
	Total	5	14	19

Source: Online survey carried out by the contractor (13/03/2020)

In general, the in-depth interviews corroborate the findings from the online survey. For example, packaging sizes and brand names are also said to vary across countries for some products subject to TSCs. But the most frequently mentioned impact of TSCs is higher purchasing prices for retailers. Retailers mention that they have no choice but to pass on these higher costs, which negatively impact consumers. At the same time, retailers suggest that lower purchasing prices in the absence of TSCs would be passed on to consumers due to the high competition in the FMCGs market. It is even thought that competition among retailers would increase without TSCs. One retailer estimates that consumer prices would reduce by up to 30% without TSCs. However, wholesalers doubt that retailers would pass on cost reductions and manufacturers point out that, while prices might decrease in some regions, other regions are likely to face higher prices in the absence of TSCs.

From an operational and supply-chain perspective, most retailers say that without TSCs they would seek to source their products at the European level. The main success driver for their business is price efficiency, which is why they always look to buy from the cheapest source. In a world without TSCs that could mean streamlining supply chains and procuring products for several countries from a single sales point of the producer instead of purchasing the products from the producer's sales office or an intermediary in each country. According to some retailers, sourcing products internationally is already being done for private label products, which do not face any constraints.

The national purchase structures are, thus, said to cause unnecessary complexity for retailers. On the other hand, one manufacturer mentioned that manufacturers could face inefficiencies when supply is centralised. Some manufacturers also suggested that they have national sales offices in all countries to mirror the retailers' purchase practices. The available information does not provide robust, unambiguous information on whether the manufacturers or the retailers are at the source of the decentralised purchase/sales system.

Some concern has also been raised about retailers that operate only in one country as international retailers may be able to achieve lower purchase prices than national retailers when the former can pool purchases for several countries in which they operate.

Another impact of TSCs that was mentioned frequently in the in-depth interviews is the restricted access to some products and limitations on sales volumes that, according to retailers, prevent them from reacting quickly to changes in demand. Retailers noted that they cannot always buy all products that they would like because of TSCs. At the present time, retailers search for alternative suppliers or substitutes for certain products. These are often only available at higher costs and the result is greater complexity in the procurement process. In the absence of TSCs, retailers would expect the range of products (SKUs) to increase. However, from the perspective of manufacturers, increasing the range of products accessible for countries that currently face restrictions would increase inefficiencies.

Furthermore, some concerns specific to certain regions within Europe were raised. For example, retailers from Central European countries mention that they face the DC-SIP issue and retailers in the Benelux countries stated that they are particularly affected by TSCs due to the geographic proximity to other countries where retailers can source the same products at lower prices.

However, a wholesaler indicated that TSCs are important to build a brand and protect investments. This is in line with a response from a manufacturer that noted that abandoning TSCs would limit their capacity to innovate. Furthermore, manufacturers emphasised the importance of the current distribution system that allows them to have control of distribution and labelling to satisfy local legislation and ensure consumer safety. Retailers recognised that labelling costs in addition to country-specific tariffs and different marketing activities are sources for varying prices across countries.

5.2.3 Impacts of TSCs on consumers

As a first step in addressing quantitatively the issue of the potential impact of the TSCs on consumer prices, the first section below presents a descriptive statistical analysis of observed price data provided by Euromonitor and a second section presents a descriptive analysis of the prices collected in several border regions.

In a second step, several econometric analyses were undertaken to identify the potential impact of TSCs on consumer prices. Consumer prices from Euromonitor and Eurostat are the focus of these econometric analyses. The results of this work are discussed in subsequent sections[95].

5.2.3.1 Descriptive statistical analysis of the data from Euromonitor

The analysis below uses price data provided by Euromonitor International. These prices are average national retail prices by distribution channel.

The dataset obtained from Euromonitor Prices includes observed[96] prices for various brands across a range of product categories and countries. The product categories include 'beauty and personal care', 'home care', 'packaged food' and 'bottled water'. The price points are from 2017 for all products except for soap, in which case the data refers to 2018 prices[97].

Prices for A Brands in these product categories have been sampled in 11 countries – namely in Austria, Belgium, Croatia, Czechia, Denmark, Estonia, France, Portugal, Romania, Slovakia and the United Kingdom.[98] Luxembourg and the Netherlands are not included in the sample, as Euromonitor does not hold any or only very limited information on these countries.

In addition to the price points, the dataset provides the following information on each observation:

- Package size;
- Package type;[99]
- Multipack; and
- Outlet store.[100]

[95] The data provided by Euromonitor does not lend itself for an econometric analysis, as it does not include a sufficiently large sample of perfectly identical brands across countries.

[96] To gather data, Euromonitor applies a rigorous methodology to collect all relevant published information, perform store checks and foodservice outlet visits and speak with all major actors in the supply chain to cross-triangulate all available sources and counteract the weaknesses each one possesses.

[97] The analysis draws on different years to maximise the number of available observations. The difference in the reference year does not have an impact on our analysis, given that prices are only compared within product categories in the same year.

[98] The United Kingdom was in included in the analysis of product specific price differences as data were readily available.

[99] Package types include e.g. PET bottles, brick liquid cartons, flexible packaging, paper-based containers, metal tins.

[100] Outlet stores include e.g. supermarkets, discounters, internet retailing, drugstores/pharmacy, mass merchandisers, hypermarkets.

Data cleaning approach

To compare prices for the same brands across countries, one must ensure that the labelling and categorisation of brands is the same for identical items. Therefore, several steps have been taken to clean the data. More specifically:

- In some cases, identical items were recorded differently. These cases were manually re-categorised and relabelled consistently. Examples of these instances include:
    - Identical brands categorised in different subcategories
        - Subcategories are harmonised if it is possible to determine that the items are identical
        - E.g. 'Cini minis' appeared in the subcategories 'flakes' and 'children's breakfast cereals'[101]
    - Varying brand names
        - Brands are harmonised if it is possible to determine that the items are identical
        - E.g. 'Ariel 3-in-1 Pods' and 'Ariel 3-in-1'
- Observations were excluded from the sample if they referred to:
    - Brands that are a group of multiple brands
        - E.g. 'Other Kellogg's brands' in the subcategory 'children's breakfast cereals'
    - Brands that do not provide enough information to be unequivocally identified
        - E.g. 'Nestlé' in the subcategory 'flakes'

Following the data cleaning, brands were matched across and within countries that exhibit the same combination of subcategory and brand label[102]. This is a very conservative approach because some brand labels vary only slightly (e.g. by the addition of a flavour, smell or ingredient in the brand name). Since it is not possible to determine whether these product characteristics give rise to price differences, they are treated as non-identical branded products in the present analysis.

The package size is harmonised by converting it into grams or millilitres for each product. Unit prices per kilogram or litre are calculated based on the local package price and the package size. To compare prices across countries, the price has been converted from the local currency into euros using the exchange rates provided by Euromonitor. As already noted above, the price points are from 2017 for all products except for soap whose price data refer to 2018 prices. Annual exchange rates from the relevant years were used in the conversion of domestic-denominated prices to euro-denominated prices.

For the purpose of comparability across products, the study does not report absolute prices but relative prices, by indexing the lowest price with a base value equal to 100.

Identification of identical products

The Euromonitor dataset has a total of 2,097 observations. These observations refer to branded products and to private label brands. Since private label brands are manufactured and distributed by the same retailer, the occurrence and impact of TSCs are likely to differ between these two brand categories. The study takes this into account by analysing the observations of branded products and private label brands separately. Following the data cleaning process, the dataset of branded products holds 1,690 observations, which corresponds to 1,165 unique products, out of which 134 are recorded in at least

[101] A brand like Dove appearing e.g. in the subcategories liquid soap and bar soap would not be harmonised.

[102] A fuzzy matching algorithm has been used that disregards differences in the use of 'spaces' and special characters.

two countries. The data for private label brands is more limited, as it includes only 164 observations for 130 unique products.

When comparing prices across countries, it is important to compare like for like. This means that it must be considered that products are likely to have different prices depending on e.g. the package size, the outlet store and whether they are sold in multipacks[103]. Hence, the analysis only considers products of a specific brand to be perfectly identical when they are sold in the same type of outlet store and have the same:

- Product-subcategory combination
- Package size
- Multipack size
- Package type

Branded products

In a first instance, this section analyses the sub-sample of branded products. Table 23 shows the number of identical (branded) products that can be identified across countries based on the products characteristics mentioned above. The first column shows the number of products that have the same product-subcategory classification[104]. The second/third/fourth/fifth column show the number of identical products that have the same packaging size/multipack/package type/outlet store in addition to the same product subcategory combination. The last column shows the number of products that are perfectly identical across all product characteristics (in line with the above definition).

Table 23: Number of branded products by the number of countries in which they are collected

Number of countries	Product - subcategory	Package size	Multi-pack	Package type	Outlet store	Perfectly identical
1	1031	1428	1099	1189	1127	1561
2	56	55	63	65	69	40
3	28	18	27	25	19	6
4	14	12	11	13	7	5
5	9	4	13	12	4	1
6	3	1	6	3	7	1
7	9	1	9	5	7	
8	6		3	1	6	
9	6	1	1		3	
10	2				1	
11	1					
2 or more	134	92	133	124	123	53

Source: Elaboration of the contractor (2020) based on Euromonitor data

The table illustrates that the dataset includes only one product that is perfectly identical across six countries. In total, there are 53 products that are perfectly identical in at least two countries.

This compares to 134 products with an identical product-subcategory combination (first column) that appear in two or more countries. This highlights that products with identical product-subcategory combinations exhibit a significant variation in other product characteristics, such as package size.

The variation in package size, which seems to be the most frequent variation, may be due to different volumes (e.g. a small versus large container of Persil) or due to marginal size differences across countries. Several observations in the dataset refer to a similar product of a brand in essentially the same size but with only marginal differences. Table 24 provides a few examples of products that exhibit minor variation in the package size across countries – at varying prices. In total, 54 product observations have a package

[103] Prices are likely to be lower e.g. for larger package sizes, in discounters and for multipacks.

[104] E.g. the dataset includes 10 products with the same product-subcategory combination that are observed in seven countries.

size that is within 15% of the package size of the same product. This number relates to 664 observations for branded products that have at least two observations in the dataset for the same multi-pack size.

Table 24: Variation in package size across countries

Countlines – Kit Kat			Drinking Yoghurt – Activia			Concentrated Powder Detergents - Persil		
Country	Package size	Price	Country	Package size	Price	Country	Package size	Price
Slovakia	40	13.75	Austria	300	3.3	Portugal	2,990	2.34
Croatia	40	16.52	Slovakia	310	2.55	France	3,150	3.68
Denmark	41	35.84	Czechia	310	2.7	United Kingdom	3,180	2.34
Romania	41.5	10.63	Belgium	320	2.72	Portugal	3,410	2.64
Portugal	41.5	21.45	Romania	320	1.87	Slovakia	3,500	2.57

Note: Price is given per package size

Source: Elaboration of the contractor (2020) based on Euromonitor data

In the first instance, the analysis treats the products with minor differences in package size as non-identical products.

To increase the number of observations in the sample, some of the conditions defining perfectly identical products could be relaxed. One possibility would be to treat observations that differ by up to 15% in the package size as identical products[105]. Other options include disregarding differences in the multipack or the package type variables across otherwise identical observations.

Table 25 shows a range of scenarios for defining identical products as well as the resulting number of products in the sample. A '-' indicates that identical matches between observations are required, whereas 'X' indicates that observations with differences in this variable are treated as identical.

Scenario 1a (perfectly identical observations) is the baseline, for which the cross-country price comparison is presented in the next section.

Table 25: Variation in package size across countries

	Brand	Subcategory	Outlet	Package type	Multipack	Package size	Sample size
Scenario 1a (Baseline)	-	-	-	-	-	-	53
Scenario 1b	-	-	-	-	-	+/-15%	68
Scenario 2a	-	-	-	-	X	-	61
Scenario 2b	-	-	-	-	X	+/-15%	76
Scenario 3a	-	-	-	X	-	-	68
Scenario 3b	-	-	-	X	-	+/-15%	83
Scenario 4a	-	-	-	X	X	-	74
Scenario 4b	-	-	-	X	X	+/-15%	89

Source: Elaboration of the contractor (2020) based on Euromonitor data

Private label products

Following the analysis of branded products, this section identifies identical products in the sub-sample of private label brands. Similar to Table 23, the table below shows the number of identical products that can be identified across countries based on the products characteristics mentioned above.

[105] Given that the prices are normalised for package size, we can compare the prices across different sizes.

Table 26: Number of private label products by the number of countries that they are collected in

Number of countries	Product - subcategory	Package size	Multi-pack	Package type	Outlet store	Perfectly identical
1	102	142	115	121	111	152
2	22	11	17	17	19	6
3	6		5	3	5	
2 or more	28	11	22	20	24	6

Source: Elaboration of the contractor (2020) based on Euromonitor data

The table illustrates that the dataset includes only six products that are perfectly identical across two countries. The low number of countries, in which identical products occur, is not unexpected, as grocery stores and sometimes also their private label brands differ across countries. Due to the lack of data, the study will not analyse private label brands in more detail. The following cross-country price analysis is focussing on the sub-sample of branded products only.

Cross-country price analysis

Table 27 – Table 32Table 31 provide a cross-country comparison of the 53 perfectly identical (branded) products by product category (namely, confectionary, dairy, personal care products, household care products and breakfast cereals[106]). The prices in the tables are normalised and show the unit prices in EUR for 1kg/litre of the respective brand. All product characteristics (e.g. package size, package type, outlet, etc.) are identical across countries within each brand-subcategory combination.

The analysis in tables 45 to 50 and Figure 7 is performed on product specific retail price data collected by Euromonitor International from a sample of products that is not representative of the whole consumer basket nor of the specific product categories. As a result, the interpretation of the results is limited.

The countries with the lowest price for each branded product are indexed at 100 and highlighted in green. The most expensive countries are highlighted in pink. Some countries (such as Austria, Belgium and Denmark) tend to have a higher price for products of particular category in comparison to others. These are also the countries in which, according to some retailers, purchase prices are much higher than in neighbouring countries.

Table 32 summarises this finding by listing the number of times that a country exhibits the highest or lowest price for a particular product (within the sample). Given that these numbers are partially driven by how often prices were observed by Euromonitor in a particular country, the table also reports the count of having the highest and lowest price as the share of the total number of price observations per country.

Prices are particularly high in Denmark, as the price is the highest across countries for every product observed in Denmark. Products are relatively cheap in Romania, the UK and France, where the observed prices have been the cheapest in more than 60% of the observed prices for each country.

[106] Soft drinks are not included as a product category, as there are no perfectly identical matches in the data. The data only contains information on bottled water within the soft drinks' category.

Table 27: Cross-country price comparison in the category 'confectionary'

Subcategory	Brand	Austria	Belgium	Croatia	Czechia	Denmark	Estonia	France	Portugal	Romania	Slovakia	United Kingdom
Countlines	Lion				100	508.6				106	121.1	
Countlines	Snickers	275			120.8	371	100					
Countlines	Bounty				109.1	378.4				100		174.4
Countlines	Milky Way				125.3					100	125.7	
Countlines	Lindt Hello	100						115.1				
Countlines	Kinder Bueno	100							131.6			
Countlines	Twix	100				142.3						
Countlines	Mars					181.2						100
Countlines	Kit Kat								201.8	100		
Countlines	Nestlé Nuts	106.4	100									
Countlines	Mars				135.4					100		
Tablets	Ritter Sport	119.4				214.4	210.2	138		134.7	100	
Tablets	Milka	153.7	126.6		150.8				192.5	100		
Tablets	Kinder Chocolate	180.8			113.7				214.6	100		
Tablets	Lindt Excellence	124.3			201.4			100				
Tablets	Lindt				100	123.7						
Tablets	Orion				100						149.7	
Tablets	Toblerone	227.2								100		
Tablets	Lindt		119.7							100		

Source: Elaboration of the contractor (2020) based on Euromonitor data from 2018 or 2017

Table 28: Cross-country price comparison in the category 'dairy'

Subcategory	Brand	Austria	Belgium	Croatia	Czechia	Denmark	Estonia	France	Portugal	Romania	Slovakia	United Kingdom
Flavoured Yoghurt	Activia							100				196.6
Plain Yoghurt	Activia	227.6			100							
Flavoured Yoghurt	Activia								298.6		100	
Drinking Yoghurt	Actimel							109.8			100	
Drinking Yoghurt	Activia		145.5							100		
Drinking Yoghurt	Yakult							118.3				100
Shelf Stable Milk	Lactel		161.2					100				
Drinking Yoghurt	Activia				105.9						100	

Source: Elaboration of the contractor (2020) based on Euromonitor data from 2018 or 2017

Table 29: Cross-country price comparison in the category 'personal care'

Subcategory	Brand	Austria	Belgium	Croatia	Czechia	Denmark	Estonia	France	Portugal	Romania	Slovakia	United Kingdom
Bar Soap	Palmolive			110.1			100					
Bar Soap	Dove	128.7			100							
Liquid Soap	Fa				132.2		100					
Liquid Soap	Dove	100			103.8							
Standard Shampoos	Garnier Fructis	114.5			100							

Source: Elaboration of the contractor (2020) based on Euromonitor data from 2018 or 2017

Table 30: Cross-country price comparison in the category 'household care'

Subcategory	Brand	Austria	Belgium	Croatia	Czechia	Denmark	Estonia	France	Portugal	Romania	Slovakia	United Kingdom
Concentrated Liquid Detergents	Ariel			142.6					177.6		100	
Concentrated Liquid Detergents	Ariel									100	132.1	
Fine Fabric Detergents	Woolite			168.9	100							
Hand Dishwashing	Fairy						160.9					100

Source: Elaboration of the contractor (2020) based on Euromonitor data from 2018 or 2017

Table 31: Cross-country price comparison in the category 'breakfast cereals'

Subcategory	Brand	Austria	Belgium	Croatia	Czechia	Denmark	Estonia	France	Portugal	Romania	Slovakia	United Kingdom
Children's Breakfast Cereals	Nesquik	122.6				187.2			104.2			100
Children's Breakfast Cereals	Lion	122.8										100
Children's Breakfast Cereals	Cookie Crisp								109.9			100
Children's Breakfast Cereals	Kellogg's Frosties	100				130.3						
Children's Breakfast Cereals	Kellogg's Rice Krispies					174.2		100				
Children's Breakfast Cereals	Cheerios					144.1			100			
Children's Breakfast Cereals	Cini Minis	102						100				
Children's Breakfast Cereals	Chocapic									109.6	100	
Flakes	Kellogg's Corn Flakes		103			211.3		100				
Flakes	Fitness	121.5				134.7			100			
Flakes	Fitness									100	198.5	
Flakes	Kellogg's Special K							100				106.5
Hot Cereals	Quaker Oats		151.1									100
Hot Cereals	Emco Expres Ovesna Kase				100						109.3	
Muesli and Granola	Vitalis	114.5			100							
Other RTE Cereals	Weetabix	138						100	126.4			
Other RTE Cereals	Kellogg's All Bran		133.1					100				

Source: Elaboration of the contractor (2020) based on Euromonitor data from 2018 or 2017

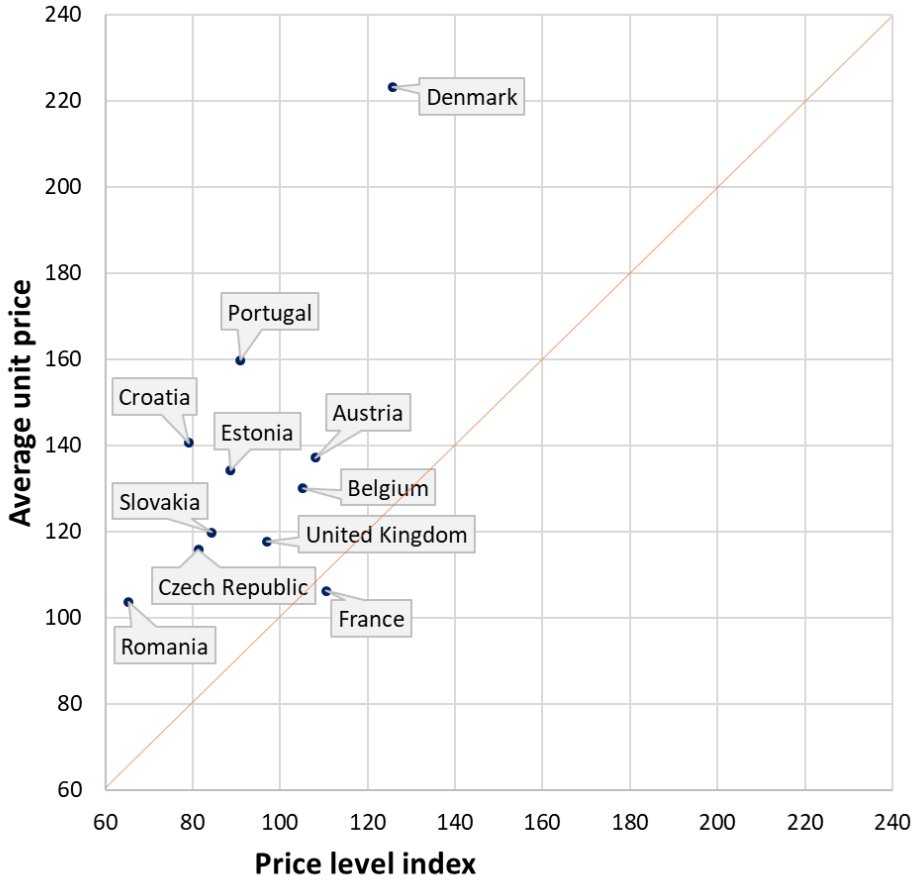
Table 32: Number of lowest and highest price observations per country

	Austria	Belgium	Croatia	Czechia	Denmark	Estonia	France	Portugal	Romania	Slovakia	United Kingdom
Observation	21	8	3	19	13	5	13	11	14	12	10
Lowest value	5	1	0	9	0	3	9	2	11	6	7
Lowest value (%)	24%	13%	0%	47%	0%	60%	69%	18%	79%	50%	70%
Highest value	9	5	2	5	13	1	3	7	1	5	2
Highest value (%)	43%	63%	67%	26%	100%	20%	23%	64%	7%	42%	20%

Source: Elaboration of the contractor (2020) based on Euromonitor data from 2018 or 2017

Variation in the general price levels across countries might be a driver of the cross-country price differences found in the Euromonitor data. In countries with higher general price levels, prices in the observed brands and subcategories would be assumed to be higher as well. The correlation between the Euromonitor price data and the Eurostat price level index for total goods in 2017 is 0.36. This correlation explains part of the cross-country difference in prices of observed branded products by linking it to the difference in the general price level index for goods. The correlation is small but positive. Figure 7 shows the relationship between the two variables by plotting indices for average unit prices and for the general price level. The correlation does not appear to be very strong for most of the countries. Denmark stands out, as it shows a particularly high price level index and average unit price index. When excluding observations from Denmark from the sample of perfectly identical brands, the correlation between Euromonitor price data and the Eurostat price level index drops to 0.14. This indicates that the cross-country differences in prices of the observed branded products do not necessarily follow the pattern of the cross-country differences in the general price levels for goods.

Figure 7: Correlation between average observed unit prices and general price levels[107]



Source: LE Europe analysis of Euromonitor data from 2018 or 2017 and Eurostat (2017)

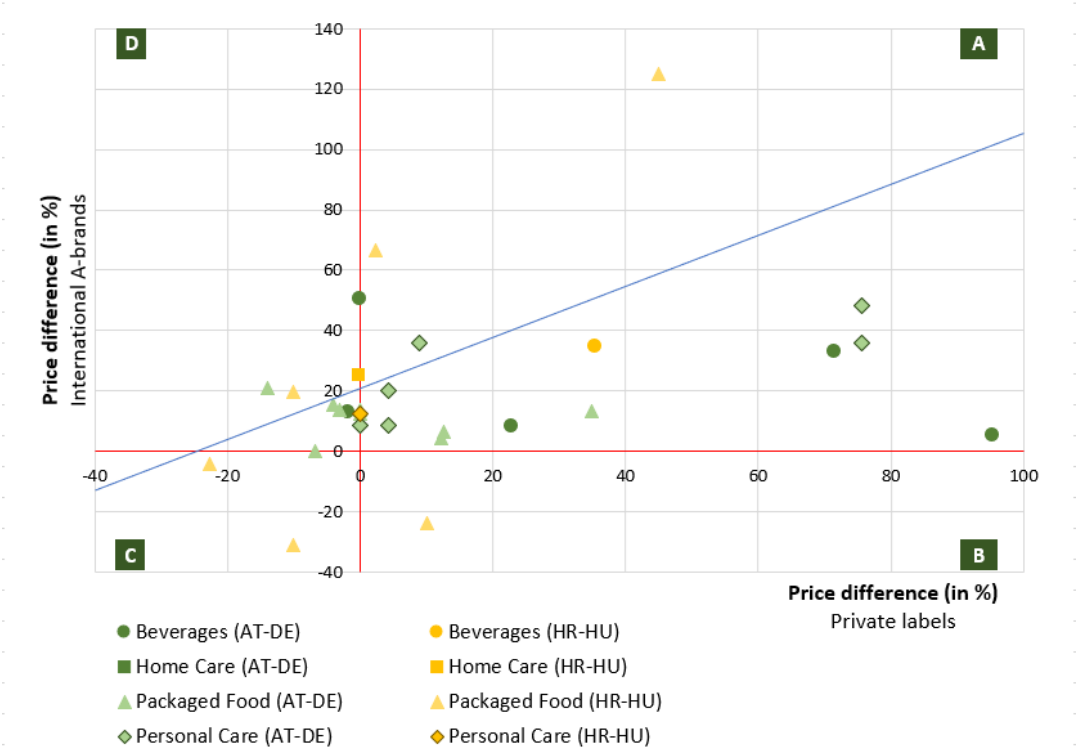
[107] The price level is measured for total goods in 2017 and is indexed at 100 for the EU28. The average unit price index is calculated as the average of the normalised prices for all perfectly identical brands across each country. The prices are normalised by indexing the cheapest observation per identical brand at 100.

5.2.3.2 Descriptive statistical analysis of the price data collected in selected border regions

As part of this study, a mystery shopping exercise was undertaken to collect price information for a range of products from different A, national/regional and own brands (see list of products in Annex V) in three border regions.[108] The price information has been cleaned and, when required, scaled to the same product size. This makes it possible to compare prices for identical products across countries (from stores of the same retail chain). Furthermore, it is possible to analyse whether there is any difference in the cross-country price differences between A-brands and private labels. In total 29 products have been identified, for which price observations have been collected for A-brands and private label brands from two border regions. These observations include 16 unique products[109] from four different grocery chains.[110]

Figure 8 presents the cross-country price differences for A-brands on the y-axis and for private label brands on the x-axis. Each dot in the scatter plot represents two cross-country price differences from four separate price observations. Price differences are expressed in percentage terms and are calculated relative to Germany (blue dots) and to Hungary (green dots). For example, the rightmost blue dot indicates that a jar of A-brand instant coffee from Retailer 2 is 5% more expensive in Austria compared to Germany, whereas a jar of instant coffee from Retailer 2 private label brand is 95% more expensive in Austria compared to Germany.

Figure 8: A-brands and private label brands cross-country price comparison



Source: Contractors' analysis of price information collected from selected retailers

[108] Data has been collected from three border regions. However, due to limited data availability from France, the analysis only draws on data from the border regions Austria/Germany and Croatia/Hungary.

[109] The products include all-purpose cleaner, caramel bar, chocolate bar, cola, can of corn, cornflakes, hand cream, cream cheese, energy drink, hazelnut spread, instant coffee, ketchup, shampoo, soap, spaghetti, toothpaste.

[110] Price information has been collected from Lidl (AT, DE), Norma (AT, DE), Penny (AT, DE), Spar (AT)/Edeka (DE), Spar (HR, HU).

The figure shows that most data points are above the horizontal red line (in quadrants A and D). This means that the A-brand products are consistently more expensive in Austria (relative to Germany) and in Croatia (relative to Hungary). This finding is consistent with information shared by retailers as well as with other analyses conducted in this study. The price difference and geographical proximity of the sampled grocery stores gives consumers an opportunity to arbitrage between the two countries through cross-border shopping.

While A-brands are almost consistently more expensive in Austria and Croatia, the same cannot be said for private label brands. Data points on the left-hand side of the vertical red line indicate private label products that are cheaper in Austria (relative to Germany) and in Croatia (relative to Hungary). However, the percentage price difference is significantly larger for the private label brands that are relatively more expensive in Austria/Croatia (the largest observed price difference is +95.4%), compared to those that are relatively cheaper in Austria/Croatia (the largest observed price difference is -22.8%). This indicates that Austria and Croatia are on average also more expensive for private label brands.

One might expect that A-brands and private label brands are relatively more or less expensive in the same countries. The data points that are in line with this hypothesis are in the quadrants A and C. However, quadrant D shows products, for which the A-brand is more, and the private label brand is less expensive in Austria/Croatia. The opposite relationship is true for quadrant B.

Figure 8 provides yet another insight when looking at the data points in quadrant A. For any product that is directly on the orange line, the percentage cross-country price difference for A-brands and private label brands is the same. The data show that the percentage country price difference of A-brands is larger compared to the price difference of private label brands for all data points above the orange line. The opposite is true for those points below the orange line. Given that there is about an equal share of data points above and below the orange line in quadrant A, it is not possible to say that the percentage price difference is consistently larger for A-brands compared to private label brands (or vice versa). Arbitrage opportunities thus exist equally for A-brands as well as for private label brands.

5.2.3.3 Econometric analysis of the impact of TSCs on prices paid by consumers

Due to a lack of data, there seems to exist no publicly available literature which comprehensively assesses differences in purchase prices paid by retailers and relates any observed differences to the existence of TSCs. There exists some literature on the extent to which more generally retailers pass on higher costs to consumers, mainly higher import costs following a depreciation of the domestic currency. In this regard, a 2014 report[111] noted that a thorough review of the relevant literature shows that "cost pass-through by a business differs depending on whether the cost change is idiosyncratic or industry-wide; that the extent of cost pass-through by a business depends on the responsiveness of the demand and supply conditions it faces; and that cost pass-through varies with the degree of competition between businesses up and down the supply chain". (OFT 2014). The same report also notes that "in summary, the available evidence reveals a wide range of pass-through rates or elasticities. Absolute industry-wide pass-through can be as low as 20% but can also reach well over 100%. Pass-through elasticities may fall close to zero but in some cases, they come close to one. However, there is not enough empirical evidence to tie these variations in pass-through to specific market features, as predicted by the

[111] OFT (2014). *Cost pass-through: theory, measurement, and potential policy implications*. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/320912/Cost_Pass-Through_Report.pdf

theory described in the preceding chapters" and conclude that they "are able to draw little by way of solid conclusions in this respect".

Moreover, only very few studies focus on differences in the level of retail prices (i.e. prices paid by consumers) of identical products across industrialised countries.

The most notable study focusing on retail prices in the EU is the 2014 ECB study by Reif and Rumler (op. cit.) which finds that, within the eurozone over the period 2008-2011, "for a small subset of homogenous products (…) price differences across the countries are by an order of magnitude larger than within (20% vs 3.5%). According the Reif and Rumler, about a quarter of the differences between the cross-country and within-country differences in retail prices can be explained by differences in "income levels, tax rates, consumption intensities, population densities and unemployment rates". The most important factor is differences in VAT rates which account for about 10% of the cross-country price differences. The authors do not refer to TSCs as a potential factor but caution that the empirical findings are subject to potential omitted variables effect, measurement error and unobserved heterogeneity across countries. However, an article in the first issue of the ECB Bulletin in 2015 notes that observed differences across eurozone countries in the prices of identical grocery products in 2009 and 2011 may be due, among other factors, to territorial supply constraints.

The econometric analysis addresses this gap in the academic literature by investigating the impact of TSCs on consumer prices by using retail and purchase price data across various Member States. Since the use of various types of TSCs is not public knowledge, the analysis relies on a variable that indirectly quantifies the extent to which product categories are subject to TSCs across countries. To explore the robustness of the results, two different datasets of consumer prices are used in the analysis: product-level (individual retailers) and country-level data (Eurostat). Due to the uncertainty resulting from measuring the impact of TSCs indirectly, the analysis also uses two different methodologies to estimate the TSCs variable based on purchasing prices exceeding a threshold and based on average price levels.

A. Product-level analysis (Retailers' data)

Explanatory variable

Wholesale purchasing prices often vary for retailers across countries, which can give rise to arbitrage. However, TSCs prevent retailers from procuring products from other countries, in which they are sold at a lower price. This can mean that a retailer faces different prices when buying products for stores in two different countries even though they are bought from the same supplier. This cross-country price difference can be used as an indicator for the presence of TSCs: **If purchase prices in country A are more expensive compared to the same products from the same supplier in other countries, one can assume that country A is affected by TSCs**.

This reasoning has been used to create a variable based on product-specific purchase price data provided by some internationally operating retail chains[112]. This data contains information on the prices paid by retailers for the same product in different countries. It can therefore be used to determine:

[112] Purchase price data has been collected from a number of retailers. The different sources show a similar pattern of prices across countries. However, this particular dataset is the most comprehensive one, as it contains more price observations, product categories and countries than all other sources. To ensure consistency and comparability in the data, the explanatory variable for the product-level analysis is based on the information from some retailers only. However, the explanatory variable in the country-level analysis draws on all available sources of purchase price data.

a) whether the purchasing price for a product is particularly high in a country;

b) whether many products in this country are particularly expensive; and

c) whether the number of expensive products in this country differs from other countries.

In more technical terms, these questions can be expressed as:

a) Is product X in country A at least 50%[113] more expensive compared to cheapest countries?

b) What is the share of products in country A that are at least 50% more expensive compared to other countries?

c) *By how much is the share of products in country A that are at least 50% more expensive compared to other countries larger or smaller than the average share across all countries?*

The purchasing price data can be used to calculate questions a), b) and c). The result is a variable that measures the extent to which a particular country is affected by TSCs relative to all other countries. This proxy serves as explanatory variable in the regressions.

The data underlying these explanatory variables includes 829 price observations on 76 different products for eight Member States. The products belong to the categories 'beauty and personal care', 'beer', 'canned goods', 'confectionery and snacks', 'dairy', 'deep frozen', 'edible grocery', 'home care', 'hot beverages', 'non-alcoholic drinks' and 'spirits'.[114]

Econometric specification

The econometric analysis draws on the explanatory variable derived above in order to explain cross-country differences in the Euromonitor retail price data (see section 5.2.3.1 for a description of this data) with the variation in the relative presence of TSCs across countries. **Regressing retail prices on the explanatory variable yields a positive coefficient (see Column 1 in Table 33), which suggests that prices are higher in countries that are subject to relatively more TSCs**.

However, it is important to consider that retail prices are also influenced by several other variables. If these variables are also linked to the explanatory variable, results might be biased in regressions that do not control for these variables. For this reason, it is important to include any variable in the regressions that might be correlated with both the dependent and the explanatory variable. For example, manufacturers point out that different market positions and differences in labour costs across countries can influence purchasing prices and retail prices (AIM, 2013; RBB Economics, 2013).

The control variables used in the analysis are based on the literature (see ECB (2015)). They include variables that control for the regional economy (e.g. GPD per capita, unemployment rate, labour costs), for the concentration of national brand owners (e.g. HHI of owners, number of large and small national owners, market share of the largest national owner, market size) and for the concentration of retailers in a market (e.g. HHI of retail chains, number of retail outlets, market share of largest national retailer, retailer's operating margin). Data for these control variables has been obtained from various sources, such as Eurostat (2017), Euromonitor (2020) and Retail-Index (2018).

When all the control variables are included, the regression specification can be described as follows:

(1) $\Delta\, retail\ price_{i,c} = \alpha + \beta * \Delta\, TSC_{i,c} + \sum_{x=1}^{n} \gamma_x * \Delta\, regional\ variables_{c,x} + \sum_{v=1}^{n} \theta_v * \Delta\, brand\ owner\ market_{i,c,v} + \sum_{w=1}^{n} \pi_w * \Delta\, retail\ market_{c,w} + \varepsilon_{i,c}$

[113] 50% has been set as a threshold to identify countries that are significantly more expensive compared to other countries.

[114] The product categories in the retailer's purchasing price data do not perfectly match the product categories in the Euromonitor retail price data. The assumption has been made that any country-specific findings on purchasing prices are independent of the specific product category.

where:

- $\Delta retail\ price_{i,c}$ is the relative difference in the retail price for product i in country c (relative to its EU average[115]);
- $\Delta TSC_{i,c}$ is the relative difference in the measure of TSCs for product i in country c (relative to its EU average);[116]
- $\Delta\ regional\ variables_{c,x}$ is a vector of variables controlling for the relative difference in regional socio-economic variables (e.g. GDP per capita, VAT[117], population, etc.) (relative to its EU average);
- $\Delta\ brand\ owner\ market_{i,c,v}$ is a vector of variables controlling for the relative indicators reflecting competition in the brand owner[118] market (relative to its EU average)[119];

$\Delta\ retail\ market_{c,w}$ is a vector of variables controlling for the relative indicators reflecting competition in Member States, for which data are available for all variables in the final dataset. This means that a one unit refers to a 1% difference between the value of the variable in a country and the EU average.

Econometric results

Table 33 presents the output to the main regression specification when using product-level retail price data as a dependent variable.

Column 1 presents the output for a parsimonious model that only includes the dependent and the explanatory variable. The other regressions include different sets of control variables. **Column 4 presents the output for the full regression specification and is the preferred model.** For consistency and comparability, the samples are restricted to the same observations across all models.

The findings show that the coefficient on the explanatory variable is positive and statistically significant in all models. **This suggests that a relatively higher presence of TSCs (as represented by relatively higher purchase prices) are associated with relatively higher retail prices. To be more specific, purchase prices that are 1% higher compared to the purchase prices for the EU average are associated with retail prices that are 0.943% higher than the EU average** (Column 4). The estimated effect is noticeably larger once the regression controls for retailer concentration.

From an economic perspective, a positive coefficient is not unexpected, as higher costs are passed on from the retailer to the customer. These findings are in line with the literature on industry-wide pass-through rates (OFT, 2014). However, it suggests that consumers are negatively impacted by suppliers using TSCs. **By controlling for a wide range of variables, the empirical analysis also shows that this effect is not driven by other factors commonly mentioned by suppliers (e.g. labour cost and market position)**.

[115] The EU average in the present analysis refers to the average of EU countries for which data are available for all variables in the final dataset.

[116] The underlying measure of the share of products exceeding 50% of the lowest price is constant across products within one country. However, when calculating the difference to the EU average, the variable becomes product specific because, due to data availability, the EU average is calculated for each product over a slightly different set of countries.

[117] The VAT is product specific, as a reduced VAT has been assigned to all food items and the standard VAT has been assigned to all non-food items.

[118] The variables related to the national brand owner serves as a control variable for the competition in the producer market. An example for a national brand owner is Kellogg Co of Great Britain Ltd, which is the owner of various brands (e.g. Kellogg's Corn Flakes, Kellogg's Coco Pops, Kellogg's Special K, etc.). The structure of national brand owners can differ across countries.

[119] The regression in the country-level analysis does not include variables on the brand owner market, as the available data from Euromonitor is limited to a few product categories only.

Comparing the adjusted R-squared in Column 4 to Column 5 also shows that the TSC variable explains a significant portion of the variation in the retail prices in the models. This highlights the relative importance of the variable. The estimated coefficients of the control variables are generally in line with economic reasoning and with the findings presented in ECB (2015).

Most of the variables controlling for regional socio-economic variation are significant, from a statistical perspective and in terms of their economic impact on the dependent variable, but the direction of their impact is not always intuitive. For example, higher GDP per capita, higher unemployment and a higher population (relative to the EU average) are generally associated with lower retail prices. In the case of the population variable, economies of scale can explain its negative coefficient.[120]

The estimated coefficients for the national A-brand owner concentration and the retail concentration variables are more ambiguous. Some of them indicate that less concentration, which could be considered the same as more competition, is associated with lower retail price (e.g. the negative coefficient for the retailer's operating margin and the HHI – national brand owners), while other variables indicate the opposite (e.g. the positive coefficient for the number of retail chains). However, many of these control variables are highly collinear. This means that part of the correlation is captured by other variables, which affects the coefficient and the level of statistical significance.

Furthermore, it should be noted that the findings cannot be interpreted as necessarily implying a causal relationship because it is not possible to control for unobserved determinants due to the cross-sectional structure of the data. For this reason, the results might be biased due to the omission of some variables. However, the range of control variables on socio-economic regional factors, national owner concentration and retail concentration are very exhaustive (therefore limiting the risk of such bias) and in line with the literature, such as ECB (2015).

[120] The coefficients for these variables are not statistically significant in ECB (2015). For this reason, not too much importance is attributed to these coefficients.

Table 33: Regression results – product-level retail price data (8 countries)

		(1)	(2)	(3)	(4)	(5)
		Retail price	Retail price	Retail price	Retail price	Retail price
	TSC	0.269***	0.404***	1.015***	0.943***	
		(0.0444)	(0.117)	(0.293)	(0.311)	
Regional variables	GDP per capita		0.537	-2.109*	-2.004*	-1.780
			(0.397)	(1.209)	(1.184)	(1.246)
	Unemployment rate		0.133*	-0.756**	-0.855**	-0.779**
			(0.0735)	(0.352)	(0.349)	(0.366)
	Population		0.0174	-0.357**	-0.423**	-0.485***
			(0.0557)	(0.165)	(0.170)	(0.178)
	Labour cost - wholesale, trade, repair		-0.617	0.608	0.651	1.296
			(0.405)	(0.840)	(0.825)	(0.840)
	VAT		0.332**	-0.186	-0.248	0.240
			(0.136)	(0.276)	(0.288)	(0.252)
Retail concentration	HHI - retail chains			0.611	0.164	-0.388
				(0.588)	(0.609)	(0.613)
	Number of retail chains			1.854***	1.530**	0.330
				(0.679)	(0.678)	(0.580)
	Number of retail outlets			0.205*	0.276**	0.144
				(0.123)	(0.134)	(0.133)
	Retailer's operating margin			0.114	-0.233	-1.381***
				(0.532)	(0.548)	(0.417)
National owner	HHI - national brand owners				-0.0783	-0.150
					(0.108)	(0.111)
	Number of large national owners				0.110	0.113
					(0.0916)	(0.0966)
	Number of small national owners (excl. others)				-0.0295	-0.0627
					(0.0441)	(0.0450)
	Market size				-0.0826	-0.0365
					(0.0597)	(0.0609)
	Constant	-0.000166	-0.000188	0.000121	0.000130	-4.40e-05
		(1.861)	(1.758)	(1.687)	(1.640)	(1.729)
	Observations	88	88	88	88	88
	Adjusted R-squared	0.290	0.367	0.417	0.449	0.388

*Source: own elaboration of the contractor (2020), Standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1*

B. Country-level analysis (Eurostat data)

The above analysis is performed on product specific retail price data collected by Euromonitor that is not representative of the whole consumer basket nor of the specific product categories. As a result, the interpretation of the results is limited. To identify the impact of TSCs on product categories more generally, broader price measures must be considered. The country-level analysis, thus, draws on country-wide price level indices (PLIs) compiled by Eurostat, for the categories 'bread and cereals', 'other food', 'alcoholic beverages' and 'non-alcoholic beverages'[121]. The data used in the analysis includes observations for 11 Member States.

The TSC variable

The TSC variable in the product-level analysis draws on the data provided by one retail chain only. Another methodology has been used to measure TSCs for the country-level analysis. The two major differences between the approaches are:

1. The variable for the country-level analysis draws on the purchasing price data provided by five internationally operating retail chains.
2. The variable for the country-level analysis is based on average purchase prices rather than relying on a threshold to identify the share of expensive products.

To be more specific, the average purchase price per country has been calculated for all products in each data source. The averages from the most comprehensive dataset have then been normalised so that the cheapest country takes the value 100. If the average price in a country is 25% higher than the lowest average price, it would take the value 125. Each additional data source has then been added by linking one country that appears in both datasets. Prices for all other countries from this data source are normalised to the linked country.

Like the explanatory variable in the product-level analysis, the average price level in each country is then expressed relative to the average across all countries. The result is the TSC variable that has been used for the country-level analysis.

Econometric specification

The econometric specification now takes the form[122]:

(2) $\Delta\, price\ level\ index_{p,c} = \alpha + \beta * \Delta\, TSC_c + \sum_{x=1}^{n} \gamma_x * \Delta\, regional\ variables_{c,x} + \sum_{w=1}^{n} \pi_w * \Delta\, retail\ market_{c,w} + \varepsilon_{p,c}$

where:

- $\Delta\, price\ level\ index_{p,c}$ is the relative difference in the price level index for product category p in country c (relative to its EU average)

The variables PLI, TSC and GDP per capita are log-transformed. The coefficients estimated in the regression represent a percentage change in the dependent variable in response to a one percent change in the TSC and the GDP variable.

Econometric results

Table 34 presents the output to the main regression specification when using country-specific price level indices as dependent variable.

[121] The product categories in the retailer's purchasing price data do not perfectly match the PLI product categories. The assumption has been made that any country-specific findings on purchasing prices are independent of the specific product category.

[122] This regression does not include any control variables for the brand owner concentration because the underlying data is not product specific.

The estimates of the coefficient of the TSC variable are consistently positive across the parsimonious model and the models including control variables. The coefficients are statistically significant at the 5% level in the parsimonious model and at the 10% level when controlling for retail concentration in addition to socio-economic regional variables. **The findings suggest that a 1% increase in the TSC variable (relative to the EU average), is associated with a 0.859% increase in the price level index (relative to the EU average). This highlights that TSCs affect consumers through a higher level of consumer prices**.[123]

Some of the control variables display coefficients different from the ones in the product-level analysis (e.g. the coefficient for GDP per capita and the unemployment rate were negative in the product-level analysis and are positive in the country-level analysis). These differences might arise because the samples include different countries with structural differences in their economy or because the dependent variables capture prices for different bundles of products. Nonetheless, most of the control variables are still in line with economic reasoning. For example, a positive coefficient for GDP per capita is in line with ECB (2015) and can be explained because of the higher purchasing power of consumers. However, the values of these variables are not ascribed too much importance, as none of them are statistically significant in ECB (2015).

It should be noted that the regression findings are subject to similar caveats compared to the ones presented for the regressions on the product-level retail price data.

Overall, the results of the country-level analysis corroborate the findings in the product-level analysis. The exact coefficients cannot be compared because the dependent and explanatory variables are expressed differently. However, the results in both analyses indicate that consumers face higher prices as a result from suppliers using TSCs. The fact that this finding emerges when using two different price datasets and two different measures for TSCs supports the robustness of the results. Furthermore, this relationship also holds when controlling for a wide range of other factors that could impact retail prices.

The implications for consumers of the results of the econometric analysis of the relationship between retailer purchase prices and Eurostat consumer prices are discussed in section 5.2.4.2.

[123] These regressions provide evidence on the impact of TSCs in the 11 countries that are part of the sample. However, the results do necessarily apply to all EU Member States, as they do not seem to hold for a few other countries that are not part of the sample.

Table 34: Regression results – country-level price level index (PLI) data (11 countries)

		(1)	(2)	(3)	(4)
		Price level index (in logs)	Price level index (in logs)	Price level index (in logs)	Price level index (in logs)
	TSC (in logs)	0.507**	0.149	0.859*	
		(0.229)	(0.262)	(0.493)	
Regional variables	GDP per capita (in logs)		0.419***	0.300**	0.329**
			(0.123)	(0.143)	(0.147)
	Unemployment rate		0.249***	0.301***	0.317***
			(0.0404)	(0.0761)	(0.0778)
	Population		-0.0400*	-0.0565	-0.0590
			(0.0208)	(0.0796)	(0.0819)
	Labour cost - wholesale, trade, repair		-0.175	-0.243*	-0.0987
			(0.138)	(0.138)	(0.114)
	VAT		0.0688	0.0108	0.0494
			(0.0912)	(0.116)	(0.118)
Retail concentration	HHI - retail chains			0.368	0.180
				(0.225)	(0.203)
	Number of retail chains			0.369	0.0287
				(0.236)	(0.136)
	Number of retail outlets			-0.00628	0.0246
				(0.0424)	(0.0396)
	Retailer's operating margin			0.157	0.0653
				(0.163)	(0.159)
	Constant	-0.00924	-0.0691	-0.876	-0.484
		(0.0233)	(0.209)	(0.601)	(0.574)
	Observations	44	44	44	44
	Adjusted R-squared	0.083	0.663	0.697	0.679

Source: own elaboration of the contractor (2020)
Standard errors in parentheses
**** p<0.01, ** p<0.05, * p<0.1*

5.2.4 Impacts of eliminating TSCs

5.2.4.1 Cost, price, internal market trade and innovation impacts of eliminating TSCs

The stakeholders' views about the **retailer cost and consumer price effect** of manufacturers not being able to apply TSCs differ markedly (Table 35).

Most retailers and wholesalers in the survey and in-depth interviews are of the opinion that:

1. Retailers would benefit from a reduction in costs (24 out 39 retailer and wholesaler survey respondents); and
2. Retailers would pass on to customers any reduction in costs in cases where manufacturers would not be able to apply TSCs (24 out 39 retailer and wholesaler survey respondents).

In contrast, only a small minority of manufacturers believe that this will be the case.

With regard to the **product offers of retailers**, only a minority of retailers and manufacturers are of the opinion that manufacturers not being able to apply TSCs would lead retailers to change the range of their product offers or increase their range of private label products.

In terms of the impact on **cross-border trade**, most retailers and wholesalers are of the opinion that:

1. Retailers would source more from the countries from which they could not import previously because of TSCs (23 out 39 retailer and wholesaler survey respondents); and.
2. Parallel imports would develop in the products previously subjected to TSCs (24 out 39 retailer and wholesaler survey respondents).

However, manufacturers do not share this opinion.

Moreover, just half of retailer and wholesaler respondents believe that wholesalers would start to export products previously subject to TSCs and slightly more than half expect that wholesalers would start to import products previously subject to TSCs. However, only a minority of such survey respondents believe that retailers would start to export products to markets in which these products were previously subject to TSCs. Only a minority of manufacturers are of the opinion that such developments will materialise.

Finally, regarding the impact of manufacturers not being able to apply TSCs on the manufacturers' product **innovation activities** the most frequent answer of manufacturers is that it will reduce such activities and retailers and wholesalers that it will increase these activities.[124] But, in both cases, this view is held by a minority of respondents. In the in-depth interviews with manufacturers, one potential effect of the downward pressure on prices which is often mentioned is the creation of less choice for the consumer due to less manufacturers' innovation. In general, however, the position of manufacturers is that it would be detrimental for the whole value-chain since it makes it more difficult for suppliers to continue investing in the development of new products, also because brand-owners would not be able to manage new investments in an incremental way on national markets.

[124] A 2014 study by EY, Arcadia International and Cambridge Econometrics for EC DG Competition on the economic impact of modern retail on choice and innovation in the EU food sector found that the main drivers of food product innovation were the rate of employment of the region in which the shop is located, a measure of retailers' business expectations, the national turnover in the product category, certain shop characteristics (format, floorspace) and the presence of a new shop opening in the local area. All these factors had positive impacts on product innovation. The evidence was mixed regarding concentration of modern retailers and suppliers. Territorial supply constraints were not considered by the study.

Table 35: Impact of manufacturers not being able to apply TSCs

		Manufacturer	Retailer	Wholesaler	Total
Retailers would benefit from a reduction in costs	No answer	2	6	1	9
	Do not know	9	4	1	14
	No	2	2	1	5
	Yes	4	18	6	28
	Total	17	30	9	56
Retailers would pass on to customers any reduction in costs in cases where manufacturers would not be able to apply TSCs	No answer	2	7	1	10
	Do not know	5	3	1	9
	No	7	1	2	10
	Yes	3	19	5	27
	Total	17	30	9	56
Retailers would source more from the countries from which they could not import previously because of TSCs	No answer	2	8	0	10
	Do not know	9	2	3	14
	No	0	1	2	3
	Yes	6	19	4	29
	Total	17	30	9	56
Parallel imports would develop in the products previously subjected to TSCs	No answer	2	6	1	9
	Do not know	9	4	1	14
	No	2	2	1	5
	Yes	4	18	6	28
	Total	17	30	9	56
Retailers would change the range of their product offers	No answer	2	9	0	11
	Do not know	6	5	1	12
	No	5	2	3	10
	Yes	4	14	5	23
	Total	17	30	9	56
The range of private label products in the retailers' offer would increase	No answer	2	10	1	13
	Do not know	6	2	3	11
	No	6	13	3	22
	Yes	3	5	2	10
	Total	17	30	9	56
Retailers would start to export products to markets in which these products were previously subject to TSCs	No answer	2	9	0	11
	Do not know	7	7	3	17
	No	3	3	1	7
	Yes	5	11	5	21
	Total	17	30	9	56
Wholesalers would start to export products previously subject to TSCs	No answer	4	6	0	10
	Do not know	7	6	4	17
	No	2	4	1	7
	Yes	4	14	4	22
	Total	17	30	9	56
Wholesalers would start to import products previously subject to TSCs	No answer	4	7	0	11
	Do not know	7	5	4	16
	No	2	2	0	4
	Yes	4	16	5	25
	Total	17	30	9	56

Impact on manufacturers' product innovation strategies and objectives	No answer	3	3	0	6
	Do not know	5	8	5	18
	It would decrease the pace and intensity of the manufacturers' innovation activities	5	0	0	5
	It would have no impact	3	7	1	11
	It would increase the pace and intensity of the manufacturers' innovation activities	1	12	3	16
	Total	17	30	9	56

Source: Online survey carried out by the contractor (13/03/2020)

While a majority of retailers and wholesalers reported that they expected that retailers would pass on to customers any reduction in costs in cases where manufacturers would not be able to apply TSCs, the extent to which consumers would benefit is unclear in the case of the product categories of interest as the majority of retailers (and wholesalers) did not answer the question about the potential magnitude of the price reduction or responded that they did not know (Table 36).

Among the minority of retailers that provided an answer, typically the answer was that the price reduction would be less than 100%. However, views were split about how much less than 100%.

These findings are in line with the in-depth interviews conducted with retailers and wholesalers for this study as these confirmed similar claims on how TSCs increase the costs and ultimately affect the product prices for consumers. On the other hand, in-depth interviews with manufacturers provided a completely different perspective on this topic since they see that the pressure to lower prices will be in the long-term detrimental for the whole value chain. Even in the medium-term, some manufacturers see the potential imposition of an 'obligation' to supply at all the EU markets under a unique price as highly detrimental for the consumers. They say that it would increase prices in most countries since markets with currently lower prices would face higher prices for the same products, thus increasing inefficiencies at EU level.

Table 36: Price pass-through of impact of manufacturers not being able to apply TSCs

		Retailer	Wholesaler	Total
Breakfast cereals	No answer	15	5	20
	Do not know	4	2	6
	100%	6	1	7
	75% to less than 100%	2	0	2
	50% to less than 75%	1	0	1
	Less than 50%	2	1	3
	Total	30	9	39
Confectionary (chocolate bars & chocolate tablets)	No answer	14	5	19
	Do not know	3	2	5
	100%	5	1	6
	75% to less than 100%	3	0	3
	50% to less than 75%	1	0	1
	Less than 50%	4	1	5
	Total	30	9	39
Dairy (yoghurts & milk)	No answer	14	5	19
	Do not know	4	2	6
	100%	5	1	6
	75% to less than 100%	2	0	2
	50% to less than 75%	1	0	1
	Less than 50%	4	1	5
	Total	30	9	39
Household care (washing detergents, washing-up liquids)	No answer	15	5	20
	Do not know	2	2	4
	100%	6	1	7
	75% to less than 100%	4	0	4
	50% to less than 75%	0	0	0
	Less than 50%	3	1	4
	Total	30	9	39
Personal care (shampoos, shower gels & soaps)	No answer	14	5	19
	Do not know	2	2	4
	100%	5	1	6
	75% to less than 100%	4	0	4
	50% to less than 75%	2	0	2
	Less than 50%	3	1	4
	Total	30	9	39
Soft drinks (cola carbonates & non-cola carbonates)	No answer	13	4	17
	Do not know	3	2	5
	100%	6	1	7
	75% to less than 100%	2	0	2
	50% to less than 75%	1	1	2
	Less than 50%	5	1	6
	Total	30	9	39

Source: Online survey carried out by the contractor (13/03/2020)

In terms of potential spill-over effects of the elimination of TSCs in one country on consumers in other countries (Table 37):

- Only a small minority of survey respondents (8 out 56 survey respondents who replied to this question) expected prices to go up on products which were subject to TSCs in other countries;
- A large minority of survey respondents believed a change would occur:
    - in the composition of the products which were subject to TSCs in other countries (21 out of 56 survey respondents); and,

- in the packaging of the products which were subject to TSCs in other countries (24 out of 56 survey respondents).

Table 37: Following the elimination of TSCs would consumers in some Member States experience

		Manufacturer	Retailer	Wholesaler	Total
Higher prices on products which were subject to TSCs in other countries	No answer	4	6	0	10
	Do not know	9	5	2	16
	No	2	16	4	22
	Yes	2	3	3	8
	Total	17	30	9	56
A change in the composition of the products which were subject to TSCs in other countries	No answer	4	6	0	10
	Do not know	5	8	3	16
	No	3	4	2	9
	Yes	5	12	4	21
	Total	17	30	9	56
A change in the packaging of the products which were subject to TSCs in other countries	No answer	4	7	0	11
	Do not know	5	6	1	12
	No	4	2	3	9
	Yes	4	15	5	24
	Total	17	30	9	56

Source: Online survey carried out by the contractor (13/03/2020)

Finally, among the limited number of stakeholders that reported that TSCs are used more often in relation to new products or other types of innovation, a majority reported that it would increase the pace and intensity of the manufacturers' innovation activities in the case of all product categories of interest except dairy (yoghurts & milk) (Table 38).

Table 38: Impact of elimination of TSCs on innovation by product category

TSCs are used more often in relation to new products or other types of innovation		No answer	Do not know	It would decrease the pace and intensity of the manufacturers' innovation activities	It would have no impact	It would increase the pace and intensity of the manufacturers' innovation activities	Total
Breakfast cereals	No answer	4	9	1	8	5	27
	Do not know	2	6	4	2	3	17
	No	0	2	0	1	6	9
	Yes	0	1	0	0	2	3
	Total	6	18	5	11	16	56
Confectionary (chocolate bars & chocolate tablets)	No answer	3	8	1	9	2	23
	Do not know	2	6	4	1	3	16
	No	0	2	0	0	6	8
	Yes	1	2	0	1	5	9

TSCs are used more often in relation to new products or other types of innovation		No answer	Do not know	It would decrease the pace and intensity of the manufacturers' innovation activities	It would have no impact	It would increase the pace and intensity of the manufacturers' innovation activities	Total
	Total	6	18	5	11	16	56
Dairy (yoghurts & milk)	No answer	4	8	1	7	7	27
	Do not know	2	4	4	2	3	15
	No	0	4	0	0	5	9
	Yes	0	2	0	2	1	5
	Total	6	18	5	11	16	56
Household care (washing detergents, washing-up liquids)	No answer	4	8	1	9	4	26
	Do not know	2	6	3	1	1	13
	No	0	3	1	1	8	13
	Yes	0	1	0	0	3	4
	Total	6	18	5	11	16	56
Personal care (shampoos & soaps)	No answer	4	7	0	8	3	22
	Do not know	1	7	2	1	1	12
	No	1	3	2	1	8	15
	Yes	0	1	1	1	4	7
	Total	6	18	5	11	16	56
Soft drinks (cola carbonates & non-cola carbonates)	No answer	3	9	1	8	4	25
	Do not know	2	6	4	1	1	14
	No	0	2	0	1	7	10
	Yes	1	1	0	1	4	7
	Total	6	18	5	11	16	56

Source: Online survey carried out by the contractor (13/03/2020)

5.2.4.2 Impact of eliminating TSCs on consumer spending

The survey responses from retailers and wholesalers reported above suggest that eliminating TSCs would lead to lower purchasing prices for retailers. Furthermore, most respondents noted that these cost reductions would be passed on to the consumer. This means that the elimination of TSCs would result in potential consumer savings.

These qualitative insights are in line with the findings from the econometric analysis, which has shown that retail prices are lower in countries that are less affected by TSCs.

This section estimates the potential impact of eliminating TSCs on consumer spending by drawing on the econometric results of the country-level analysis in Chapter 5.2.3.3. The estimation is done for the product categories and Member States that form part of the sample in the econometric analysis.

To estimate the change in consumer spending, the following effects are calculated:

Figure 9: Steps of the estimation of the impact of eliminating TSCs on consumer spending[125]

1. Change in purchasing prices

Eliminating TSCs means that retailers in all countries can purchase products from the country with the lowest price if they wish to do so. However, retailers importing products from another country could face some additional costs, for example for processing (relabelling, etc.) and transportation. This means that they are paying slightly more than the price in the lowest country. The modelling takes this into account by adding a margin to the purchase price of the country with the lowest TSC level in the econometric analysis.

The baseline assumption in the analysis below is that this additional margin amounts to 10%. This assumption is based on information by retailers, as well as on the fact that the average purchasing price across all EU countries in the sample is 18.9% higher than in the country with the lowest purchasing prices.

When estimating the level of purchasing prices per country in the absence of TSCs, it is assumed that a country remains at its original TSC value if it is lower than the TSC of the country with the lowest TSC plus the margin for additional costs. If the original TSC value is higher, the TSC of the country with the lowest TSC plus the margin is assigned to this country as the new counterfactual.

The percentage difference between the counterfactual TSC and the average TSC across all countries before the elimination of TSC indicates the country-specific percentage change in purchasing prices (relative to the original EU average). This percentage change is equivalent to a change in purchasing prices, as measured by the TSC variable in the regressions. Based on this modelling, the change in purchasing prices varies significantly across countries. The average across all countries is -8.8%, while it ranges from 0% to nearly -30% for individual countries[126].

2. Change in retail prices

The variable 'TSC' in the country-level regressions estimates the effect of a change in purchasing prices on price level indices (PLIs). The results show that a 1% reduction in purchasing prices (relative to the EU average) leads to a 0.86% reduction in the PLI (relative to the EU average). This coefficient is used to calculate the change in retail prices for each country. On average, it translates into a 7.6% reduction in retail prices considering the average estimated reduction of 8.8% in purchasing

[125] This model does not take changes in demand in response to changes in the retail price into account.

[126] These estimates are based on a margin for additional costs (relative to the cheapest country) of 10%.

prices[127]. To reflect the uncertainty attached to the regression estimate, PLIs in the scenario of no TSCs have also been calculated for the lower and upper bound of the 90% confidence interval of the estimated coefficient [0.0241835, 1.693467].

The modelling draws solely on the cross-sectional regression estimates. However, it should be noted that changes in purchasing prices over time might not be passed through to the consumer entirely. The academic literature indicates that industry-wide pass-through rates "can be as low as 20% but can also reach well over 100%" (OFT, 2014). The confidence interval applied in the modelling can be interpreted as reflecting some of this uncertainty.

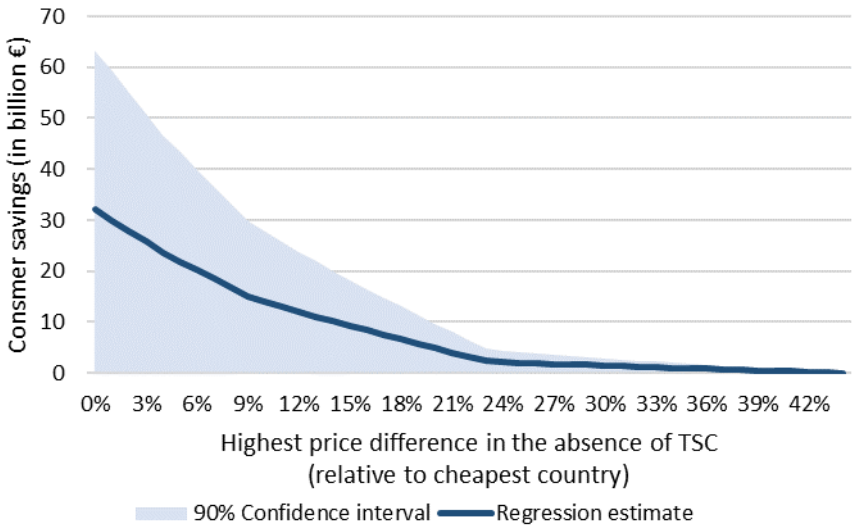
3. Change in consumer spending

The estimated changes in retail prices per country can then be applied to the overall consumer spending in each country. Consumer spending is based on nominal data from Eurostat that matches the product categories of the PLI data. In line with the variables and the sample used in the regressions, consumer spending for the product categories 'bread and cereals', 'other food', 'alcoholic beverages' and 'non-alcoholic beverages' in 11 EU Member States has been considered. Multiplying consumer spending by the percentage price reduction yields an estimate for consumer savings.[128]

Figure 10 illustrates the potential savings as a result of eliminating TSCs. The blue line indicates the savings when considering the main regression estimate for the effect of purchasing price on retail price. The shaded light blue area outlines the potential savings based on the 90% confidence interval of the regression estimate. The horizontal axis details the margin for additional costs (e.g. administrative, relabelling and transportation costs) that the model assumes importing retailers will face when importing from the cheapest country.

At a 10% margin, consumers are estimated to save about EUR 14 billion. The 90% confidence interval around this estimate ranges from EUR 0.5bn to 28bn.

Figure 10: Estimated consumer savings of eliminating TSCs



Source: Contractors' econometric analysis

The consumer savings are estimated based on the 11 EU Member States for which the econometric analysis yielded a statistically significant impact of the TSC variable on the Eurostat price level index

[127] These estimates are based on a margin for additional costs (relative to the cheapest country) of 10%.

[128] This model does not take changes in demand in response to changes in the retail price into account.

variable. In addition, there were three Member States for which preliminary data analysis showed no relationship between the TSC variable and the Eurostat price variable and two which could not be included in the analysis because the purchase price information was provided in a different format. Overall, the potential savings of EUR14.1bn represent about 3.5% of overall consumer spending in the four categories ('bread and cereals', 'other food', 'alcoholic beverages' and 'non-alcoholic beverages') in the set of countries for which we had retailer purchase price information[129].

5.2.4.3 Environmental Impact on eliminating the TSCs

In terms of the environmental impact of the elimination of TSCs, only a small minority of stakeholders reported that they expected a positive effect. Only 12 survey respondents out of 56 thought that it would lead to a decrease in the total amount of greenhouse gas emissions and to a reduction in the total amount of waste. Even a smaller proportion of survey respondents held the view that it would have a detrimental impact on the environment (Table 39).

Table 39: Impact of the elimination of TSCs on the environment

		Manufacturer	Retailer	Wholesaler	Total
What would be the carbon footprint impact of the elimination of TSCs	No answer	3	3	0	6
	Do not know	4	14	3	21
	It would decrease the total amount of greenhouse gas emissions	1	7	4	12
	It would increase the total amount of greenhouse gas emissions	7	0	0	7
	No impact on the total amount of greenhouse gas emissions	2	6	2	10
	Total	17	30	9	56
What would be the impact of the elimination of TSCs on waste in the retail sector?	No answer	3	4	0	7
	Do not know	7	10	3	20
	It would decrease the total amount of waste	1	7	4	12
	It would increase the total amount of waste	1	0	0	1
	No impact on the total amount of waste	5	9	2	16
	Total	17	30	9	56
What other environmental impact would an elimination of TSCs have?	No answer	4	6	0	10
	Do not know	4	14	2	20
	Negative impact on the environment	5	0	0	5
	Neutral	3	5	5	13
	Positive impact on the environment	1	5	2	8
	Total	17	30	9	56

Source: Online survey carried out by the contractor (13/03/2020)

[129] These estimates are based on a margin for additional costs (relative to the cheapest country) of 10%.

The views expressed in the in-depth interviews underline that retailers and manufacturers have different opinions about the potential environmental impacts of eliminating TSCs. Retailers do not expect a removal of TSCs to have any impact on the environment, as products must be moved to the same end destination – independent of them being transported by the supplier or the retailer. In some instances, retailers even pointed out that transporting products to the suppliers' national distribution centres causes unnecessary inefficiencies. On the other hand, manufacturers argue that the environmental footprint would be worse without TSCs due to longer shipping distances and a higher waste production due to increased stocks.

Finally, it is important to point out that the data reported in the present chapter shows that, while TSCs exist in all the product categories of interest, their prevalence varies across the covered FMCG categories. Considering this as well as the fact that only a limited number of product categories are covered in the present study, it is not possible to derive reliably from this data an estimate of the prevalence of TSCs across all FMCG categories.

5.3 Summary of the findings

The present chapter assessed the extent to which TSCs impact on consumers and retailers/wholesalers and this summary highlights the key findings of the analysis.

A large majority of the retailers and wholesalers having responded to the stakeholder survey are of the view that a) the prices of products subject to TSCs are higher than they would be without TSCs and b) the products subject to TSCs are not available at retailers. Moreover, a small majority is of the opinion that consumers in border regions cross the border to buy abroad products subject to TSCs in their country.

All the types of TSCs and related practices discussed in the present report are perceived by retailer and wholesaler stakeholders as impacting product prices and reducing the availability of products.

Interestingly, the retailers' and wholesalers' views about the impact of TSCs on prices, product availability and consumer cross-border shopping are independent of whether these stakeholders tried to source products in another EU country but were refused based on their geographical location.

The results of an econometric analysis indicate that the differences in prices faced by consumers can be partly explained by cross-country differences in purchase prices faced by retailers for identical products. Separate analyses have been conducted, drawing on different datasets. One dataset uses product-level information for the retail prices, whereas the other datasets draw on country-wide consumer price indices (PLI). A relative measure of cross-country differences in purchase prices, which have been provided by internally operating retailers, has been used as an explanatory variable. These differences in purchase prices arise in part because of TSCs which prevent retailers from sourcing their supplies from the cheapest source in the Single Market. To isolate the effect of TSCs from other factors that could explain differences in purchase prices, the regressions control for various macroeconomic variables, the concentration of national brand owner and the concentration of retailers in the market. The positive effect of differences in purchasing prices on the retail prices is broadly consistent across the different samples and regression models, which suggests that consumers face higher prices when TSCs are in place.

If retailers in all the countries with higher purchase prices than the country with the lowest purchase prices could source their supplies from that country, the results of the econometric analysis suggest that, under the assumption that possible additional costs (such as logistics costs) would increase the actual purchase price by up to 10% relative to the cheapest purchase price, consumers could save an estimated EUR 14.1bn (or 3.5%) on their purchases of 'bread and cereals', 'other food', 'alcoholic beverages' and 'non-alcoholic beverages' in the set of 16 countries for which we had retailer

purchase price information. Any econometrically derived estimate is subject to some uncertainty, the 90% confidence interval of this estimate ranges from EUR 0.5bn to 28bn.

A clear majority of retailers and wholesalers are of the opinion that, if manufacturers were not able to apply TSCs, retailers would benefit from a reduction in costs and retailers would pass on to customers any reduction in costs. In contrast, only a small minority of manufacturers believe that this will be the case.

Moreover, a majority of retailers and wholesalers are of the opinion that, if manufacturers were not able to apply TSCs, retailers would source more from the countries from which they could not import previously because of TSCs and parallel imports would develop in the products previously subjected to TSCs. In addition, just under half of retailer and wholesaler respondents believe that wholesalers would start to export products previously subject to TSCs and slightly more than half expect that wholesalers would start to import products previously subject to TSCs.

However, manufacturers disagree with the assessment that cross-border trade will be stimulated if they were not able to impose TSCs.

Finally, regarding the impact of manufacturers not being able to apply TSCs on the manufacturers' product innovation activities, the most frequent answer of manufacturers is that it will reduce such activities while retailers and wholesalers expressed that it will increase these activities. But, in both cases, this view is held by a minority of respondents.

While a majority of retailers and wholesalers reported that they expected that retailers would pass on to customers any reduction in costs in cases where manufacturers would not be able to apply TSCs, the retailers' replies to the online survey do not provide clear information on the extent to which consumers would benefit in the case of the product categories of interest. Among the minority of retailers that provided an answer, typically the answer was less than 100%. However, views were split about how much less than 100%.

In terms of cross-country spill-over effects of the elimination of TSCs in a Member State, few stakeholders expected prices to go up in countries other than the one in which the TSCs are eliminated. However, a sizeable minority indicated that a change would occur in the composition and packaging of products. These findings are in line with the in-depth interviews conducted with retailers and wholesalers for this study as these confirmed similar claims on how TSCs affect the product prices and increase the costs.

Finally, only a small minority of stakeholders reported that they expected the elimination of TSCs to have a positive impact on the environment. Most stakeholders responding to the survey did not know what the environmental impact of the removal of TSCs was likely to be. The in-depth interviews highlighted a divergence in opinion between retailers and manufacturers. Most of the retailers do not expect the elimination of TSCs to influence the environment, while some of the manufacturers expect the environmental footprint to be worse without TSCs.

6 Role of digitalisation, in particular of multichannel retail

The present chapter of the study focuses on the role of digitalisation and e-commerce in the sales of FMCGs and the potential effect of cross-border e-commerce in FMCGs on the impact and sustainability of TSCs. The chapter first sets out its specific aims and objectives. Next, it provides quantitative information on the current level of e-commerce in FMCGs and then summarises key findings from the review of the relevant literature. Thereafter, it presents the results of the part of the stakeholder survey and in-depth interviews focusing on the specific issue of e-commerce in FMCGs and its potential impact on the persistence of TSCs.

6.1 Aims and objectives

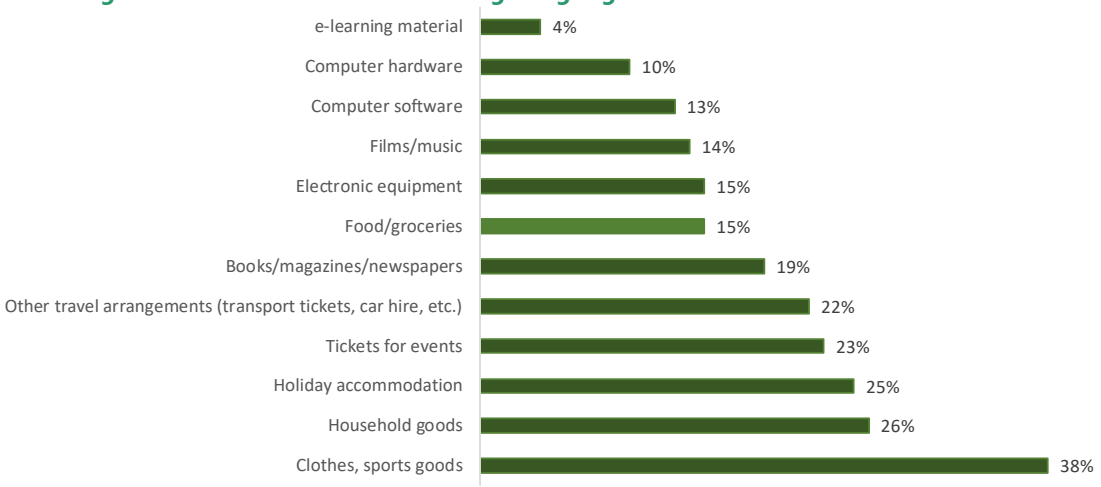
The aim of this chapter is to provide a comprehensive and descriptive overview of past, and more importantly, future trends in e-commerce, especially cross-border. It also aims to show how FMCG as e-commerce, especially cross-border e-commerce, may reduce the impact of TSCs in the future.

6.2 Results – The current level of e-commerce in FMCGs

6.2.1 Patterns of on-line spending in the EU (based on Eurostat data)

At the EU-27 level, the share of individuals buying food and groceries online was still relatively low in 2019 compared to the penetration of e-commerce in many other retail/consumer segments. For example, according to Eurostat data, 38% of individuals in the EU27 in 2019 bought clothes and sports goods online and 26% of individuals bought household goods online but only 15% of EU27 individuals bought food and groceries online (Figure 11) [130].

Figure 11: Share of individuals having bought goods and services online in 2019

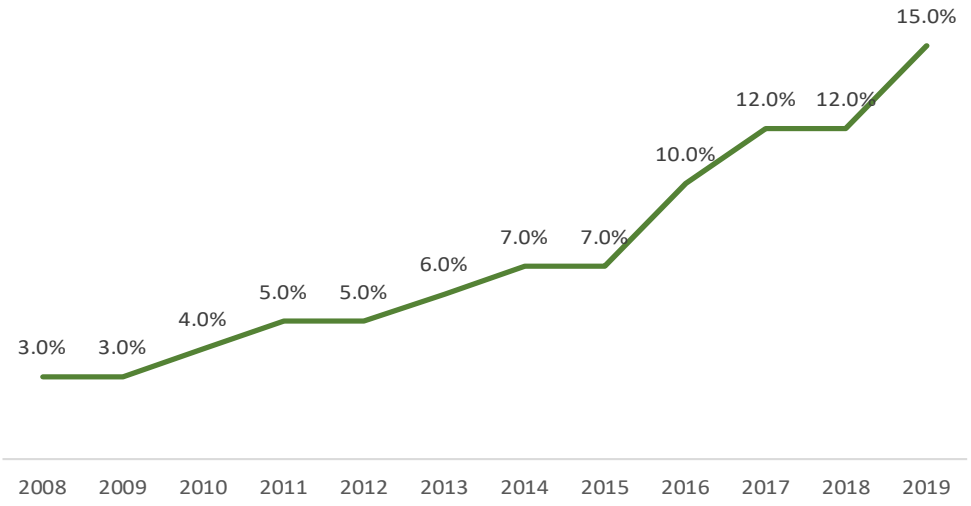


Source: Eurostat

However, the share of individuals buying food and groceries online has increased very rapidly in recent years, more than doubling over the past four years (from 7% in 2015 to 15% in 2019) in the EU-27 (Figure 12).

[130] These figures refer to a period before the outbreak of the Covid-19 pandemic. Online purchases are likely to increase as a result of the pandemic.

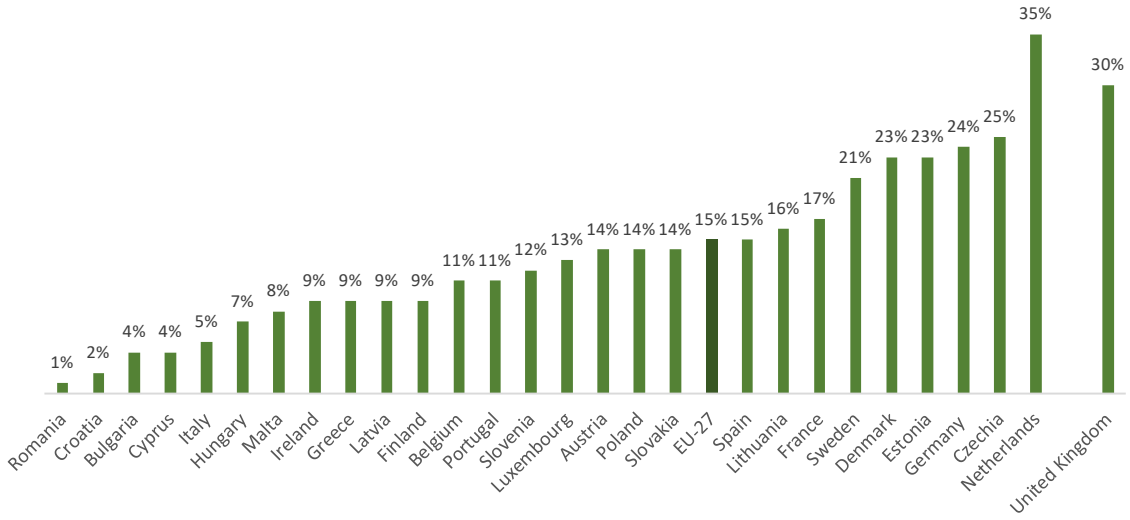
Figure 12: Share of individuals in the EU27 having bought food and groceries online – 2005 to 2019



Source: Eurostat

Within the EU27, the proportion of individuals having purchased food and groceries online in 2019 varies greatly, ranging from 5% or less in Bulgaria, Croatia, Cyprus, Italy and Romania to 35% in the Netherlands.

Figure 13: Share of individuals having bought food and groceries in 2019 – EU27 Member States and United Kingdom



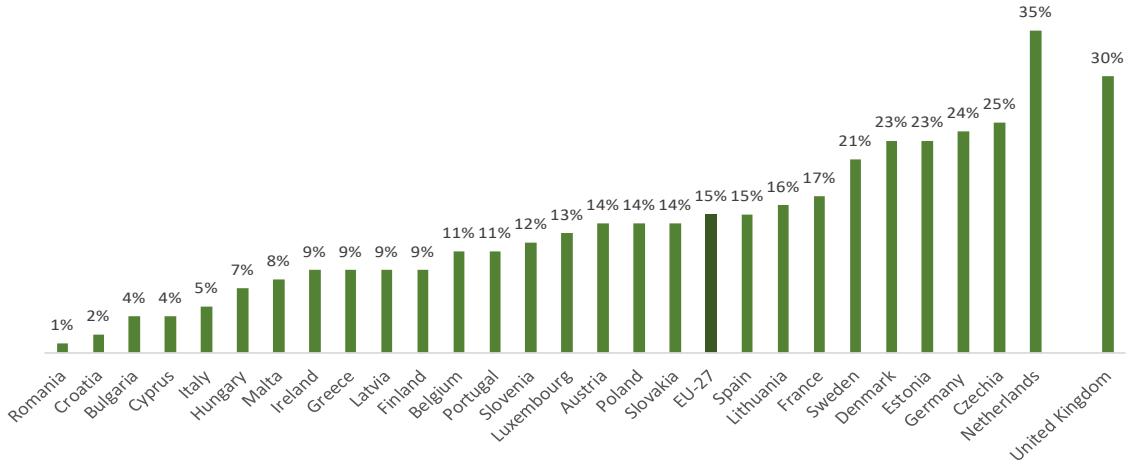
Source: Eurostat

The fact that a much higher proportion of individuals purchase food and groceries online in some Member States than in other countries is a relatively recent development of the past 10 years. For example, according to Eurostat, the proportion of individuals having purchased food and groceries online ranged in 2009 from close to 0% in Croatia, Cyprus, Greece, Malta, Latvia and Romania to 9% in Germany.[131] Ten years later, in 2019, the difference across Member States in the proportion of individuals purchasing food and groceries online had almost quadrupled, with this proportion ranging from 1% in Romania to 35% in the Netherlands. The EU27 Member States which experienced the fastest growth in the penetration of online food and groceries purchases are the Netherlands,

[131] Data for Austria are not available for the year 2009.

Czechia and Germany. In contrast, Bulgaria, Cyprus, Croatia, Italy and Romania experienced almost no growth in the penetration of such online purchases (Figure 14).

Figure 14: Change (in percentage points) from 2009 to 2019 in the proportion of individuals buying food and groceries online[132]



Source: Eurostat

The differences in the penetration of online purchases of food and groceries across Member States reflect a combination of low penetration of online purchases overall and country-specific consumer habits, with the latter being themselves likely to be influenced by the availability of various online channels (such as click and collect, home delivery, presence of pure online food retailers) for purchasing food and groceries.

- The proportion of individuals having bought food and groceries online in 2019 is strongly and negatively correlated with the proportion in 2019 of individuals who have never bought any product or service online. In fact, across Member States, the correlation between these two online purchase patterns is -0.80 (Figure 15).
- However, a high penetration level of online purchases is not always associated with a corresponding high penetration level of online food and groceries purchases. As already mentioned, online purchases of clothes and sports goods shows in the EU27 a high penetration rate with 38% of individuals having undertaken such purchases in 2019 compared to 15% for online food and groceries purchases. The penetration of online clothes and sports goods is used in the analysis below as a proxy, albeit an imperfect one, of individuals' disposition towards online buying.

  A comparison of the penetration rates of online purchases of clothes and sport goods with online purchases of food and groceries clearly shows that, in all Member States, the proportion of individuals buying clothes and sport goods online is higher than the proportion of individuals buying food and groceries online in all Member States (Figure 15).

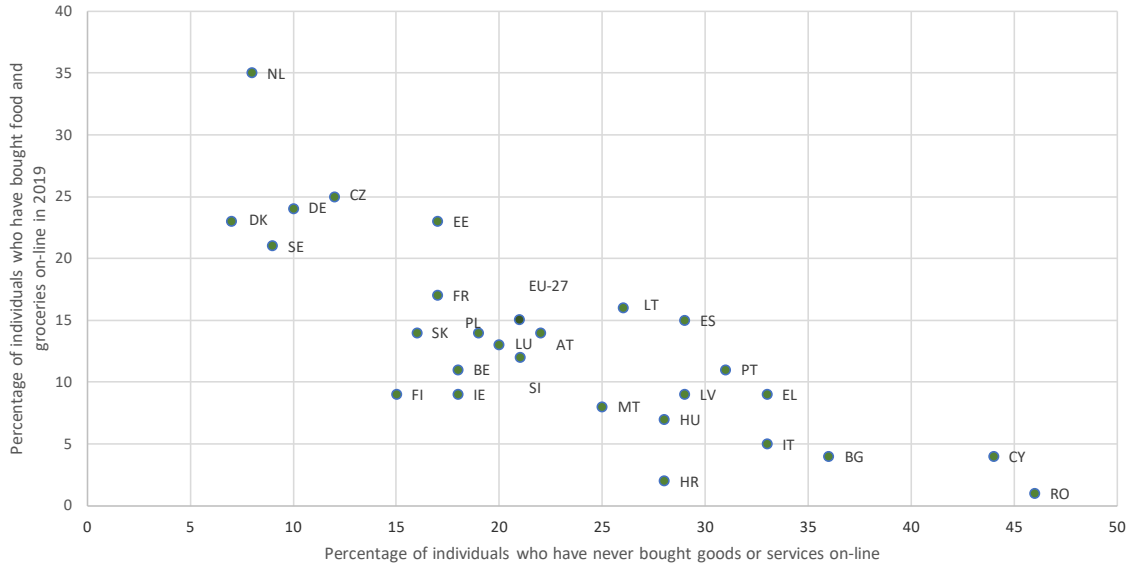
  However, the difference between the two proportions varies greatly across the EU27, reflecting other country-specific characteristics of clothes/sport goods and food/groceries retailing.

[132] No data for Austria in 2009.

For example, while the penetration of clothes/sports goods e-commerce in Finland, Ireland and Malta is high (relative to the EU27 average), it is well below the EU27 average in the case of online purchases of food and groceries (Figure 15 and Figure 16).

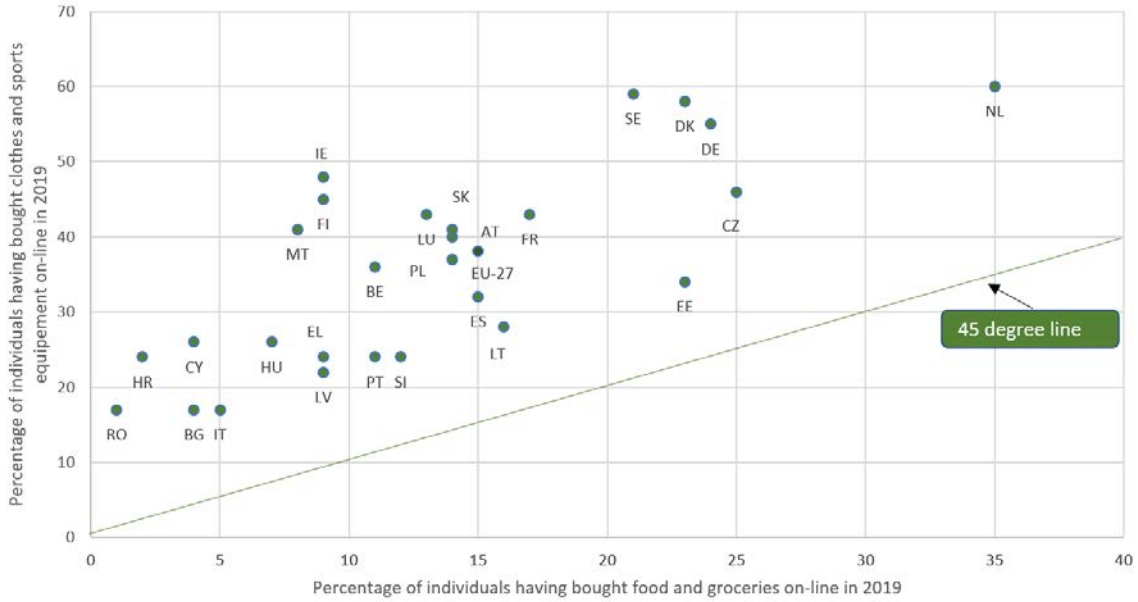
In contrast, in Estonia, the difference in penetration rates of clothes/sport goods and food/groceries e-commerce is among the lowest of all EU27 Member States even though the penetration rate of food retailing/groceries is among the highest in the EU27.

Figure 15: Proportion (in %) of individuals who have never bought any goods and services online and proportion of individuals having bought food and groceries online in 2019



Source: Eurostat

Figure 16: Proportion (in %) of individuals who bought clothes and sports goods online and individuals who have bought food and groceries online in 2019



Source: Eurostat

6.2.1.1 Online sales in selected product categories

The previous section highlighted that a) 15% of individuals in the EU27 bought food and groceries online and b) the penetration of food and groceries e-commerce varied greatly across the EU27 in 2019. Using data from Euromonitor, the present section focuses on the importance of online purchases in the product categories of interest in selected Member States and the UK.

Two key observations emerge from these data:

1. In general, online purchases of the various product categories other than personal care products account, on average across the different Member States and the UK, for only a small share of total sales of the product category; and
2. Moreover, in each of the countries, online purchases of the products in the different categories account on average across product categories for less than 5% of total sales. The only exceptions are France (average of 5.3%) and the UK (average of 8.3%).

Table 40: Share (in %) of online sales in different product categories in various EU Member States and the UK in 2018

	Personal care		Household care		Breakfast cereals	Chocolate confectionary	Dairy products		Average
	Bath and shower	Hair care products	Dishwashing	Laundry care products			Drinking milk products	Yogurt	
Austria	6.2	5.8	1	2	1.6	0.4	0.2	1	2.3
Belgium	5.8	3.8	6	6	3.8	2.8	2.7	3.3	4.3
Croatia	3.8	3.2	0.1	0.4	1.9	0.3	0.6	0.8	1.4
Czechia	7.4	16.8	1.9	3.1	1.1	1.3	1.8	1.8	4.4
Denmark	11.8	10.1	2.8	2.8	1.6	0.7	0.8	0.6	3.9
Estonia	6.8	4.2	1.7	2.1	0.5		3	2.9	3.0
France	7.7	7.6	4	4	3.6	5.7	5	4.4	5.3
Portugal	1	1.4	2.5	3.1	1.7	1.0	2	1.6	1.8
Romania	0.9	1.6	0.5	3.2	0.4	0.2	0.6	1	1.1
Slovakia	1.3	5.0	1.1	1.2	0.1	0.1	0.2	0.1	1.1
United Kingdom	10.7	12.6	7.6	10.2	6.4	5.3	6.5	6.9	8.3
Average	5.8	6.6	2.7	3.5	2.1	1.8	2.1	2.2	

Source: Euromonitor

6.2.1.2 Cross-border retail sales

The desk research aimed to identify reports, studies, etc. focusing on trends (past and future) in e-commerce, especially on trends in cross-border e-commerce in FMCGs.

Unfortunately, no literature focusing specifically on cross-border e-commerce or even more generally e-commerce in FMCGs has been identified. However, more general information on general trends in e-commerce was provided by Euromonitor. This information complemented by data from some other sources was used in the short overview of trends provided below.

The Euromonitor information provides estimates on the historic market sizes of domestic and cross-border internet retailing from 2011 to 2018 and forecasts for 2019 to 2023. The figures are estimates of the retail value RSP excluding sales tax and do not include travel among other categories. All figures are converted to EUR at constant 2018 prices.

The data cover 14 countries in Europe and distinguishes between foreign and domestic internet retailing. Internet retailing is the "sales of consumer goods to the general public via the Internet[133]" (Euromonitor, 2019). The figures are estimates for the retail value RSP excluding sales tax and do not include travel and some other products/services[134]. All figures are converted to EUR at constant 2018 prices.

The "sales data is attributed to the country where the consumer is based, rather than where the retailer is based". (Euromonitor, 2019) In this context, foreign internet retailing refers to goods purchased from a seller in a country that is not the consumers' country of residence, while domestic internet retailing refers to goods purchased from sellers in the consumers' country of residence.

1. The cross-border e-commerce market in 2018

The e-commerce market has gained significantly in importance and size over the past decade. In 2018, the largest markets[135] for internet retailing were the UK (EUR 72.5bn), Germany (EUR 55.7bn) and France (EUR 41.6bn) (see Figure 17). These countries are also the biggest markets for foreign internet retailing[136] (EUR Germany: 6.4bn; France: EUR 5.5bn; UK: EUR 3.3bn). However, the difference in sales value between these countries and the next largest markets is significantly smaller for cross-border foreign internet retailing compared to total internet retailing[137], reflecting the fact that the relative importance of foreign internet retailing varies across countries.

[133] "Internet retailing excludes sales of: (a) C2C sales through various platforms (but B2C sales are included); (b) Sales of motor vehicles, motorcycles and vehicle parts; (c) Tickets for events (sports, music concerts etc) and travel; (d) Sales of travel and holiday packages; (e) Revenue generated by online gambling sites; (f) Quick delivery services of food, magazines, household goods and DVD rentals, for example: MaxDelivery.com, LicketyShip.com, Netflix.com, LoveFilm (g) Returned products/unpaid invoices. (h) click and collect orders in stores where the payment is made in the store." (Euromonitor, 2019)

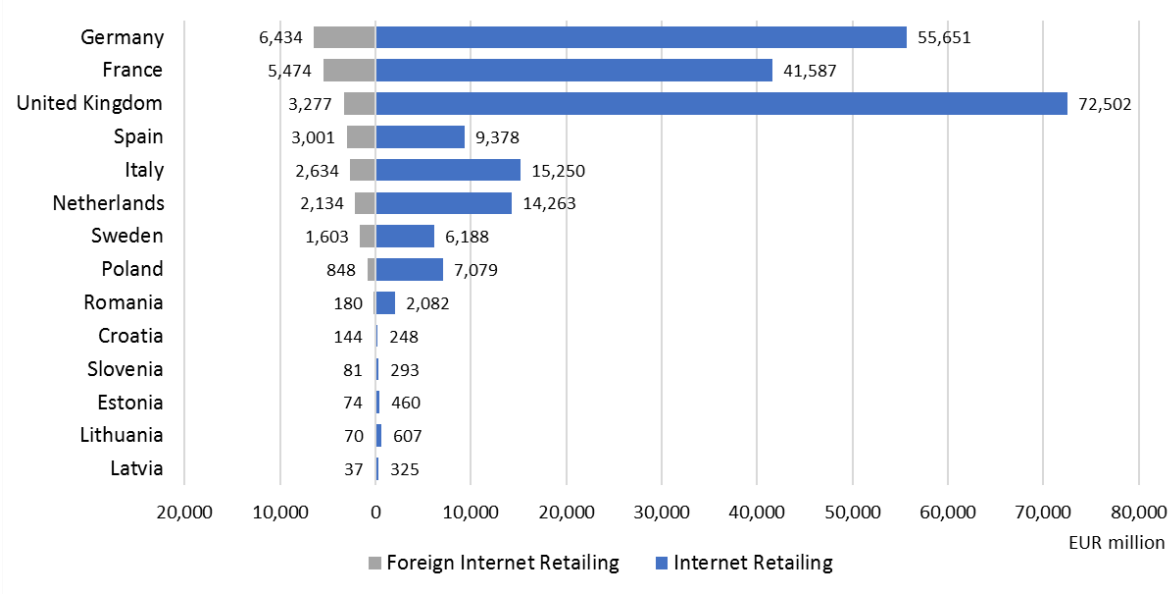
[134] Western Europe: France, Germany, Italy, Netherlands, Spain, Sweden, United Kingdom – Central Europe: Croatia, Estonia, Latvia, Lithuania, Poland, Romania, Slovenia

[135] The data provided by Euromonitor only covers 13 EU Member States and the UK. Any statement and comparison made in this section refers to this sample only and not the entirety of all EU countries.

[136] Foreign internet retailing is used interchangeably with cross-border e-commerce sales in this study.

[137] Total internet retailing is the sum of domestic and foreign internet retailing.

Figure 17: Market size of foreign and total internet retailing in 2018 (in EUR million)



Source: Euromonitor

2. *Historical trends from 2011 to 2018*

Foreign internet sales (dark blue columns) have increased significantly between 2011 and 2018 (Figure 18). In most countries, sales have increased one to fourfold over this period. This is equivalent to an annual compound growth rate of 9% to 22% over eight years.[138] In Romania and the UK, foreign internet sales have even increased 16-fold between 2011 and 2018. However, these two countries are outliers.

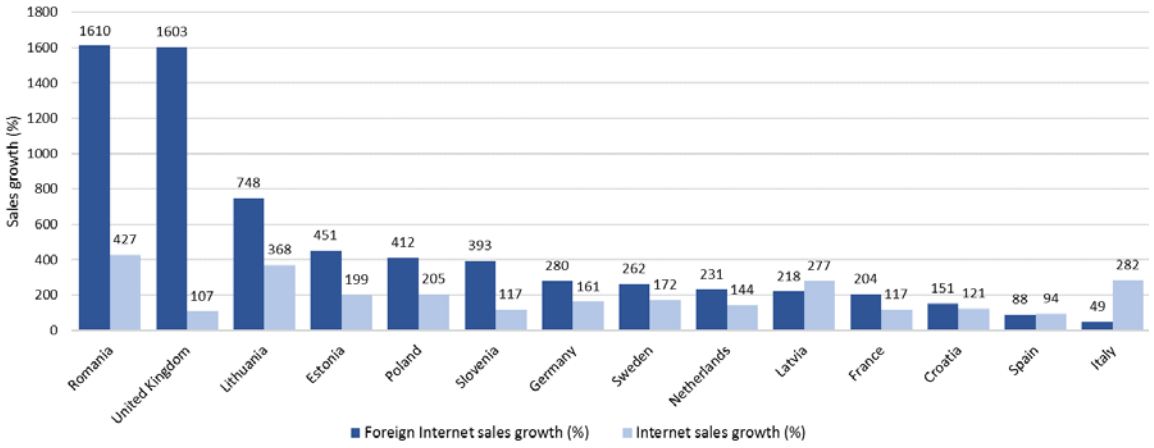
The growth in foreign internet sales can either be driven by a general growth in internet sales[139], by a relative increase in foreign (compared to domestic) internet sales or by a combination of both. The data show that, in fact, total online sales have grown in every country and the growth in foreign internet sales exceeded the growth in total online sales in almost all countries.[140]

[138] When looking at year-by-year growth rates, one observes differences in the evolution of growth rates between countries. Some countries experience particularly high growth rates in the beginning of the period under investigation that decreases thereupon (e.g. Lithuania, the United Kingdom, Estonia, Germany). A particular drop appears to be around 2015. Another group of countries shows the opposite pattern, as they experience low growth rates prior to 2015 and a surge in the growth rate thereafter (e.g. Latvia, Sweden, Poland, the Netherlands, France).

[139] Assuming the ratio between foreign and domestic internet sales to be constant, foreign internet sales would grow at the same rate as overall internet sales.

[140] The only exceptions are Italy, Latvia and Spain.

Figure 18: Foreign and total internet retailing growth rate from 2011-2018 (in %)[141]



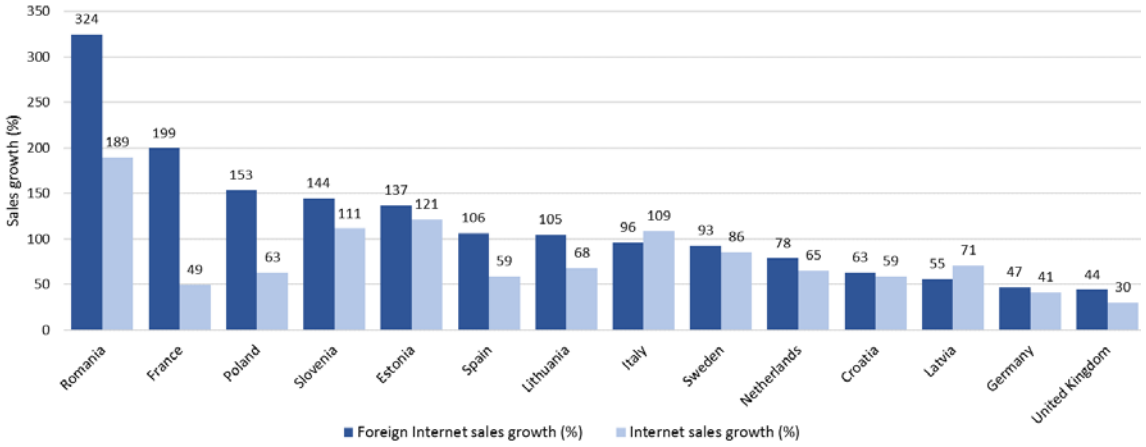
Source: Euromonitor

3. *Forecasts of future trends*

According to Euromonitor, foreign and total internet retailing are expected to continue to grow in every country from 2018 to 2023 (Figure 19).

Moreover, foreign internet retailing is predicted to continue to grow faster than total internet retailing growth in most countries.[142]

Figure 19: Foreign and total internet retailing growth rate from 2018-2023 (in %)[143]



Source: Euromonitor

4. *Findings on e-commerce trends from the literature*

Several studies and reports focus on cross-border e-commerce (e.g. Accenture, 2012; Accenture, 2019; AliResearch/Accenture, 2016; DHL, 2016; European Commission, 2019)[144]. These studies estimate market sizes, consider trends in the market and, in some instances, conduct consumer surveys (European Commission, 2017; IPC, 2019; PayPal, 2018). This market research is mainly

[141] The countries are listed in decreasing order in the foreign internet sales growth.
[142] The only exceptions are Italy and Latvia.
[143] The countries are listed in decreasing order in the foreign internet sales growth.
[144] There is an even further array of literature on trends related to overall E-commerce.

published by stakeholders in the (cross-border) e-commerce sector, such as logistic companies, digital payment services and online retailers.

5. Global cross-border e-commerce

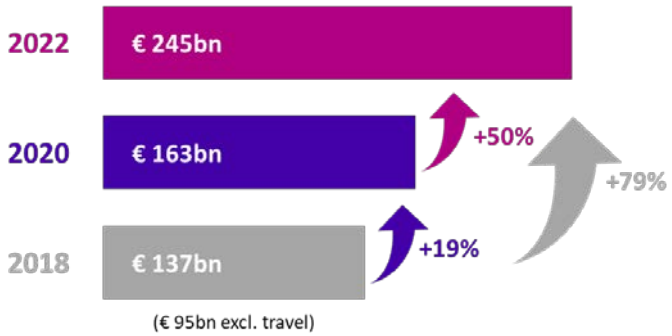
Estimates for the global cross-border e-commerce market across all studies range from USD 627bn in 2022 (Forrester, 2017) to more than USD 1tr in 2021 (IPC (2018) as cited in European Commission (2019)).

All the above-mentioned studies do not only predict a high growth rate in global sales volume, but they also predict the share of cross-border e-commerce to increase over time. Cross-border online sales are expected to make up between 20% of e-commerce in 2022 and nearly 25% in 2021 (Forrester, 2017; DHL, 2016; IPC (2018) as cited in European Commission (2019)). The importance of cross-border e-commerce becomes more apparent when considering that it has been growing at twice the rate of domestic e-commerce globally (DHL, 2016; Accenture, 2019). This is in line with findings from the Euromonitor data reported previously.

Cross-border e-commerce in Europe

Within the EU16, a more recent study estimates the B2C cross-border e-commerce market in 2018 to be worth EUR 137bn including travel and EUR 95bn excluding travel (cross-border commerce Europe (2018) as cited in Ecommerce News Europe (2019a)). The market including travel is forecasted to grow by 19% until 2020, totalling EUR 163bn, and by another 50% from 2020 to 2022, totalling EUR 245bn. This amounts to an overall growth of 79% over four years.

Figure 20: B2C Cross-Border E-Commerce EU 16



Source: Cross-Border Commerce Europe (2018) as cited in Ecommerce News Europe (2019a)

More than half (55% - 52.3bn EUR) of the non-travel sales in 2018 are attributable to EU16 sellers, whereas the remainder (45% - 42.8bn EUR) was sold by non-EU16 sellers. However, "in almost every country in Europe, China is the number one country from which online shoppers bought their most recent online cross-border purchase" (Ecommerce News Europe, 2019b).

In addition to the sales figures, consumer surveys found that clothing/footwear/apparel and consumer electronics are the most popular product categories for cross-border purchases (PayPal, 2018; IPC, 2019). The main reason for cross-border purchases are better prices (PayPal, 2018; DHL, 2016) and nearly half of the purchases (40%) have a value below EUR 25 (IPC, 2019).

6.2.2 Impact of growth in cross-border on effects of TSCs - views of survey respondents

The survey to stakeholders included a few questions on TSCs and cross-border e-commerce in order to gather the views of stakeholders on whether growth in cross-border e-commerce was likely to erode the impact of TSCs on retail prices by increasing competition in the FMCG markets of Member States.

Only 16 out of the 56 survey respondents having completed the part of the survey focusing on potential impacts of the TSCs indicated that they expect growth over the next five years in cross-border e-commerce to reduce the impact of TSCs on retail prices faced by consumers (Table 41). In contrast,15 survey respondents did not think that there will be any impact on prices and 22 did not know whether future growth in e-commerce would have any impact or did not answer that specific question. A similar response pattern is observed among the groups of manufacturers and retailers with only three manufacturers out of 17 and 7 retailers out of 30 reporting that they expected prices paid by consumers to reduce as a result of erosion of TSCs due to growth in cross-border e-commerce.

Moreover, only 10 out of 56 survey respondents expected that the growth in cross-border over the next five years will eliminate differences in product composition across the EU (Table 41). Almost half of survey respondents indicated that either growth in e-commerce will have no impact on differences in product composition and 16 did not know whether it would have any impact.

Finally, only a quarter of survey respondents (16) expect that differences in product choices will be reduced as result of the growth in cross-border e-commerce (Table 41). Of the 56 survey respondents, 16 indicated that they did not know what the impact is likely to be, and 20 respondents are of the opinion that differences in product choices will remain the same. Manufacturers, retailers and wholesalers are largely of the same opinion.

Table 41: Effect of growth over the next five years in cross-border e-commerce in FMCGs on potential effects of TSCs on consumers – number of answers

		Manufacturer	Retailer	Wholesaler	Total
Impact on					
Prices	No answer	3	3	0	6
	Do not know	7	8	1	16
	Will be reduced	3	7	6	16
	Will be unchanged	4	10	1	15
	Will increase	0	2	1	3
	Total	17	30	9	56
Product composition	No answer	3	3	0	6
	Do not know	7	7	2	16
	Will become identical across in all EU markets	2	7	1	10
	Will continue to differ across EU markets	5	13	6	24
	Total	17	30	9	56
Product range availability	No answer	3	3	0	6
	Do not know	7	8	1	16
	Will become more similar across all EU markets	3	8	3	14
	Will continue to differ across EU markets	4	11	5	20
	Total	17	30	9	56

Source: Online survey carried out by the contractors (13/03/2020)

Table 42: Effect of growth over the longer term in cross-border e-commerce in FMCGs on potential effects of TSCs on consumers – number of answers

		Manufacturer	Retailer	Wholesaler	Total
Will the price impact of TSCs be fully eroded?					
	No answer	4	5	0	9
	Do not know	7	7	3	17
	No	3	10	2	15
	Yes	3	8	4	15
	Total	17	30	9	56
Will the product composition impact of TSCs be fully eroded?					
	No answer	4	8	0	12
	Do not know	7	5	5	17
	No	0	12	1	13
	Yes	6	5	3	14
	Total	17	30	9	56

Source: Online survey carried out by the contractors (13/03/2020)

The findings from the interviews were somewhat similar, as interviewed manufacturers and retailers expected the share of e-commerce to grow, but that their impact on product availability remains to be seen. Interviewed manufacturers and retailers both considered e-commerce, despite its recent growth, still to be underdeveloped. E-commerce is considered to have a significant impact on non-food products, but it is said to be less relevant for (low cost) FMCGs, especially in terms of cross-border sales. Nonetheless, retailers expect competition to increase due to new global players entering the EU market.

They mentioned that despite the possibility of direct sales online via a shop on the company's own website, most sales via e-commerce were carried out on the online platforms of brick and mortar shops and designated online stores. Retailers often operate their e-commerce platforms via their national operations, even though generally the retailers claimed that there is no price discrimination between the different national platforms (which is not allowed under the Geo-blocking Regulation).

Overall, digitalisation has an impact on businesses and creates benefits for many players. However, the impact on the existence of TSCs is expected to be limited.

6.3 Summary of the findings

The present section focused on e-commerce and cross-border in general and in FMCGs. The latest data from Eurostat show that, in the EU-27, only 15% of individuals had bought food and groceries online in 2019. While the proportion of individuals buying food and groceries online varies greatly across the EU27, even in the country with by far the highest penetration of online purchases of food and groceries, only 35% of individuals do so.[145] Cross-border business-to-consumer e-commerce is still relatively limited in magnitude in almost all EU Member States. Although no comprehensive data on cross-border e-commerce in food and groceries is available, it is likely that the latter accounts for only a small proportion of total consumer spending on such items as, more generally, the share of individuals buying food and groceries online and the value of such purchases is low in Member States. Looking ahead, while e-commerce and cross-border e-commerce are projected to grow markedly, because this growth is not expected in the FMCG sector, only a minority of all survey respondents expect this development to erode the impact of TSCs and result in price reductions and a more similar product composition across the EU over the next five years and over a longer horizon of 10 to 15 years.

[145] These figures refer to a period before the outbreak of the Covid-19 pandemic. Online purchases are likely to increase as a result of the pandemic.

7 Outcomes and conclusions

This section presents the main outcomes of the study in the form of conclusions for each of the main study topics covered.

For the purpose of this study, Territorial Supply Constraints are understood as barriers imposed by private operators (suppliers) in the supply chain, which can affect retailers or wholesalers. These may impede or limit the retailers' or wholesalers' ability to source goods in other EU countries than the one in which they are based, and/or prevent them from distributing (i.e. reselling) goods to other EU countries than the one in which they are based. These practices imposed by suppliers (manufacturers and brand owners) have been mentioned by retailers and wholesalers as problematic in recent years. There are also several studies (e.g. the Benelux studies and the ECB study) that indicate either that TSCs exist or that there are unexplainable price differences between (national) markets which are hypothesised to be caused by TSCs.

In terms of the typology of TSCs, the study distinguishes between Territorial Supply Constraints understood as direct and strict restrictions (e.g. refusal to supply, destination obligations or quantitative limitations) and related practices which might be blended with and/or used alongside TSCs, and which serve as an enabler for the direct TSCs (e.g. differentiation of products in terms of content/composition and differentiation of products in terms of packaging). Both types of restrictions are covered by the study.

Within the context of this study, roughly half of all the retailers and wholesalers consulted (i.e. through the online survey and in-depth interviews) mentioned having faced TSCs before, see the table below. However, it should be noted that it was mostly retailers with an interest in the topic that were highly motivated to participate in these data collection tools, which may pose a selection bias.

Table 43: Prevalence of TSCs as reported by retailers and wholesalers

RETAILERS AND WHOLESALERS Were there any instances where you tried to source products in another EU country where you were refused based on your geographical location?	Responses
Yes	34 (49%)
No	21 (31%)
Do not know	14 (20%)
Total	**69**

Source: Online survey carried out by the contractors (13/03/2020)

To contrast this number, the CATI, which were conducted during the scoping phase at the start of the study and covered all retailers and wholesalers, found that between 5% and 20% of retailers (depending on the country and the product category referred to) reported having been affected.[146]

Regarding the practices most often reported by retailers and wholesalers, the table below presents information based on the survey results.

Table 44: Prevalence of types of TSCs and related practices or their symptoms

RETAILERS AND WHOLESALERS	Responses

[146] It should be noted that there were some issues with the CATI in terms of sampling, so these results should not be taken as absolute figures, but the CATI results, as based on a more random sampling, could indicate that the prevalence of TSCs is more limited than what the survey and interview results suggest.

What types of TSCs is your company facing? (multiple answers possible)	
Refusals to supply certain products	32 (46%)
Differentiation of products in terms of packaging (e.g. national language labelling and/or refusal to put multi-language labels, packaging size)	21 (30%)
Destination obligation (i.e. obligation to limit the supply to only a certain market/area)	20 (29%)
Differentiation of products in terms of content	19 (27%)
Quantitative limitations (including supply quotas and others)	17 (24%)
Restrictions to supply promotions/Restrictions on promotions of certain products (please provide examples)	11 (15%)
Other types of TSCs	5 (7%)
Total	**69**

Source: Online survey carried out by the contractors (13/03/2020)

The information gathered also pointed to certain product categories being more affected by TSCs than others, see the table below.

Figure 21: Incidence of TSCs across product categories

Source: Online survey carried out by the contractor (13/03/2020)

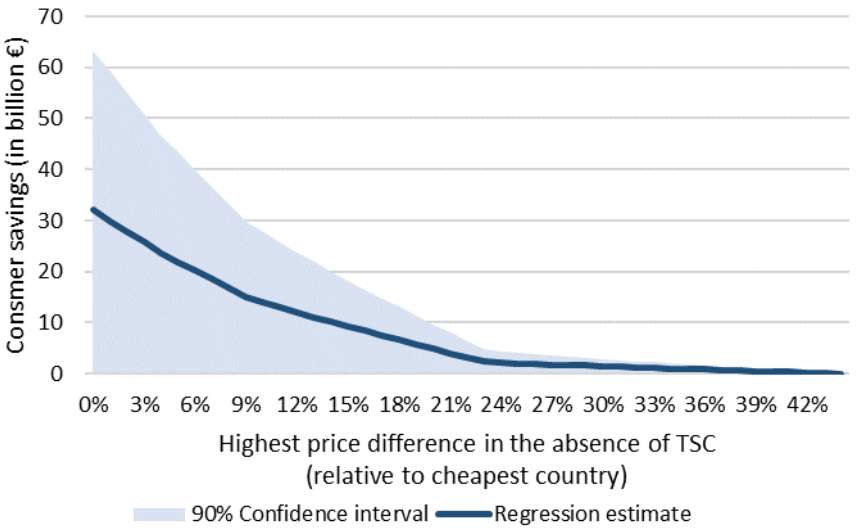
Manufacturers, who are the operators being identified by retailers and wholesalers as imposing these TSCs, expressed that they do differentiate their product offer across different (national) markets and sometimes engage in price discrimination depending on the competitive situation in the different markets. This is often due to the manufacturers' internal structures, where national branch offices oversee sales and national product catalogues. They explained that they operated as part of a complex, multi-layered and interconnected supply chain and that the way they were organised was to adapt and adhere to consumers wide and often-changing tastes and trends as well as the competitive environment. Suppliers also explained that they mirrored the way retailers and wholesalers were organised along national lines to best serve the needs of the retailers and wholesalers. Moreover, product differentiation and price discrimination do not automatically constitute TSCs and might be based on reasonable and justifiable practices/business decisions. Manufacturers explained that product differentiation was actually beneficial to consumers, as it was driven by brand manufacturers' commitment to innovation, and to adapt products to consumer preferences, local market traditions and cultures. Moreover, manufacturers stated that at the same time they always allowed retailers and wholesalers to engage in

parallel imports and to sell the products targeted for one national market in another national market, specifically in the case of passive sales where the initiative comes from the retailer or wholesaler.

The qualitative assessment of the impact of TSCs indicates that TSCs restrict cross-border trade in the Single Market and, as a result of certain types of TSCs, retailers are not able to source their supplies from the cheapest location in the EU from which a manufacturer sells, either directly or indirectly through wholesalers. The quantitative analysis of retail prices shows that the wide range of prices charged across the EU by manufacturers to retailers for the purchase of specific branded products cannot be fully explained by the factors which are typically applied to explain price differences, such as different taxation regimes (including VAT), labour costs, raw material costs, production costs (e.g., related to volumes/economies of scale), pricing of logistics. This finding is in line with existing studies – for example, the ECB study. As a result, consumers are paying higher prices than they would if the retailer could source (most of) their supplies from the manufacturer's cheapest supply location in the EU. However, manufacturers alleged that price setting is predominantly done by retailers and wholesalers themselves and they had limited influence on this process.

The results of the econometric analysis suggest that if retailers in all the countries with higher purchase prices than the country with the lowest purchase prices could source their supplies from that country, consumers could save an estimated EUR 14.1 billion (or 3.5%) on their purchases of 'bread and cereals', 'other food', 'alcoholic beverages' and 'non-alcoholic beverages' in the set of 16 countries for which retailer purchase price information was available for the study. As this econometrically derived estimate is subject to some uncertainty, the 90% confidence interval of this estimate ranges from EUR 0.5 to 28 billion.

Figure 22: Estimated consumer savings of eliminating TSCs



Source: Contractors' econometric analysis

However, the results of the survey do not allow for certainty whether the possible benefit of a lower consumer price would indeed materialise. Although most retailers reported that, in general, prices of products subject to TSCs would be lower in the absence of TSCs, only a small minority expected this to be the case when asked specifically about the product categories covered by the study. Ultimately, the pass-through of reductions in the retailer purchase prices due to the possible elimination of TSCs and more actual or potential cross-border sourcing would depend on the level of competition in the retail market and, more specifically, on the response of manufacturers to the eliminations of TSCs. Regarding the level of competition in the retail market, in the more competitive markets retailers would have to

pass-through the reductions to consumers to a larger extent as otherwise they would deteriorate their position. Regarding the response of manufacturers, they may reduce or even eliminate any differences in their sales prices across the EU, and thus reduce or eliminate the reasons to engage in cross-border sourcing. Respondents also indicated that, without TSCs, manufacturers could differentiate their product composition and packaging even further, which would undermine the economic rationale for retailers' cross-border sourcing.

The effects outlined above are not found uniformly across types of retailers and wholesalers, across product categories or across Member States.

The qualitative analysis conducted for this study has shown that the prevalence of TSCs seems to vary according to several factors, which ultimately seem to relate to issues linked to market power, such as market size, market conditions from a consumer perspective (e.g. demographics, demand, etc.) and the degree of competition on both retailer/wholesaler and manufacturer side. The study results indicate that TSCs seem to be more prevalent in the following situations:

- For **retailers** that reach a certain critical mass in terms of size and volumes traded and that are thus large enough to consider parallel imports to be economically attractive. Most retailers and wholesalers who report being subject to TSCs are international companies active in several Member States. Larger retailers and wholesalers actively seek and exploit opportunities for parallel imports as they can bear the costs of relabelling and other costs linked with these activities, while smaller retailers do not even try to engage in sourcing abroad as it is economically not advantageous for them or they are not aware of such possibilities. However, it is worth noting that smaller retailers can be affected too if they buy from national wholesalers affected by TSCs or if they form retail alliances, which both would make parallel importing (without TSCs) economically advantageous for them while this is not the case when acting individually.
- For **retailers facing strong internal competition**. Retailers and wholesalers with a strong market position are less dependent on their suppliers, as their competitive position in the retail market is less affected by the loss of a limited number of brand products, as long as these do not fall within the category of so-called 'must-have products'. This might be the reason, for instance, why TSCs have been reported only to a limited extent in a country like Denmark, where a small group of retailers dominate the market. However, it should be noted that consumers still pay very high prices in this country, possibly due to other reasons, such as high VAT rates or labour costs. On the other hand, larger players who pass the threshold of making it economically advantageous for them to engage in parallel imports but with a less strong market position and facing more internal competition seem to have a considerably worse negotiating position towards the manufacturers of international brands.
- For **branded products with high brand loyalty with consumers** where consumers are potentially more loyal to the brand than to the retailer. The manufacturers of these products often have more negotiation power due to their strong market position and due to their operations in multiple countries, which gives them the ability to limit the cross-border availability of their products as well as to set different prices for different markets (i.e. price discrimination).
- **In smaller markets,** where even relatively big retailers may not have the market power in their purchasing decisions towards manufacturers due to the lower volumes they purchase. Although TSCs form a widespread problem across the EU, there are differences in the size of the impact of TSCs across Member States. The study results indicate that TSCs are most prevalent and problematic in smaller and less competitive markets, which are situated close to larger and more competitive markets with low prices (e.g. Austria, Belgium and Luxembourg). As explained

before, this is mainly due to the market power of retailers in the negotiations with manufacturers, which depends *inter alia* on the volumes of products purchased. In the smaller markets, where retailers purchase lower volumes, manufacturers have stronger positions and TSCs consequently are more prevalent and have more impacts. Interestingly, in Central European countries, TSCs are mainly discussed as part of the wider issue of Differences in Composition of Seemingly Identical branded Products. This seems to indicate that TSCs in those countries would mainly affect the choice of products available and retailers would be motivated to engage in cross-border sourcing more by the product choice than by its price.

- For products with **shorter value chains and lower transport and logistics costs** where logistical constraints do not impede the selling and purchasing of the products cross-border. A wide range of product categories were found to be affected by TSCs. However, some products seem to be more heavily affected than others. For example, fresh foods and heavy, low-cost products often have shorter supply chains due to their shorter shelf life or the higher proportion of logistics costs in their product price, which means that supply from smaller and local producers is more common. This makes TSCs less relevant for these product categories. With other product groups, such as soft drinks, the TSCs can be more common due to the dominance of international producers, which often have national production facilities for each national market. Consequently, the categories of products for which TSCs have been mentioned by retailers and wholesalers most often are soft drinks, confectionery and personal care products.

Based on the above cases where TSCs occur more often, it can be concluded that that such constraints are more likely where the market power, and thus bargaining position, of retailers or wholesalers compared to manufacturers is small and they are less likely where the market power, and thus bargaining power, is more skewed towards the retailer or wholesaler. [147] On the other hand, it is important to point out that market power is usually linked with other characteristics. The initial hypotheses, based on existing literature, was that TSCs would be more prevalent in countries from a certain geographical area (e.g. Eastern Europe) or that predominantly higher-priced countries or predominantly smaller countries are more affected by TSCs. However, the study findings point to the competitive environment of markets (both on the side of retailers/wholesalers and on that of the manufacturers) as well as the strength of the negotiating position of the different actors as the main explanatory factors linked to the prevalence of TSCs. The price level seems to be more a consequence of the competitive environment, just like the likelihood of finding TSCs is a consequence of that. On the other hand, the geographical location and size of countries could be a factor which partly accounts for this competitive environment, but this would be subject to further analysis.

It should also be noted that there is a difference on how TSCs are understood by both retailers and manufacturers. Manufacturers in general know direct sourcing restrictions are not allowed under competition rules. However, they do apply practices that lead to differences in treatment across territories and TSCs, which are used alongside this system in practice. Manufacturers often explain these differences to be caused by the adaptation to different consumer preferences and different market conditions, which makes them change characteristics such as product availability, composition, size and packaging. They also point towards regulatory requirements as a reason for this product differentiation; they explained that this goes beyond their influence as they are required to comply with requirements that still differ widely between Member States. Most manufacturers have national offices, which form the

[147] It is important to point out that to consider bargaining power correctly, the comparison of the market shares (i.e. share of the total turnover) between retailers and manufacturers should be made based on a specific product category. While for one product category, the market share and thus bargaining power might rest with the retailer, for another product category it might rest with the manufacturer. Therefore, the above average percentages are only indicative pointing toward the higher likeliness that these retailers will have more bargaining power for certain product categories in relation to their suppliers.

direct contact points for the retailers and wholesalers for each market they operate in and which have the decision-making power over the issues flagged in this study, such as product availability and/or pricing. Nevertheless, manufacturers deny posing TSCs that would limit the geographic or quantitative access to their products. On the contrary, retailers and wholesalers argue that the TSCs and related practices described above are not used because of different market characteristics, but to divide the markets and artificially increase the profit for manufacturers. Based on the information and data collected for this study and specifically the quantitative analysis, the study concludes that the explanations of manufacturers linked to logistics or market conditions do not explain all/entirely the TSCs reported and their impacts. The information collected seems to support the argument of the retailers and wholesalers, saying that in some cases dominant market positions are exploited with the use of TSCs.

In most cases, retailers and wholesalers are affected by TSCs in a similar manner, making it less meaningful to separate the two market players in this context. Wholesalers and retailers have often similar perceptions of TSCs and both groups of stakeholders stated similar frequencies and profiles of the TSCs they face as their position in the supply chain is comparable in relation to manufacturers. On the other hand, the research found no reported instances of wholesalers applying TSCs in their relations with retailers. On the contrary, retailers only mentioned manufacturers as the actors engaging in these practices and categorically excluded wholesalers from doing so.

Regarding private label products, the collected information through all data collection tools shows no instances of the use of TSCs within a retailer chain. However, it has been stated by different respondents, and confirmed by the price data collection, that large multinational retailers applied different prices in different countries for their private label products. In the case of identical private label products, this could be considered price discrimination, which also puts pressure on pricing policies of branded products of manufacturers. The impacts of these pricing differences fall directly on the consumer, as private label products are directly distributed to them by retailers without any intermediate suppliers. This is different compared to TSCs for branded goods which only fall indirectly on consumers as retailers and/or wholesalers are intermediate suppliers between the consumers and manufacturers. According to retailers, there are no TSCs for private label products as there are no relationships between different economic operators. Even though from a Single Market and a consumer perspective, these practices might be questionable, it is much more difficult to intervene from a competition policy angle as these practices only cover internal business decisions and not relationships between different economic operators.

Finally, the data reviewed as part of the study and the responses of survey respondents suggest that the expected growth in e-commerce, and more specifically cross-border e-commerce of fast moving consumer goods (FMCG), over the near- and medium-term are unlikely to have any marked effect on the impacts of TSCs on product prices and product composition.

As an overall conclusion, it is difficult to make an assessment of the use of Territorial Supply Constraints strictly speaking (such as refusals to supply and quantitative restrictions) as no hard or documentary evidence is available besides statements and reporting from both the retailers and wholesaler on the one hand and the manufacturers on the other. However, indirect evidence, mainly the econometric analysis, the survey and interviews results, and existing literature, seems to suggest the presence of restrictions in the supply chain, which fragment the Single Market. Moreover, there is evidence to suggest that manufacturers are engaging in practices that also enable them to use TSCs more effectively, which take the form of product differentiation not justified by regulatory requirements and other constraints (e.g. different taxation regimes (including VAT), different labour costs, different raw material costs, different production costs (e.g., related to volumes/economies of scale), different pricing of logistics). This has a disproportionate effect on a certain category of retailers and wholesalers – namely, those for which it would be economically advantageous to engage in parallel imports, but which do not have a

sufficiently strong negotiating position towards the manufacturers.

Annex I: List of consulted sources

- Agra Alimentation (2019), Commerce de détail: les distributeurs dénoncent les contraintes territoriales d'approvisionnement dans le Benelux, 30 May 2018.
- AIM – European Brands Association (2013), Specific AIM comments on Territorial Supply Constraints, 25 April 2013.
- Aktuality (2017), Top potravinové reťazce, v ktorých najviac míňajú Slováci svoje peniaze, 11.9.2017.
- SZPI (2016), Press release "Research: the Czech consumer demands the same quality food as the European one", 02/18/2016.
- Aktuality (2018), Potraviny na Slovensku sú v rámci V4 najdrahšie, tvrdí analytička, 5.7.2018.
- Antitrust: Commission opens formal investigation into AB InBev's practices on Belgian beer market, European Commission - Press release, 30 June 2016.
- Antitrust: Commission sends Statement of Objections to AB InBev for preventing cheaper imports of beer into Belgium, European Commission - Press release, 30 November 2017.
- FOD/SPF Economie (2012), Niveau de prix dans les supermarchés, FOD/SPF Economie, E1-432/0310-12, Bruxelles, 2012.
- Avalara (2020), 2020 European Union VAT rates, Avalara.
- Bánociová and Ťahlová (2018). Do Reduced Vat Rates on Foodstuffs in Eu Affect Consumers? Slovak Journal of Food Sciences.
- BPI (2014), Equity Research – Portuguese Retail, BPI, 2014.
- Bunte, Frank & Van Galen, Michiel & A, Winter & Dobson, Paul & Bergès-Sennou, Fabian & Monier, Sylvette & Juhász, A. & Moro, Daniele & Sckokai, Paolo & Soregaroli, Claudio & Meulen, Bernd & Szajkowska, Anna. (2011). The impact of private labels in SME competitiveness of the European food supply chain. Journal of Herpetology - J HERPETOL., January 2011.
- C(2019) 3465, Commission decision of 13.5.2019 relating to a proceeding under Article 102 of the Treaty on the Functioning of the European Union (the Treaty) AT.40134 – AB InBev beer trade restrictions, Brussels, 13.5.2019.
- COM(2009) 591, A better functioning food supply chain in Europe, 28 October 2009.
- COM(2010) 2020, Communication from the Commission "Europe 2020 – A strategy for smart, sustainable and inclusive Growth."
- COM(2013) 37, Green Paper on unfair trading practices in the Business-to-Business food and non-food supply chain in Europe, 31 October 2013.
- COM(2018) 219, A European retail sector fit for the 21st century, 19 April 2018.
- Conseil de la concurrence (2019), Rapport d'enquete dans le secteur de la grande distribution au Grand-Duche de Luxembourg. 18 January 2019.
- Conseil central de l'économie (2019), Les défis de l'économie belge - Une évolution des prix à la consommation et des prix business-to-business en phase avec les trois principaux pays voisins, Conseil central de l'économie, CCE 2019-1256, Bruxelles.
- ConsumerHub (2018), European retailers lobby the EU to combat territorial supply constraints, Consumer Hub, 8 June 2018.
- CPH Post (2016), Danish discount retailer Normal to expand abroad: Fast-growing chain plans to invest 400 million kroner in new stores next year. December 13th, 2016.
- Distrifood.nl, Marktaandelen (2019).
- ECB (2015). Grocery Prices in The Euro Area: Findings from The Analysis of a Disaggregated Price Dataset. ECB Economic Bulletin (Issue 1).
- EU Food Law (2019), Romanian Senate adopts legislation on dual food standards, 30 Oct 2019.

- European Competition, DG Competition (2014), The economic impact of modern retail on choice and innovation in the EU food sector, Report prepared by EY, Arcadia International and Cambridge Econometrics, November 2014.
- European Commission (2018), Operational Restrictions in the Retail Sector, doi: 10.2873/6677, April 2018.
- European Commission (2019). VAT rates applied in the Member States of the European Union – Situation at 1st July 2019.
- European Council (2017), Agriculture and Fisheries Council meeting on 6 March 2017 Experience of certain EU Member States with dual quality of foodstuffs in free movement within the EU, 6716/17, Brussels, 27 February 2017.
- European Parliament (2018), Parliamentary question, Question for written answer E-001577-18, 14 March 2018.
- FranceAgrimer (2019), Impact des Nouvelles Formes de Commerce sur les Entreprises Agroalimentaires, 2019.
- Gondola (2017), Belgium: Gondola, The Big Picture: Aller Over Belgische Consumptie in cijfers, 2017.
- Ministère de l'Économie du Grand-Duché du Luxembourg, Observatoire de la formation des prix (2018), Etude 4 Frontières, Analyse comparative des prix de produits identiques dans les grandes surfaces alimentaires au sein de la Grande Région.
- Government Europa (2019), Deposit return schemes: resolving plastic waste, January 2019.
- Institut des comptes nationaux (2018), Analyse des prix Rapport Annuel 2017 de l'Institut des comptes nationaux, SPF Economie, Brussels, 13 mars 2018.
- JRC Technical Reports (2020), Analyses of economic rationale behind differences in the composition of seemingly identical branded food products in the Single Market.
- Le Quotidien (2019), Manger coûte plus cher au Luxembourg, 23/09/19.
- Le Soir (2017), AB InBev suspecté d'abus de position dominante: Les Belges ont sans doute payé leurs bières plus cher, 30/11/2017.
- Les Echos (2020), Négociations commerciales: amendes pour Carrefour, Système U et Intermarché, 11 févr. 2020.
- Narodne Novine (2017), Zakon o zabrani nepoštenih trgovačkih praksi u lancu opskrbe hranom, November 2017.
- OECD (2013), Roundtable on vertical restraints for on-line sales, note submitted by the European Union to the Competition Committee, 30 Jan 2013.
- RBB Economics (2013), RBB Brief 42, May 2013.
- RBB Economics (2013), Territorial supply constraints: the economic arguments. April 2013
- Retail Detail (2018), Urgent action needed against territorial supply constraints, Retail Detail, 23 May 2018.
- Retail Report (2018), Geschäfte ohne Geoblocking, 02.08.2018.
- Secrétariat général Benelux (2015), Enquête sur la nature et l'ampleur des restrictions territoriales de l'offre dans le commerce de détail au sein du Benelux, 30 November 2015.
- Secretariat of the Benelux Union (2018), Territorial Supply Constraints in The Retail Trade in Belgium, The Netherlands and Luxemburg, General Secretariat of the Benelux Union, Brussels, February 2018.
- Senat de Belgique (2018), Question écrite n° 6-1889 de Lode Vereeck (Open Vld) au vice-premier ministre et ministre de l'Emploi, de l'Economie et des Consommateurs, chargé du Commerce extérieur, 31/5/2018.
- Sonae (2018), Introduction to Sonae, June 2018.
- Státní zemědělská a potravinářská inspekce (2016), Výzkum: český spotřebitel žádá stejně kvalitní potraviny jako evropský. 18. 02. 2016.

- Sudinfo.be (2019), Écarts de prix entre pays: le Benelux interpelle la Commission, 20 Août 2019.
- Susanne Bygvrå (1998) The road to the Single European Market as seen through the Danish retail trade: Cross-border shopping between Denmark and Germany, The International Review of Retail, Distribution and Consumer Research, 8:2, 147-164, DOI: 10.1080/09593969800000003.
- Thelocal.dk (2019), Denmark is EU's most expensive country for buying groceries, 25 June 2019.
- Tvsyd (2012), Mad overhaler spiritus i grænsebutikker. 20. February 2012.

Websites:

- http://eagri.cz/public/web/file/634075/Prezentace__Zofin_16._10._2019.pdf
- http://www.mpsr.sk/download.php?fID=12627
- https://apps.fas.usda.gov/newgainapi/api/report/downloadreportbyfilename?filename=Retail%20Food%20Sector%20_Prague_Czech%20Republic_5-18-2015.pdf
- https://ec.europa.eu/eurostat/statistics-explained/index.php/Comparative_price_levels_of_consumer_goods_and_services
- https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/1936-Evaluation-of-the-Vertical-Block-Exemption-Regulation
- https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019L0633&from=EN
- https://import-export.societegenerale.fr/en/country/estonia/market-distribution
- https://united-kingdom.taylorwessing.com/en/insights/brands-update/new-restrictions-affecting-international-food-brands-in-slovakia
- https://www.statista.com/statistics/1100962/europe-sales-area-provision-2018/
- https://www.statista.com/statistics/451485/sales-area-per-capita-in-europe-by-country/
- https://www.statista.com/statistics/516574/store-brands-market-share-in-germany/
- https://www.statista.com/statistics/565747/market-share-of-selected-grocery-retailers-in-denmark/
- https://www.statista.com/statistics/565747/market-share-of-selected-grocery-retailers-in-denmark/
- https://www.statista.com/statistics/589618/leading-companies-in-food-retail-netherlands/
- https://www.statista.com/statistics/778911/division-sales-volume-distributors-food-by-circuit-france/
- https://www.statista.com/statistics/778911/division-sales-volume-distributors-food-by-circuit-france/
- https://www.statista.com/statistics/869237/private-labels-market-share-by-segment-in-italy/
- https://www.statista.com/statistics/893574/private-label-market-share-in-belgium-by-product-category/
- https://www.statista.com/statistics/978630/leading-food-retailers-in-belgium-by-market-share/
- https://www.statista.com/study/45155/the-market-for-private-label-in-western-economies/

Annex II: List of price data analysed

Euromonitor

Average national retail prices by distribution channel for various brands across a range of product categories and countries. The product categories include 'Beauty and Personal Care', 'Home Care', 'Packaged Food' and 'Bottled Water'. The price points are from 2017 for all products except for soap, in which case the data refers to 2018 prices. The countries covered by this dataset are Croatia, Czechia, Estonia, Romania, Slovakia, Austria, Belgium, Denmark, France, Portugal and the United Kingdom.

Eurostat

Price level indices (EU-27 =100) for food, non-alcoholic beverages and alcoholic beverages for each of the 27-EU Member States downloaded from the folder "Purchasing power parities (PPPs), price level indices and real expenditures for ESA 2010 aggregates (prc_ppp_ind)" https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=prc_ppp_ind&lang=en)

Retailer data on purchase prices

Indices of purchase prices (cheapest country =100) for anonymised goods in various product categories in various EU Member States

Prices from regional price collection exercise

Prices of 31 A brand products (and similar national/regional brand products and private label products) collected from stores in 3 border regions. The list of products is provided at Annex V and the list of the stores is provided at Annex VI.

Annex III: Interview guidelines

Retailers

Name:
Organisation:
Country:
Brief description of your organisation/activity:

Introduction

These interviews are conducted for a study on behalf of the European Commission looking into Territorial Supply Constraints (TSCs) in the EU retail sector. TSCs are understood as barriers imposed by private operators (manufacturers or wholesalers) in the supply chain, which can affect retailers or wholesalers. They impede or limit the retailers' or wholesalers' ability to source goods in other EU countries than the one they are based in, and/or distribute (i.e. resell) them to other EU countries than the one they are based in. Retailers or wholesalers subject to TSCs are usually referred to a specific national subsidiary of the supplier. For example, they can be refused to be supplied from abroad or the products may be differentiated to make cross-border supplying impossible. A situation when a supplier agrees to sell products to a wholesaler or a retailer from abroad under condition that they collect the products themselves directly from the supplier, is not considered a TSC.

Based on the inception phase of this study, we have selected the following product categories for further analysis Please refer to these giving concrete examples when answering the questions below:

- Breakfast cereals;
- Confectionary (chocolate bars & chocolate tablets);
- Dairy (yoghurts & milk);
- Soft drinks (cola carbonates & non-cola carbonates);
- Household care (washing detergents, washing-up liquids); and
- Personal care (shampoos & soaps).

All information you provide will be treated with the utmost care and only presented in an aggregated and anonymised manner, to ensure confidentiality of your replies.

Prevalence of TSCs

1. **Retailers/wholesalers:** Are you facing any Territorial Supply Constraints? Have you experienced TSCs directly or indirectly (e.g. with no clear justification)? What forms did these TSCs take?
2. **Retailers/wholesalers:** If so, for which of the product groups mentioned in the introduction (or for another not mentioned) do you face TSCs?

	Often	Sometimes	Rarely	Never
Breakfast cereals				
Confectionary (chocolate bars & chocolate tablets)				

Dairy (yoghurts & milk)				
Household care (washing detergents, washing-up liquids)				
Personal care (shampoos & soaps)				
Soft drinks (cola carbonates & non-cola carbonates)				
Others, please specify				

3. **Retailers/wholesalers:** what hat type of manufacturers are more likely to limit the supply of their products to certain territories? Think for example of:
   - Multinational or domestic;
   - Large manufacturers or small manufacturers;
   - Producers of more homogeneous goods (e.g. only 1-2 product categories) or producers of heterogeneous goods (3 and more categories);
   - Producers of simple products or producers of complex (multiple ingredients, highly processed) products; and
   - Other patterns – please explain?
4. **Retailers/wholesalers:** What types of TSCs exist and which ones are more prevalent (and why)? Consider, for example the following:

	Often	Sometimes	Rarely	Never
Refusals to supply certain products;				
Quantitative limitations (including supply quotas and others);				
Restrictions to supply promotions/Restrictions on promotions of certain products;				
Destination obligations;				
Obligation of no reselling (to other wholesalers or retailers);				
Differentiation of products in terms of content/composition;				
Differentiation of products in terms of packaging (e.g. national language labelling and/or refusal to put multi-language labels, packaging size);				
Other types of differentiation of products (please specify); and				
Other types of TSCs (please specify).				

Which is the most important one (e.g. in terms of frequency or impact)?

5. **Retailers/wholesalers:** From the types you identified, are some types of practices more common for certain products from the list, for certain distribution channels (store types and formats) or for certain supply chains?

6. **Retailers:** To your knowledge, do other retailers in your country face TSCs to the same extent as you? For the products indicated, what would be your assessment of market shares of all retailers in your country that face TSCs?
7. **Retailers:** For which of the product categories does your company offer products under its own brand?
8. **Retailers:** For the products offered under your own brand, what is the share of Private Label in the total of the product category? In particular for the 6 products indicated.
9. **Retailers:** For the products offered under your own brand, to what extent are they differentiated across countries in which your company operates? For example, in terms of composition, packaging or prices?

Reasons for using TSCs

10. **Retailers/wholesalers:** What are the reasons mentioned by suppliers for applying TSCs?
11. **Retailers/wholesalers:** Are TSCs used more often in relation to new products or other types of innovation?
12. **Retailers/wholesalers:** Does your company experience more TSCs from suppliers that are more vertically integrated and consolidated? Does your company experience more TSCs from suppliers that have more market power than you? Does more competition among suppliers lead to less/more TSCs? Does more competition among retailers lead to less/more TSCs?
13. **Retailers/wholesalers:** For the product categories in which TSCs are present, do you know of regulatory barriers such as national packaging or labelling requirements that would explain suppliers restricting sales of certain products to certain Member States or differentiating the products, their packaging or their sales conditions? Are there any product categories for which there are no such regulatory barriers?
14. **Retailers/wholesalers:** Which consumer-related factors (e.g. consumer preferences such as taste, packaging size or formula, consumer purchasing power or consumer behaviour such as sales channels used, interest in product information, interest in particular kinds of products such as bio) determine the offer of the products under scope of this study, including the price, the product attributes and the range of products in particular Member States? Please answer for each of the product categories separate, if relevant. How do these factors impact the way distribution is organised?
15. **Retailers/wholesalers:** Are there other factors (mentioned by suppliers) that would explain TSCs?
16. **Retailers**: If your company differentiates products under its own brand across different countries in which it operates, what are the reasons for this differentiation? Please refer to the possible explanations mentioned in the questions above as well as any other factors that may play a role.

The impact of TSCs

17. **Retailers:** What is the impact of TSCs such as those mentioned earlier in this questionnaire? At this stage please list the various impacts that are significant from a business perspective. We will discuss some of these impacts in greater detail in the next questions.

18. **Retailers:** Does the existence of TSCs increase the cost of your supplies? If yes, in what way particularly? Would this cost be different depending on the product category subject to TSCs? For example, do you need to pay higher purchase prices? Is there a cost of lost opportunities – if yes, could you estimate it as a share of your revenue, profit or in another way? Would non-existence of TSCs increase your transportation costs if products were to be sourced from abroad?
19. **Retailers:** Are the costs related to TSCs (including possible cost of additional transport or cost of lost opportunities) passed on to your consumers/customers? If yes, how and to what extent (e.g. as a share of the final price)? If not, please explain why not.
20. **Retailers:** Do you think that sales of products subject to TSCs could be higher if these TSCs did not exist? Would that be case for all product categories or only some? If only some, please specify the product categories for which this would be the case.
21. **Retailers:** Do you think that your range of stock keeping units (SKUs) would be wider if these TSCs did not exist? Would that be case for all product categories or only some? If only some, please specify the product categories for which this would be the case.
22. , **Retailers:** Do you think that you could reduce the price of products subject to TSCs if these TSCs did not exist? If only some, please specify the product categories for which this would be the case.?
23. **Retailers:** If you think that sales are lower, can you please provide an estimate (in %) of how much lower they are relative to a situation with no TSCs. Please provide those estimates for the different product categories subject to TSCs. I
24. **Retailers:** Are there any products (within the 6 product categories and other) which you do not sell because they are subject to TSCs? In terms of brands, types of products, SKUs, or other?
25. **Retailers:** If you answered yes to the previous question, please enumerate these products and provide an estimate how much potential sales revenue you are losing as a result.
26. **Retailers:** What would be a typical profit margin (operating income/sales revenues) on such sales?
27. **Retailers:** Would you source differently your supplies if TSCs did not exist?
28. **Retailers:** In particular would you source directly from foreign suppliers (wholesaler and / or manufacturer)? If yes, please specify for each of the product categories subject to TSCs.
29. **Retailers:** If the answer is yes, what proportion (please specify by value or volume) of your supply of each product category subject to a TSC would you source abroad in the absence of a TSC?
30. **Retailers:** If there are differences across product categories, please explain why. What product attributes would you consider important for particular product categories when considering possibility of sourcing abroad? Which criteria would such products need to fulfil to make cross-border purchases attractive and economically justified?
31. **Retailers:** What impact(s) does the presence of TSCs have on your strategy(ies) for attracting customers to your stores.
32. **Retailers:** If TSCs were eliminated, would you pass-on any lower supply costs to consumers? If yes, to what extent those lower costs would be passed on for each of the product categories subject to TSCs? Please elaborate.
33. **Retailers:** If TSCs were eliminated would you change the range of services offered to your customers?
34. **Retailers:** How else could your customers benefit from an elimination of TSCs?
35. **Retailers:** Do you see any potential negative impacts of an elimination of TSCs on consumers?

36. **Retailers:** If regulatory barriers such as national packaging or labelling requirements or recycling schemes exist for any of the product categories, to what extent would they still be a reason for your limiting imports from abroad or not importing at all? Please elaborate for each of the product categories concerned and other?
37. **Retailers:** What would be the impact on the environment (e.g. in terms of carbon footprint, waste generation, etc.) if you sourced more of your supply from abroad?
38. **Retailers:** If you could source your products as you wished (i.e. there are no TSCs), would it:
    a. result in longer shipping distances for the products you purchase and hence higher environmental footprint (depending on the product category and the means of transport)? If yes, what would be the difference, e.g. in percentage terms? If yes, would there be ways to mitigate possible effects?
    b. would it result in more or less waste being generated? If yes, what would be the difference, e.g. in percentage terms? If waste would increase, would there be ways to mitigate possible effects?
    c. Would there be any other positive or negative impacts on the environment/sustainability of the supply chain?
39. **Retailers:** Would there be ways for manufacturers to introduce other (new) means that would serve as TSCs?
40. **Retailers:** Do you think the cross-border supply of products under your company's own brand could change (e.g. increase)? If you could, would you source the own brand products from another branch of your global brand owner? If yes, in what product categories? What would be the share of such products in their product categories?

The role of digitalisation, in particular the multipurpose channels

41. **Retailers and wholesalers:** What impact do current and future e-commerce (domestic and cross-border) developments have on your sales strategies? For example, do you differentiate the sales channels used? Do you differentiate the products offered? Does e-commerce have impact on the prices of products you offer, including on products under your own brands? Other….
42. **Retailers and wholesalers:** To what extent are sales to customers outside the EU important to your business strategy? Have sales to customers outside the EU increased in the past five years? By how much approximately? By how much do you expect such sales to increase from 2020 to 2025? What proportion of total sales do you expect sales outside of the EU to account for?
43. **Retailers and wholesalers:** To what extent do you source products from outside the EU. How important is this for your business strategy? Have purchases from sources outside the EU increased in the past five years? For products which are not subject to TSCs? For products which are subject to TSCs. By how much approximately? By how much do you expect such purchases to increase from 2020 to 2025? What proportion of total sales do you expect sales outside of the EU to account for?
44. **Retailers and wholesalers:** Do you think that your customers are increasingly purchasing outside your home country, ordering on-line or shopping physically abroad. If you, do, do you think that in the longer run this will make it more difficult for manufacturers to apply TSCs. If yes, please explain why.

45. **Retailers and wholesalers:** What are the past and future impacts of sales from and to countries outside the EU on your company's situation? Do you face or expect to face increased competition from sellers based outside the EU?
46. **Retailers and wholesalers:** What other impact(s) do you expect digitalisation to have on your business model, strategy and processes (e.g. use of big data, digitalisation of production, logistics, consolidation of the value chain, online wholesale platforms, etc.)?

Concluding questions

47. **All stakeholders:** Is there anything, within the scope of this study, that needs to be considered which we have not discussed yet?
48. **All stakeholders:** Is there any specific literature that you could recommend and that covers different aspects of the topic of this study?
49. **All stakeholders:** Are there any relevant documents and/or data you are willing to share with us? If so, please provide such documents and indicate whether they contain any confidential information.

Wholesalers

Name:
Organisation:
Country:
Brief description of your organisation/activity:

Introduction

These interviews are conducted for a study on behalf of the European Commission looking into Territorial Supply Constraints (TSCs) in the EU retail sector. TSCs are understood as barriers imposed by private operators (manufacturers or wholesalers) in the supply chain, which can affect retailers or wholesalers. They impede or limit the retailers' or wholesalers' ability to source goods in other EU countries than the one they are based in, and/or distribute (i.e. resell) them to other EU countries than the one they are based in. Retailers or wholesalers subject to TSCs are usually referred to a specific national subsidiary of the supplier. For example, they can be refused to be supplied from abroad or the products may be differentiated to make cross-border supplying impossible. A situation when a supplier agrees to sell products to a wholesaler or a retailer from abroad under condition that they collect the products themselves directly from the supplier, is not considered a TSC.

Based on the inception phase of this study, we have selected the following product categories for further analysis Please refer to these giving concrete examples when answering the questions below:

- Breakfast cereals;
- Confectionary (chocolate bars & chocolate tablets);
- Dairy (yoghurts & milk);
- Soft drinks (cola carbonates & non-cola carbonates);
- Household care (washing detergents, washing-up liquids); and

- Personal care (shampoos & soaps).

All information you provide will be treated with the utmost care and only presented in an aggregated and anonymised manner.

Prevalence of TSCs

1. **Retailers/wholesalers:** Are you facing any Territorial Supply Constraints? Have you experienced TSCs directly or indirectly (e.g. with no clear justification)? What forms did these TSCs take?
2. **Retailers/wholesalers:** If so, for which of the product groups mentioned in the introduction (or for another not mentioned) do you face TSCs?

	Often	Sometimes	Rarely	Never
Breakfast cereals				
Confectionary (chocolate bars & chocolate tablets)				
Dairy (yoghurts & milk)				
Household care (washing detergents, washing-up liquids)				
Personal care (shampoos & soaps)				
Soft drinks (cola carbonates & non-cola carbonates)				
Others, please specify				

3. **Retailers/wholesalers:** what hat type of manufacturers are more likely to limit the supply of their products to certain territories? Think for example of:
   - Multinational or domestic;
   - Large manufacturers or small manufacturers;
   - Producers of more homogeneous goods (e.g. only 1-2 product categories) or producers of heterogeneous goods (3 and more categories);
   - Producers of simple products or producers of complex (multiple ingredients, highly processed) products; and
   - Other patterns – please explain?
4. **Retailers/wholesalers:** What types of TSCs exist and which ones are more prevalent (and why)? Consider, for example the following:

	Often	Sometimes	Rarely	Never
Refusals to supply certain products;				
Quantitative limitations (including supply quotas and others);				
Restrictions to supply promotions/Restrictions on promotions of certain products;				
Destination obligations;				
Obligation of no reselling (to other wholesalers or retailers);				
Differentiation of products in terms of content/composition;				

Differentiation of products in terms of packaging (e.g. national language labelling and/or refusal to put multi-language labels, packaging size);				
Other types of differentiation of products (please specify); and				
Other types of TSCs (please specify).				

Which is the most important one (e.g. in terms of frequency or impact)?

5. **Retailers/wholesalers:** From the types you identified, are some types of practices more common for certain products from the list, for certain distribution channels (store types and formats) or for certain supply chains?
6. **Wholesalers:** To what extent do you apply TSCs towards retailers for the six selected product categories and for other product categories? Are you required to do so by manufacturers?
7. **Wholesalers**: To your knowledge, do other wholesalers in your country face TSCs to the same extent as you? For the products indicated, what would be your assessment of market shares of all wholesalers in your country that face TSCs?
8. **Wholesalers:** To what extent do you think that the lack of availability of certain products for purchase in the national market is driven by:
    - TSCs applied by manufacturers;
    - Market decisions by the retailers; and
    - Other factors (please mention).
9. **Wholesalers:** For which of the product categories does your company offer products under its own brand?
10. **Wholesalers**: For the products offered under your own brand, what is the share of Private Label in the total of the product category? In particular for the 6 products indicated.
11. **Wholesalers**: For the products offered under your own brand, to what extent are they differentiated across countries in which your company operates? For example, in terms of composition, packaging or prices?

Reasons for using TSCs

12. **Retailers/wholesalers:** What are the reasons mentioned by suppliers for applying TSCs?
13. **Retailers/wholesalers:** Are TSCs used more often in relation to new products or other types of innovation?
14. **Retailers/wholesalers:** Does your company experience more TSCs from suppliers that are more vertically integrated and consolidated? Does your company experience more TSCs from suppliers that have more market power than you? Does more competition among suppliers lead to less/more TSCs? Does more competition among retailer lead to less/more TSCs?
15. **Retailers/wholesalers:** For the product categories in which TSCs are present, do you know of regulatory barriers such as national packaging or labelling requirements that would explain suppliers restricting sales of certain products to certain Member States or differentiating the products, their packaging or their sales conditions? Are there any product categories for which there are no such regulatory barriers?
16. **Retailers/wholesalers:** Which consumer-related factors (e.g. consumer preferences such as taste, packaging size or formula, consumer purchasing power or consumer behaviour such as sales channels used, interest in product information, interest in particular kinds of products such as bio) determine the offer of the products under scope of this study, including the price, the product attributes and the range of products in particular Member States? Please answer for each of the product categories separate, if relevant. How do these factors impact the way distribution is organised?
17. **Retailers/wholesalers:** Are there other factors (mentioned by suppliers) that would explain TSCs?
18. **Manufacturers, wholesalers:** If you do so, how do you explain restricting sales of certain products to certain Member States?
19. **Manufacturers, wholesalers:** If you do so, how do you explain differentiating sales conditions (in particular the price and the range of Stock Keeping Units, SKUs) of certain products in the different Member States you operate in?

The impact of TSCs

20. **Wholesalers:** What is the impact of TSCs such as those mentioned earlier in this questionnaire? At this stage please list the various impacts that are significant from a business perspective. We will discuss some of these impacts in greater detail in the next questions.
21. **Wholesalers:** Does the existence of TSCs increase the cost of your supplies? If yes, in what way particularly? Would this cost be different depending on the product category subject to TSCs? For example, do you need to pay higher purchase prices? Is there a cost of lost opportunities – if yes, could you estimate it as a share of your revenue, profit or in another way? Would non-existence of TSCs increase your transportation costs if products were to be sourced from abroad?
22. **Wholesalers:** Are the costs related to TSCs (including possible cost of additional transport or cost of lost opportunities) passed on to your consumers/customers? If yes, how and to what extent (e.g. as a share of the final price)? If not, please explain why not.
23. **Wholesalers:** Do you think that sales of products subject to TSCs could be higher if these TSCs did not exist Would that be case for all product categories or only some? If only some, please specify the product categories for which this would be the case.

24. **Wholesalers:** Do you think that your range of stock keeping units (SKUs) would be wider if these TSCs did not exist? Would that be case for all product categories or only some? If only some, please specify the product categories for which this would be the case.
25. **Wholesalers:** Do you think that you could reduce the price of products subject to TSCs if these TSCs did not exist? If only some, please specify the product categories for which this would be the case.?
26. **Wholesalers:** If you think that sales are lower, can you please provide an estimate (in %) of how much lower they are relative to a situation with no TSCs. Please provide those estimates for the different product categories subject to TSCs. I
27. **Wholesalers:** Are there any products which you do not sell domestically because they are subject to TSCs?
28. **Wholesalers:** If you answered yes to the previous questions, please enumerate these products and provide an estimate how much sales revenue you are forgoing as a result.
29. **Wholesalers:** What would be a typical profit margin (operating income/sales revenues) on such sales?
30. **Wholesalers:** Are there any products which you do not sell abroad because they are subject to TSCs?
31. **Wholesalers:** If you answered yes to the previous questions, please enumerate these products and provide an estimate how much sales revenue you are forgoing as a result.
32. **Wholesalers:** What would be a typical profit margin (operating income/sales revenues) on such sales?
33. **Wholesalers:** Would you source differently your supplies if TSCs did not exist?
34. **Wholesalers:** In particular would you source directly from foreign suppliers (wholesaler and / or manufacturer)?
35. **Wholesalers:** If the answer is yes, what proportion of your supply of a product subject to a TSC would you source abroad in the absence of a TSC?
36. **Wholesalers:** Would it be feasible to import all required products from abroad once a supplier would remove all their TSCs?
37. **Wholesalers:** Would there be a limit on the quantity due to the production and distribution network of the supplier?
38. **Wholesalers:** Would you do this for all products currently subject to a TSC or only for selected products? If you would do this only for selected products, please explain why.
39. **Wholesalers:** Would you sell your products to markets abroad if TSCs did not exist?
40. **Wholesalers:** If the answer is yes, by what percentage would you increase your sales of a product subject to a TSC by selling abroad in the absence of a TSC?
41. **Wholesalers:** Would it be feasible to source all required products from abroad once a supplier would remove all their TSCs?
42. **Wholesalers:** Would there be a limit on the quantity due to the production and distribution network of the supplier?
43. **Wholesalers:** Would you do this for all products currently subject to a TSC or only for selected products? If you would do this only for selected products, please explain why.
44. **Wholesalers:** Would you have adopted a different sales strategy in the absence of TSC? Please explain how it would differ
45. **Wholesalers:** If TSCs were eliminated, would you pass-on fully or partially any lower supply costs to your customers? Please elaborate if less than full pass through?
46. **Wholesalers:** If TSCs were eliminated would you change the range of services offered to your customers?
47. **Wholesalers:** How else could your customers benefit from an elimination of TSCs?
48. **Wholesalers:** Do you see any potential negative impacts for customers of an elimination of TSCs?

49. **Wholesalers:** To what extent would regulatory barriers such as national packaging or labelling requirements or recycling schemes still be a reason for preventing or limiting imports from abroad exports to abroad? Please elaborate.
50. **Wholesalers:** If you could source your products as you wished, i.e there are no TSCs, would it:
    a. result in longer shipping distances for the products you purchase and hence higher environmental footprint (depending on the product category and the means of transport)? If yes, what would be the difference, e.g. in percentage terms? If yes, would there be ways to mitigate possible effects?
    b. would it result in more or less waste being generated? If yes, what would be the difference, e.g. in percentage terms? If waste would increase, would there be ways to mitigate possible effects?
    c. would there be any other positive or negative impacts on the environment/sustainability of the supply chain? Please explain.
51. **Wholesalers:** Would there be ways for manufacturers to introduce other (new) means that would serve as TSCs?

The role of digitalisation, in particular the multipurpose channels

52. **Wholesalers**: To what extent are sales to customers outside the EU important to your business strategy? Have sales to customers outside the EU increased in the past five years? By how much approximately? By how much do you expect such sales to increase from 2020 to 2025? What proportion of total sales do you expect sales outside of the EU to account for?
53. **Wholesalers:** To what extent do you source products from outside the EU. How important is this for your business strategy? Have purchases from sources outside the EU increased in the past five years? For products which are not subject to TSCs? For products which are subject to TSCs. By how much approximately? By how much do you expect such purchases to increase from 2020 to 2025? What proportion of total sales do you expect sales outside of the EU to account for?
54. **Wholesalers:** Do you think that your customers are increasingly purchasing outside your home country. If you, do, do you think that in the longer run this will make it more difficult for manufacturers to apply TSCs. If yes, please explain why.
55. **Wholesalers:** Do you face or expect to face increased competition from sellers based outside the EU?
56. **Wholesalers:** What other impact(s) do you expect digitalisation to have on your business model, strategy and processes (e.g. use of big data, digitalisation of production, logistics, consolidation of the value chain, online wholesale platforms, etc.)?

Concluding questions

57. **All stakeholders:** Is there anything, within the scope of this study, that needs to be considered which we have not discussed yet?
58. **All stakeholders:** Is there any specific literature that you could recommend and that covers different aspects of the topic of this study?
59. **All stakeholders:** Are there any relevant documents and/or data you are willing to share with us? If so, please provide such documents and indicate whether they contain any confidential information.

Manufacturers

Name:
Organisation:
Country:
Brief description of your organisation/activity:

Introduction

These interviews are conducted for a study on behalf of the European Commission looking into Territorial Supply Constraints (TSCs) in the EU retail sector. TSCs are understood as barriers imposed by private operators (manufacturers or wholesalers) in the supply chain, which can affect retailers or wholesalers. They impede or limit the retailers' or wholesalers' ability to source goods in other EU countries than the one they are based in, and/or distribute (i.e. resell) them to other EU countries than the one they are based in. Retailers or wholesalers subject to TSCs are usually referred to a specific national subsidiary of the supplier. For example, they can be refused to be supplied from abroad or the products may be differentiated to make cross-border supplying impossible. A situation when a supplier agrees to sell products to a wholesaler or a retailer from abroad under condition that they collect the products themselves directly from the supplier, is not considered a TSC.

Based on the inception phase of this study, we have selected the following product categories for further analysis Please refer to these giving concrete examples when answering the questions below:

- Breakfast cereals
- Confectionary (chocolate bars & chocolate tablets)
- Dairy (yoghurts & milk)
- Soft drinks (cola carbonates & non-cola carbonates)
- Household care (washing detergents, washing-up liquids)
- Personal care (shampoos & soaps)

All information you provide will be treated with the utmost care and only presented in an aggregated and anonymised manner.

Prevalence of TSCs

1. **Manufacturers:** Does your company supply wholesalers and retailers in other countries that the one you are based in? In case your company sells products to customers in different countries, what is the share of the product categories that is sold abroad and how is the distribution organised: is there one distribution centre for the entire EU or are distribution centres split up by (groups of) Member States?
2. **Manufacturers:** Do you differentiate your offer across countries?
3. **Manufacturers:** To your knowledge, are practices limiting cross-border supply from another EU country prevalent in your country? If so, for which of the product groups that your company operates in (or for other)? Consider, for example the following:

	Often	Sometimes	Rarely	Never
Refusals to supply certain products;				

Quantitative limitations (including supply quotas and others);				
Restrictions to supply promotions/Restrictions on promotions of certain products;				
Destination obligations;				
Obligation of no reselling (to other wholesalers or retailers);				
Differentiation of products in terms of content/composition;				
Differentiation of products in terms of packaging (e.g. national language labelling and/or refusal to put multi-language labels, packaging size);				
Other types of differentiation of products (please specify); and				
Other types of TSCs (please specify).				

Which is the most important one (e.g. in terms of frequency or impact)? What would be the extent of such practices, e.g. in terms of market shares in relevant product categories?

4. **Manufacturers:** What types of such practices limiting cross-border supply from another EU country exist in your country and which ones are more prevalent (and why)? Consider, for example the following:
   - Refusals to supply certain products;
   - Quantitative limitations (including supply quotas and others);
   - Restrictions to supply promotions/Restrictions on promotions of certain products;
   - Destination obligations;
   - Obligation of no reselling (to other wholesalers or retailers);
   - Differentiation of products in terms of content/composition;
   - Differentiation of products in terms of packaging (e.g. national language labelling and/or refusal to put multi-language labels, packaging size);
   - Other types of differentiation of products (please specify); and
   - Other types of TSCs (please specify).
5. **Manufacturers:** From the types you identified, are some types of practices more common for certain products within your company's offer or other that you would know of, for certain distribution channels (store types and formats) or for certain value chains?

Reasons for using TSCs

6. **Manufacturers, wholesalers:** How do you explain restricting sales of certain products to certain Member States?
7. **Manufacturers, wholesalers:** How do you explain differentiating sales conditions (in particular the price and the range of Stock Keeping Units, SKUs) of certain products in the different Member States you operate in?

8. **Manufacturers, wholesalers:** How do marketing strategies (including promotion campaigns, sales promotion, entering a new market, etc.) impact the extent to which TSCs are used in your product categories in your country? Do you have examples from other Member States?
9. **Manufacturers:** For the product categories in which TSCs are present, do you know of regulatory barriers such as national packaging or labelling requirements that would explain suppliers restricting sales of certain products to certain Member States or differentiating the products, their packaging or their sales conditions? Are there any product categories for which there are no such regulatory barriers?
10. **Manufacturers:** Which consumer-related factors (e.g. consumer preferences such as taste, packaging size or formula, consumer purchasing power or consumer behaviour such as sales channels used, interest in product information, interest in particular kinds of products such as bio) determine the offer of the products under scope of this study, including the price, the product attributes and the range of products in particular Member States? Please answer for each of the product categories separate, if relevant. How do these factors impact the way distribution is organised?
11. **Manufacturers, wholesalers:** How do these factors and related costs explain/justify restricting sales of certain products to certain Member States or differentiating their sales conditions?
12. **Manufacturers, wholesalers:** Are there other factors that would explain TSCs?

The impact of TSCs

13. **Manufacturers:** What impact on your overall business strategy would a situation in which you cannot apply TSCs or differentiate your offer across countries have?
14. **Manufacturers:** To what extent and how would you change:
    - Your distribution channels?
    - The range of products offered?
    - The composition of the products offered?
    - The prices of your products?
    - Any services that you offer to consumers?. Please specify the type of services that you would change. ?
    - your product development in terms of number of new products and the speed of their introduction, or other?
    - Any other possible changes?
15. **Manufacturers:** Would you be able to meet an increased demand for a particular product to be supplied from a particular location/distribution centre? For example, if customers from abroad would like to purchase their supplies from your country? If not, would you envisage getting products from elsewhere?
16. **Manufacturers:** To what extent would regulatory barriers such as national packaging or labelling requirements or recycling schemes still be a reason for differentiating the offer across Member States for each of the product categories you are active in?
17. **Manufacturers:** If you changed your current distribution systems and sold directly from a central location or any other single location to retailers in different Member States, would it:
    a. result in longer shipping distances for your products and hence higher environmental footprint (depending on the product category and the means of transport)? If yes, what would be the difference, e.g. in percentage terms? If yes, would there be ways to mitigate possible effects?

b. would it result in more or less waste being generated? If yes, what would be the difference, e.g. in percentage terms? If waste would increase, would there be ways to mitigate possible effects?

18. **Manufacturers:** Would there be any other positive or negative impacts on the environment/sustainability of the supply chain?

The role of digitalisation, in particular the multipurpose channels

19. **Manufacturers**: What impacts do e-commerce (domestic and cross-border) developments have on your distribution and sales strategies? For example, do you differentiate the sales channels used? Do you differentiate the products offered? Does e-commerce have impact on the prices of products you offer? Other impacts? Do you sell directly to consumers via an e-commerce platform? If not, have you tried to do so?
20. **Manufacturers**: To what extent are sales to customers outside the EU important to your business strategy? Have sales to customers outside the EU increased in the past five years? By how much approximately? By how much do you expect such sales to increase from 2020 to 2025? What proportion of total sales do you expect sales outside of the EU to account for?
21. **Manufacturers**: What is the past and future impact of globalisation (including e-commerce) on competition in your marketplace? Do you face or expect to face increased competition from sellers based outside the EU?
22. **Manufacturers**: What other impact(s) do you expect digitalisation to have on your business model, strategy and processes (e.g. use of big data, digitalisation of production, logistics, consolidation of the value chain, online wholesale platforms, etc.)?

Concluding questions

23. **All stakeholders:** Is there anything, within the scope of this study, that needs to be considered which we have not discussed yet?
24. **All stakeholders:** Is there any specific literature that you could recommend and that covers different aspects of the topic of this study?
25. **All stakeholders:** Are there any relevant documents and/or data you are willing to share with us? If so, please provide such documents and indicate whether they contain any confidential information.

Annex IV: Survey questionnaires

Questionnaire for retailers, wholesalers and manufacturers

Introduction

This survey is conducted for a study on behalf of the European Commission looking into Territorial Supply Constraints (TSCs) in the EU retail sector. TSCs are understood as barriers imposed by private operators (manufacturers or wholesalers) in the supply chain, which can affect retailers or wholesalers. They impede or limit the retailers' or wholesalers' ability to source goods in other EU countries than the one they are based in, and/or distribute (i.e. resell) them to other EU countries than the one they are based in. Retailers or wholesalers subject to TSCs are usually referred to a specific national subsidiary of the supplier. For example, they can be refused to be supplied from abroad or the products may be differentiated to make cross-border supplying impossible. A situation when a supplier agrees to sell products to a wholesaler or a retailer from abroad under condition that they collect the products themselves directly from the supplier, is not considered a TSC.

Based on the inception phase of this study, we have selected the following product categories for further analysis Please refer to these giving concrete examples when answering the questions below:

- Breakfast cereals
- Confectionary (chocolate bars & chocolate tablets)
- Dairy (yoghurts & milk)
- Soft drinks (cola carbonates & non-cola carbonates)
- Household care (washing detergents, washing-up liquids)
- Personal care (shampoos & soaps)

All information you provide will be treated with the utmost care and only presented in an aggregated and anonymised manner.

Preliminary questions

1) In your core business activity, is your company a manufacturer, a wholesaler or a retailer?*

( ) Manufacturer

( ) Wholesaler

( ) Retailer

2) In which country are you established?*

( ) Austria

( ) Belgium

( ) Bulgaria

( ) Croatia

( ) Republic of Cyprus

( ) Czechia

( ) Denmark

( ) Estonia

( ) Finland

( ) France

( ) Germany

( ) Greece

( ) Hungary

( ) Ireland

( ) Italy

( ) Latvia

( ) Lithuania

( ) Luxembourg

( ) Malta

( ) Netherlands

( ) Poland

( ) Portugal

( ) Romania

( ) Slovakia

( ) Slovenia

( ) Spain

( ) Sweden

3) In which other EU countries, other than your own country, does your company operate, i.e. to which other EU countries does your company (or your branch) sell products?

[ ] Austria

[ ] Belgium

[ ] Bulgaria

[ ] Croatia

[ ] Republic of Cyprus

[ ] Czechia

[ ] Denmark

[ ] Estonia

[ ] Finland

[ ] France

[ ] Germany

[ ] Greece

[ ] Hungary

[ ] Ireland

[ ] Italy

[ ] Latvia

[ ] Lithuania

[ ] Luxembourg

[ ] Malta

[ ] Netherlands

[ ] Poland

[ ] Portugal

[ ] Romania

[ ] Slovakia

[ ] Slovenia

[ ] Spain

[ ] Sweden

4) What is your level of representation?

( ) Head office (central response)

( ) Local office (national response)

4) What is the size of your enterprise?

Please refer to the EU-endorsed classification (https://ec.europa.eu/eurostat/web/structural-business-statistics/structural-business-statistics/sme)

( ) Micro enterprise (with less than 10 persons employed)

( ) Small enterprise (with 10-49 persons employed)

( ) Medium-sized enterprise (with 50-249 persons employed)

( ) Large enterprise (with 250 or more persons employed)

5) Please specify which products does your company sell?

[ ] Soft drinks

[ ] Dairy

[ ] Coffee

[ ] Tea

[ ] Confectionary

[ ] Breakfast cereals

[ ] Spread

[ ] Condiments and sauces

[ ] Rice and/or pasta

[ ] Canned, prepared and/or frozen food

[ ] Personal care products

[ ] Household care products

[ ] Others (please specify)

Comments:

6) For which of the following product categories does your company offer products under its own private label?

[ ] None

[ ] Soft drinks

[ ] Dairy

[ ] Coffee

[ ] Tea

[ ] Confectionary

[ ] Breakfast cereals

[ ] Spread

[ ] Condiments and sauces

[ ] Rice and/or pasta

[ ] Canned, prepared and/or frozen food

[ ] Personal care products

[ ] Household care products

[ ] Others (please specify)

Comments:

Prevalence of Territorial Supply Constraints

7) Where there any instances where you tried to source products in another EU country where you were refused based on your geographical location?*

( ) Yes

( ) No

( ) Don't know

8) From which EU countries have you tried to source products when you were refused based on your geographical location?

[ ] Austria

[ ] Belgium

[ ] Bulgaria

[ ] Croatia

[ ] Republic of Cyprus

[ ] Czechia

[ ] Denmark

[ ] Estonia

[ ] Finland

[ ] France

[ ] Germany

[ ] Greece

[ ] Hungary

[ ] Ireland

[ ] Italy

[ ] Latvia

[ ] Lithuania

[ ] Luxembourg

[ ] Malta

[ ] Netherlands

[ ] Poland

[ ] Portugal

[ ] Romania

[ ] Slovakia

[ ] Slovenia

[ ] Spain

[ ] Sweden

9) If your company supplies wholesalers and retailers in other countries that the one you are based in; do you differentiate your offer across countries?

*

( ) Yes

( ) No

( ) Don’t know

10) If your company differentiates products across different countries in which it operates, what are the reasons for this differentiation?

	Yes	No	Don't know
Consumer preferences (e.g. taste, packing size, formula, etc.)			
Consumer purchasing power			
Consumer behaviour (e.g. sales as sales channels used, interest in product information, interest in particular kinds of products such as bio)			

_____
_____

Product innovation _____
_____
_____

Product launch _____
_____
_____

Regulatory barriers _____
_____
_____

Logistics _____
_____
_____

11) What types of TSCs is your company facing? (multiple answers possible)

[ ] Refusals to supply certain products

[ ] Quantitative limitations (including supply quotas and others)

[ ] Restrictions to supply promotions/Restrictions on promotions of certain products (please provide examples)

[ ] Destination obligation (i.e. obligation to limit the supply to only a certain market/area)

[ ] Differentiation of products in terms of content

[ ] Differentiation of products in terms of packaging (e.g. national language labelling and/or refusal to put multi-language labels, packaging size)

[ ] Other types of differentiation of products (please specify)

[ ] Other types of TSCs (please specify)

Comments:

12) What TSCs does/did your company apply in the last 3 years?

Often Sometimes Rarely Never Don't know

Refusals to supply certain products _____
_____
_____
_____
_____

Quantitative limitations (including supply quotas and others)

_____
_____
_____
_____
_____

Restrictions to supply promotions/Restrictions on promotions of certain products (please provide examples) _____

_____
_____
_____
_____

Destination obligations_____

_____
_____
_____
_____

Differentiation of products in terms of content _____

_____
_____
_____
_____

Differentiation of products in terms of packaging (e.g. national language labelling and/or refusal to put multi-language labels, packaging size)

_____
_____
_____
_____
_____

Other types of differentiation of products (please specify)

_____
_____
_____
_____
_____

Other types of TSCs (please specify) _____

_____
_____
_____
_____

Comments:

13) For which of the following products does your company face TSCs? (multiple answers possible):

[ ] Soft drinks, (if so, please specify e.g. carbonated soft drinks, cola carbonates, non-cola carbonates and/or bottled water) (and if so, please specify which brands)

[ ] Dairy (if so, please specify e.g. yoghurts, soft cheese and/or milk) (and if so, please specify which brands)

[ ] Coffee, (if so, please specify e.g. fresh ground coffee and/or instant coffee) (and if so, please specify which brands)

[ ] Tea, (if so, please specify e.g. black tea, green tea, herbal infusion and/or fruit infusions) (and if so, please specify which brands)

[ ] Confectionary (if so, please specify e.g. chocolate bar and/or, chocolate tablets) (and if so, please specify which brands)

[ ] Breakfast cereals (if so, please specify which brands)

[ ] Spreads (if so, please specify e.g. chocolate spreads and/or jams) (and if so, please specify which brands)

[ ] Condiments and sauces, (if so, please specify e.g. ketchup, mayonnaise and/or tomato sauce) (and if so, please specify which brands)

[ ] Rice and/or pasta (if so, please specify which kinds and which brands)

[ ] Canned, prepared and/or frozen food (if so, please specify which kinds and which brands)

[ ] Personal care products (if so, please specify e.g. shampoos, soaps, toothpaste and/or shower gels) (and if so, please specify which brands)

[ ] Household care products (if so, please specify e.g. washing detergents, washing-up liquids and/or cleaning products (and if so, please specify which brands)

Comments:

14) For which of the following do TSCs exist in your country? (multiple answers possible):

[ ] Soft drinks, (if so, please specify e.g. carbonated soft drinks, cola carbonates, non-cola carbonates and/or bottled water) (and if so, please specify which brands)

[ ] Dairy (if so, please specify e.g. yoghurts, soft cheese and/or milk) (and if so, please specify which brands)

[ ] Coffee, (if so, please specify e.g. fresh ground coffee and/or instant coffee) (and if so, please specify which brands)

[ ] Tea, (if so, please specify e.g. black tea, green tea, herbal infusion and/or fruit infusions) (and if so, please specify which brands)

[ ] Confectionary (if so, please specify e.g. chocolate bar and/or, chocolate tablets) (and if so, please specify which brands)

[ ] Breakfast cereals (if so, please specify which brands)

[ ] Spreads (if so, please specify e.g. chocolate spreads and/or jams) (and if so, please specify which brands)

[ ] Condiments and sauces, (if so, please specify e.g. ketchup, mayonnaise and/or tomato sauce) (and if so, please specify which brands)

[ ] Rice and/or pasta (if so, please specify which kinds and which brands)

[ ] Canned, prepared and/or frozen food (if so, please specify which kinds and which brands)

[ ] Personal care products (if so, please specify e.g. shampoos, soaps, toothpaste and/or shower gels) (and if so, please specify which brands)

[ ] Household care products (if so, please specify e.g. washing detergents, washing-up liquids and/or cleaning products (and if so, please specify which brands)

Comments:

15) Do manufacturers impose TSCs on you, which you have to follow when selling to retailers?

( ) Yes

( ) No

( ) Don't know

16) According to your knowledge: was the manufacturer of the product or the wholesaler responsible for the TSCs for the following product categories?

	Manufacturer	Wholesaler	Another retailer	Don't know
Breakfast cereals				
Confectionary (chocolate bars & chocolate tablets)				
Dairy (yoghurts & milk)				
Household care (washing detergents, washing-up liquids)				

_____
_____

Personal care (shampoos & soaps) _____

_____
_____
_____

Soft drinks (cola carbonates & non-cola carbonates)

_____
_____
_____
_____

Others, please specify _____

_____
_____
_____

Comments:

Reasons for using Territorial Supply Constraints

17) Are TSCs used more often in relation to new products or other types of innovation for the following product categories?

Yes No Don't know

Breakfast cereals _____

_____
_____

Confectionary (chocolate bars & chocolate tablets)

_____
_____
_____

Dairy (yoghurts & milk)_____

_____
_____

Household care (washing detergents, washing-up liquids)

_____
_____
_____

Personal care (shampoos & soaps) _____

_____
_____

Soft drinks (cola carbonates & non-cola carbonates)

_____

_____
_____

Others, please specify _____
_____
_____

Comments:

18) Is the role of regulatory barriers such as national packaging or labelling requirements relevant in explaining suppliers restricting sales of certain products to certain Member States or differentiating their sales conditions for the following product categories?

Yes No Don't know

Breakfast cereals _____
_____
_____

Confectionary (chocolate bars & chocolate tablets)
_____
_____
_____

Dairy (yoghurts & milk)_____
_____
_____

Household care (washing detergents, washing-up liquids)
_____
_____
_____

Personal care (shampoos & soaps) _____
_____
_____

Soft drinks (cola carbonates & non-cola carbonates)
_____
_____
_____

Others, please specify _____
_____
_____

Comments:

19) Is the role of consumer-related factors (e.g. consumer preferences such as taste, packaging size or formula, consumer purchasing power or consumer behaviour) relevant in

explaining suppliers restricting sales of certain products to certain Member States or differentiating their sales conditions for the following product categories?

Yes No Don’t know

Breakfast cereals _____

_____

_____

Confectionary (chocolate bars & chocolate tablets)

_____

_____

_____

Dairy (yoghurts & milk)_____

_____

_____

Household care (washing detergents, washing-up liquids)

_____

_____

_____

Personal care (shampoos & soaps) _____

_____

_____

Soft drinks (cola carbonates & non-cola carbonates)

_____

_____

_____

Others, please specify _____

_____

_____

Comments:

20) Does your company differentiate products under its own brand (private label) across different countries in which it operates?

( ) Yes

( ) No

( ) Don't know

21) If your company differentiates products under its own brand (private label) across different countries in which it operates, what are the reasons for this differentiation?

Yes No Don't know

Consumer preferences (e.g. taste, packing size, formula, etc.)

_____
_____
_____

Consumer purchasing power _____

_____
_____

Consumer behaviour (e.g. sales as sales channels used, interest in product information, interest in particular kinds of products such as bio)

_____
_____
_____

Product innovation _____

_____
_____

Product launch _____

_____
_____

Regulatory barriers _____

_____
_____

Logistics _____

_____
_____

22) Which other possible reasons for applying TSCs could you think of?

_____

The impact of Territorial Supply Constraints

23) What is the impact of TSCs on consumers in your country?

Yes No Don't know

The prices of products subject to TSCs are higher than they would be without TSCs

_____
_____
_____

The products subject to TSCs are not available at retailers

_____
_____
_____

There is less product innovation in categories subject to TSCs:

_____
_____
_____

The products subject to TSCs are sold by fewer retailers than they would be without TSCs

_____
_____
_____

The composition of the products subject to TSCs that you sell in your country differs from that of the same products sold elsewhere in the EU.

_____
_____
_____

The packaging of the products subject to TSCs that you sell in your country differs from that of the same products sold elsewhere in the EU.

_____
_____
_____

Consumers in border regions cross the border to buy abroad products subject to TSCs in their home country _____

_____
_____

Consumers choose to buy on-line from abroad products subject to TSCs in their home country_____

_____
_____

24) What would be the impact of manufacturers not being able to apply TSCs? (multiple answers are possible)

Yes No Don't know

Retailers would benefit from a reduction in costs

_____
_____
_____

Retailers would pass on to customers any reduction in costs in cases where manufacturers would not be able to apply TSCs? _____

_____
_____

Retailers would source more from the countries from which they could not import previously because of TSCs _____

_____
_____

Parallel imports would develop in the products previously subjected to TSCs

_____
_____
_____

Retailers would change the range of their product offers

_____
_____
_____

The range of private label products in the retailers' offer would increase

_____
_____
_____

Retailers would start to export products to markets in which these products were previously subject to TSCs _____

_____
_____

25) If consumers are expected to benefit from the cost reduction, would the pass-through of the cost reduction to consumers be for each of the categories listed in the list below:

100% 75% to less than 100% 50% to less than 75% Less than 50% Don't know

Breakfast cereals _____

_____
_____
_____
_____

Confectionary (chocolate bars & chocolate tablets)

_____
_____
_____
_____
_____

Dairy (yoghurts & milk)_____

_____
_____
_____
_____

Household care (washing detergents, washing-up liquids)

_____
_____

_____
_____
_____

Personal care (shampoos, shower gels & soaps)

_____
_____
_____
_____
_____

Soft drinks (cola carbonates & non-cola carbonates)

_____
_____
_____
_____
_____

Others, please specify below _____

_____
_____
_____
_____

26) Following the elimination of TSCs would consumers in some Member States experience:

Yes No Don't know

Higher prices on products which were subject to TSCs in other countries

_____
_____
_____

A change in the composition of the products which were subject to TSCs in other countries

_____
_____
_____

A change in the packaging of the products which were subject to TSCs in other countries

_____
_____
_____

27) Would wholesalers start to:

Yes No Don't know

Export products previously subject to TSCs _____
_____
_____

Import products previously subject to TSCs _____
_____
_____

28) Would the elimination of TSCs have an impact on the product innovation strategies and objectives of manufacturers having previously imposed TSCs?

( ) It would increase the pace and intensity of the manufacturers' innovation activities

( ) It would have no impact

( ) It would decrease the pace and intensity of the manufacturers' innovation activities

( ) Don't know

29) Would regulations such as national packaging or labelling requirements or recycling schemes still result in persisting differentiated offers across Member States after the elimination of TSCs.

( ) Yes

( ) No

( ) Don't know

30) What would be the carbon footprint impact of the elimination of TSCs?

( ) It would decrease the total amount of greenhouse gas emissions

( ) No impact on the total amount of greenhouse gas emissions

( ) It would increase the total amount of greenhouse gas emissions

( ) Don't know

31) What would be the impact of the elimination of TSCs on waste in the retail sector?

( ) It would decrease the total amount of waste

( ) No impact on the total amount of waste

( ) It would increase the total amount of waste

( ) Don't know

32) What other environmental impact would an elimination of TSCs have? Please specify the impact and indicate whether it is likely to be:

( ) Positive impact on the environment

( ) Neutral

( ) Negative impact on the environment

( ) Don't know

Comments:

The role of digitalisation, in particular the multipurpose channels

33) Is the impact of TSCs on consumers likely to be reduced over the next five years with the growth in cross-border e-commerce?

The product price:

( ) Will be reduced

( ) Will be unchanged

( ) Will increase

( ) Don’t know

34) Is the impact of TSCs on consumers likely to be reduced over the next five years with the growth in cross-border e-commerce?

The product composition:

( ) Will become identical across in all EU markets

( ) Will continue to differ across EU markets

( ) Don’t know

35) Is the impact of TSCs on consumers likely to be reduced over the next five years with the growth in cross-border e-commerce?

The range of products available within a product category will

( ) Will become more similar across all EU markets

( ) Will continue to differ across EU markets

( ) Don’t know

36) Looking further ahead (10 to 15 years), is growth in cross-border e-commerce likely to fully erode the impact of TSCs on:

Yes No Don't know

Product price _____
_____
_____

Product composition _____
_____
_____

Concluding questions

37) Are there any other relevant issues that you would like to share?

_____

_____

_____

_____

38) Would you be interested to be involved in an in-depth interview on the impacts of TSCs with one of our colleagues at a later stage of the project?

( ) Yes

( ) No

39) Please leave us your contact details.

_____

_____

_____

_____

Questionnaire for national competition authorities

Name:
Organisation:
Country:
Brief description of your Unit:

Introduction

This survey is being conducted for a study on behalf of the European Commission looking into Territorial Supply Constraints (TSCs) in the EU retail sector. TSCs are understood as barriers imposed by private operators (manufacturers or wholesalers) in the supply chain, which can affect retailers or wholesalers. They impede or limit the retailers' or wholesalers' ability to source goods in other EU countries than the one they are based in, and/or distribute (i.e. resell) them to other EU countries than the one they are based in. Retailers or wholesalers subject to TSCs are usually referred to a specific national subsidiary of the supplier. For example, they can be refused to be supplied from abroad or the products may be differentiated to make cross-border supplying impossible. A situation when a supplier agrees to sell products to a wholesaler or a retailer from abroad under condition that they collect the products themselves directly from the supplier, is not considered a TSC.

Based on the inception phase of this study, we have selected the following product categories for further analysis Where relevant and where possible, please refer to these giving concrete examples when answering the questions below:

- Breakfast cereals;
- Confectionary (chocolate bars & chocolate tablets);
- Dairy (yoghurts & milk);
- Soft drinks (cola carbonates & non-cola carbonates);
- Household care (washing detergents, washing-up liquids); and
- Personal care (shampoos & soaps).

All information you provide will be treated with the utmost care and only presented in an aggregated and anonymised manner, to ensure confidentiality of both your replies and the data received from stakeholders forming the basis for this.

Prevalence of TSCs

1. **Prevalence of TSCs**
   Are you aware of any businesses in your country being faced with Territorial Supply Constraints? Have you received any official complaints or is your perception based on other kinds of evidence (e.g. anecdotal evidence)?

Ongoing investigations

2. Have you done any work concerning TSCs implemented by companies which are dominant in their respective markets (and hence can be subject to competition authorities' investigations for applying such practices)? For those cases which did not fall under the competition law, could you indicate the reason(s)?

3. **Competition law**
   If you are aware of or have considered cases concerning TSCs, what share of such cases fall under the remit of competition law? What are possible alternatives to address such cases (where competition law does not provide a solution)?

4. **Product category and TSCs**
   If you are aware of or have considered cases concerning TSCs, for which product category(ies) listed below would those cases be relevant?

   - Breakfast cereals;
   - Confectionary (chocolate bars & chocolate tablets);
   - Dairy (yoghurts & milk);
   - Soft drinks (cola carbonates & non-cola carbonates);
   - Household care (washing detergents, washing-up liquids); and
   - Personal care (shampoos & soaps).

5. **Types of TSCs**
From your experience, which types of TSCs exist and which ones are more prevalent (and why)? Consider, for example the following:

	Not prevalent at all	Low prevalence	Medium prevalence	High prevalence
Refusals to supply certain products;				
Quantitative limitations (including supply quotas and others);				
Restrictions to supply promotions/Restrictions on promotions of certain products;				
Destination obligations;				
Obligation of no reselling (to other wholesalers or retailers);				
Differentiation of products in terms of content/composition;				
Differentiation of products in terms of packaging (e.g. national language labelling and/or refusal to put multi-language labels, packaging size);				
Other types of differentiation of products (please specify);				
Other types of TSCs				

6. Types of TSCs (continued)
Which is the most important one (e.g. in terms of frequency or impact)? Are some of the types of TSCs used more widely by certain types of operators or for certain product categories?

7. **Type of manufacturers and TSCs**
In your experience, what type of manufacturers are more likely to engage in these kinds of practices? Think for example of:
- Multinational or domestic;
- Large manufacturers or small manufacturers;
- Producers of more homogeneous goods (e.g. only 1-2 product categories) or producers of heterogeneous goods (3 and more categories);

- Producers of simple products or producers of complex (multiple ingredients, highly processed) products; and
- Other patterns – please explain?

8. **TSCs in other Member States**
   To your knowledge, do other stakeholders in other countries face TSCs to the same extent as in your country?

9. **Prevalence of TSCs in the private label market**
   To your knowledge, are TSCs also present in Private Label (own brand) products? If yes, what are the characteristics of the retailers for which this is the case? In which product categories are Private Label TSCs present?

Reasons for using TSCs

10. **Reasons for TSCs**
    Are you aware of possible reasons for suppliers (wholesalers or manufacturers) to apply TSCs? What are the reasons typically mentioned by them?

11. **Competitive environment and TSCs**
    Have you carried out or are you aware of any analysis looking into links between competition in the market and the level of control that suppliers have over their products' distribution? Or between competition among retailers and the level of product prices and choice? To what extent can competition explain differences in prices – to isolate the possible impact of TSCs.

In your view, does more competition among suppliers lead to less/more TSCs? In other words, does part of the reasons that could explain TSCs lie in the fact that there are only a few suppliers, each with a strong market position which makes retailers/wholesalers dependent on them and their products?

On the other hand, would less competition among retailers/wholesalers lead to less/more TSCs? In other words, does part of the reasons that could explain TSCs lie in the fact that there are many suppliers, each with a weak market position which makes them dependent on them and their products?

What role does vertical integration of each of these players play? In other words, does part of the reasons that could explain TSCs lie in the fact that the large manufacturers are vertically integrated with certain retailers/wholesalers in big groups?

The impact of TSCs

12. **Economic impacts**
What are the economic impacts of TSCs that you are aware of in your country? Does the existence of TSCs impact the level of prices for consumers or the choice of products? What could be the economic impact of TSCs on retailers? What would be the impact of a possible ban of TSCs on retailers, suppliers and consumers?

13. **Other impacts**
    Are there any other (non-economic) impacts that are important to mention?

The role of digitalisation, in particular the multipurpose channels

14. **Digitalisation**
    What impact do current and future e-commerce (domestic and cross-border) developments have on the issue of TSCs? In particular, what is the impact of competition from online sellers from abroad?

Concluding questions

15. Is there anything, within the scope of this study, that needs to be considered which has not been discussed above?

16. Is there any specific literature that you could recommend and that covers different aspects of the topic of this study (in particular: analyses of consumer choice (product range) and price range carried out by national authorities, institutes, observatories or others)? Have you published any work on this topic yourself?

17. Are there any relevant documents and/or data you are willing to share with us? If so, please provide such documents and indicate whether they contain any confidential information.

Annex V: List of selected products for the mystery shopping exercise and price data collection

No.	Products sorted by name	Manufacturer	National / regional brands
1	Ajax All Purpose Cleaner 1000-1250ML	Colgate-Palmolive	All-purpose cleaning product, liquid 1l
2	Barilla Spaghetti No 5 500gr	Barilla	Spaghetti 500g
3	Bonduelle Corn 300-375gr	Bonduelle	Corn 300-375 gr can
4	Calgon Powder 500gr	Reckitt Benckiser	Dishwasher powder 500gr
5	Coca Cola Regular Can 330ml	Coca Cola European Partners (CCEP)	Cola (other than Coke and Pepsi) can 330ml
6	Colgate Toothpaste 75ml	Colgate-Palmolive	Unflavoured toothpaste 75ml
7	Dove soap 100gr	Unilever	Soap bar - basic, no particular scent 100g
8	Elseve shampoo 400ml	L'Oreal	Shampoo, normal hair, no conditioner / special scent added 400ml
9	Granini Orange juice 1L	Eckes-Granini Group	Smooth orange juice from frozen concentrate in glass bottle or carton, 1l
10	Head & shoulders shampoo 400ml	Procter and Gamble	
11	Heinz Ketchup 800-910gr	Kraft Heinz Company	Ketchup 800-910 gr
12	Kellogg's Cornflakes 500g	Kellog Company	Cornflakes (not sugar coated) 500g
13	Kit Kat 41,5 gr	Nestle	Small milk chocolate bar 40 to 50 g
14	Kleenex box 80 tissue	Kimberley-Clark	Box of 80-100 white tissues, not scented
15	Lavazza Crema Aroma Beans 1kg	Luigi Lavazza S.p.A	Pack of 1kg roasted coffee beans (no special origin)
16	Lipton Ice Tea Can 330ml	Unilever	Ice tea can 330 ml
17	Mars 40-51gr	Mars	
18	Milka Milk Chocolate 100gr	Mondelēz International, Inc	Milk chocolate 100g bar
19	Nescafe Gold 200gr	Nestle	Jar of instant coffee (no special flavours, types of coffee) 200gr
20	Nivea Cream 400ml	Beiersdorf Global AG	Hand cream - no special scent 400ml
21	Nutella 375g	Ferrero	Nut-based spread 350-450 g
22	Pepsi Regular Can 330ml	PepsiCo	
23	Red Bull Can 250ml	Red Bull Gmbh	Power drink no special flavour 250ml
24	Sensodyne 75ml	GlaxoSmithKline	
25	Toilet Duck 750ml	S. C. Johnson	Toilet cleaner (liquid) 750ml
26	Activia Strawberry Yogurt 120g	Danone	Small container of regular strawberry yogurt 120g
27	Philadelphia OriginalCreamCheese 180 g	Mondelēz International, Inc	Cream cheese (similar to Philadelphia) regular 175 to 200g
28	San Pelligrino Sparkling Water 1L	Sanpellegrino S.p.A.	Sparling water 1L (plastic or glass bottle)
29	Evian Natural Mineral Water 1L	Danone	Still water 1L (plastic or glass bottle)
30	Cheerios Multigrain 600g	Nestle	Cheerios equivalent - not multiflavoured, 600 boxes
31	Fairy dishwashing liquid 400-480ml	Procter and Gamble	Washing up liquid regular 400-500 ml container

Annex VI: Selection of shops for the mystery shopping exercise

Table 45: Mystery shopping locations in Lille – Tournai[148]

Supermarket	Country, city	Address	Details & cross border match
Lidl	*France, Lille*	*116 Boulevard Victor Hugo 106, 59000 Lille, France*	*Same as in Belgium*
Aldi	*France, Lille*	*10 Rue du Faubourg d'Arras, 59155 Faches-Thumesnil, France*	*Same as in Belgium*
Supermarche Match Lille	France, Lille	97 Rue Solférino, 59000 Lille, France	Delhaize: Delhaize Group owns Match markets
Spar	*France, Lille*	*60 Rue du Faubourg de Roubaix, 59800 Lille, France*	*Same as in Belgium*
Carrefour City	France, Lille	14 Place Sébastopol, 59800 Lille, France	Same as in Belgium
Lidl Tournai	Belgium, Tournai	Chaussée de Douai 140, 7500 Tournai	Same as in France
Aldi Tournai	*Belgium, Tournai*	*Rue de la Lys 18, 7500 Tournai*	*Same as in France*
Louis Delhaize Tournai	Belgium, Tournai	Avenue de Maire 100, 7500 Tournai	Match: Delhaize Group owns Match markets
Spar	Belgium, Tournai	Chaussée de Douai 354, 7500 Tournai	Same as in France
Carrefour Market	Belgium, Tournai	Rue de la Tête d'Or 22, 7500 Tournai	Same as in France

Source: elaboration of the contractor (2020)

Table 46: Mystery shopping locations in Salzburg – Freilassing

Supermarket	Country, city	Address	Details & cross border match
SPAR	Austria, Salzburg	Linzer G. 57, 5020 Salzburg, Austria	Edeka: Operated by SPAR as the German Edeka
Lidl	Austria, Salzburg	Robinigstraße 9, 5020 Salzburg, Austria	Same as in Germany
PENNY Markt	Austria, Salzburg	Neutorstraße 63, 5020 Salzburg, Austria	Same as in Germany
Hofer	Austria, Salzburg	Fürbergstraße 29, 5020 Salzburg, Austria	Aldi: Aldi owns the Hofer chain
NORMA	Austria, Salzburg	Breitenfelderstraße 26, 5020 Salzburg, Austria	Same as in Germany
Lidl, Freilassing	Germany, Freilassing	Reichenhaller Str. 84, 83395 Freilassing, Germany	Same as in Austria
Aldi Süd	Germany, Freilassing	Schillerstraße 2, 83395 Freilassing, Germany	Hofer: Aldi owns the Hofer chain
PENNY	Germany, Freilassing	Rupertusstraße 2, 83395 Freilassing, Germany	Same as in Austria
NORMA	Germany, Freilassing	Bahnhofstraße 3, 83395 Freilassing, Germany	Same as in Austria
EDEKA	Germany, Freilassing	Laufener Str. 56, 83395 Freilassing, Germany	SPAR: German owner of SPAR

Source: elaboration of the contractor (2020)

Table 47: Mystery shopping locations in Nagykanzsa – Cakovec

Supermarket	Country, city	Address	Details & cross border match
SPAR Supermarket	Croatia, Cakovec	Svetojelenska cesta 25, 40000, Čakovec, Croatia	Same as in Hungary
Lidl	Croatia, Cakovec	Športska ul. 7, 40000, Čakovec, Croatia	Same as in Hungary
Konzum	Croatia, Cakovec	Zagrebačka ul. 87, 40000, Čakovec, Croatia	Largest retailers in Croatia
Plodine	Croatia, Cakovec	Zagrebačka ul. 2, 40000, Čakovec, Croatia	Largest shop in Cakovec
Kaufland Čakovec	Croatia, Cakovec	Obrtnička ul. 1, 40000, Čakovec, Croatia	Lidl: part of the Schwarz Gruppe which also owns Lidl
SPAR szupermarket	Hungary, Nagykanzs	Nagykanizsa, Kalmár u. 3, 8800 Hungary	Same as in Croatia
Lidl	Hungary, Nagykanzs	Nagykanizsa, Balatoni utca 41, 8800 Hungary	Same as in Croatia

[148] Due to the Covid-19 crisis, price collection from the stores whose names are in italics and red was not possible.

INTERSPAR Hipermarket	Hungary, Nagykanzs	Nagykanizsa, Táborhely u. 4, 8800 Hungary	Operated by SPAR Hungary, only hypermarket in the area
Coop Szupermarket	Hungary, Nagykanzs	Nagykanizsa, Csengery út 2, 8800 Hungary	2nd largest retailer in Hungary
Tesco	Hungary, Nagykanzs	Nagykanizsa, Boszorkány u. 2, 8800 Hungary	Largest retailers in Hungary

Source: elaboration of the contractor (2020)

Annex VII: Mystery shopping protocol

Sections of this protocol
I. General information about the shop visit
II. Information about the shop
III. Product availability and price
IV. Other remarks about the shop visit

I. General information about the shop visit	
Border region and side of the border	
Date and time of the visit	
Duration of the visit (minutes)	☐ <15 ☐ 15-30 ☐ 30-45 ☐ >45

II. Information about the shop	
Name and address of the shop	
Kind of shop	☐ Supermarket ☐ Hypermarket ☐ Other (e.g. convenience store):
Characteristics of the shop (e.g. part of a chain, description, shop format)	

III. Prices and presentation of prices

Brand A product National / regional brand product	Manufacturer	Volume (volume converted to typical volume)	Price in EUR (price converted to EUR)	Original price in EUR *(if product is in promotion)*
Ajax All Purpose Cleaner 1000-1250ML	Colgate-Palmolive			
Alternative A brand product: [*insert name, product characteristics (weight, volume, number of units, etc.)*]				
National / regional brand product [*insert name, product characteristics (weight, volume, number of units, etc.)*]				
Own-label product: Alternative A brand product: [*insert name, product characteristics (weight, volume, number of units, etc.)]*				

Barilla Spaghetti No 5 500gr	Barilla			
Bonduelle Corn 300-375gr	Bonduelle			
Calgon Powder 500gr	Reckitt Benckiser			
Coca Cola Regular Can 330ml	Coca Cola European Partners (CCEP)			
Colgate Toothpaste 75ml	Colgate-Palmolive			
Dove soap 100gr	Unilever			
Elseve shampoo 400ml	L'Oreal			
Granini Orange juice 1L	Eckes-Granini Group			
Head & shoulders shampoo 400ml	Procter and Gamble			
Heinz Ketchup 800-910gr	Kraft Heinz Company			
Kellogg's Cornflakes 500g	Kellogg's Company			
Kit Kat 41,5 gr	Nestle			
Kleenex box 80 tissue	Kimberley-Clark			
Lavazza Crema Aroma Beans 1kg	Luigi Lavazza S.p.A			

Lipton Ice Tea Can 330ml	Unilever			
Mars 40-51gr	Mars			
Milka Milk Chocolate 100gr	Mondelēz International, Inc			
Nescafe Gold 200gr	Nestle			
Nivea Cream 400ml	Beiersdorf Global AG			
Nutella 375g	Ferrero			
Pepsi Regular Can 330ml	PepsiCo			
Red Bull Can 250ml	Red Bull Gmbh			
Sensodyne 75ml	GlaxoSmithKline			
Toilet Duck 750ml	S. C. Johnson			
Activia Strawberry Yogurt 120g	Danone			
Philadelphia Original Cream Cheese 180 g	Mondelēz International, Inc			
San Pelligrino Sparkling Water 1L	Sanpellegrino S.p.A.			
Evian Natural Mineral Water 1L	Danone			

Cheerios Multigrain 600g	Nestle			
Fairy dishwashing liquid 400-480ml	Procter and Gamble			

IV. Other remarks about the shop visit

Notes to the mystery shopper

1. If an A-brand product listed above is not available in the store of a retailer, an alternative but similar A-brand product can be substituted provided a) the price information for this alternative A-brand product is collected in the retailer's stores on both sides of the border and b) the product is produced by one of the major international companies producing food and groceries;
2. The selection of a national/regional brand product similar to the A-brand product is left at the discretion of the mystery shopper, but a) the price information for this national / regional brand product is collected in the retailer's stores on both sides of the border and b) the product is not produced by one of the major international companies producing food and groceries; and
3. The selection of an own-label product similar to the A- brand product is left at the discretion of the mystery shopper, but the price information for this own-label product is collected in the retailer's stores on both sides of the border.

Annex VIII: Econometric analysis (technical version)

Due to a lack of data, no publicly available literature has been found which thoroughly assesses differences in purchase prices paid by retailers and relates any observed differences to the existence of TSCs. There exists some literature on the extent to which more generally retailers pass on higher costs to consumers, mainly higher import costs following a depreciation of the domestic currency. In this regard, a 2014 report noted that a thorough review of the relevant literature shows that "*cost pass-through by a business differs depending on whether the cost change is idiosyncratic or industry-wide; that the extent of cost pass-through by a business depends on the responsiveness of the demand and supply conditions it faces; and that cost pass-through varies with the degree of competition between businesses up and down the supply chain*." OFT 2014). The same report also notes that "i*n summary, the available evidence reveals a wide range of pass-through rates or elasticities. Absolute industry-wide pass-through can be as low as 20% but can also reach well over 100%. Pass-through elasticities may fall close to zero but in some cases, they come close to one. However, there is not enough empirical evidence to tie these variations in pass-through to specific market features, as predicted by the theory described in the preceding chapters*" and conclude that they "are able to draw little by way of solid conclusions in this respect."

Moreover, only very few studies focus on differences in the level of retail prices (i.e. prices paid by consumers) of identical products across industrialised countries.

The most notable study focusing on retail prices in the EU is the 2014 ECB study by Reif and Rumler (op. cit.) which finds that, within the eurozone over the period 2008-2011, "for a small subset of homogenous products (…) price differences across the countries are by an order of magnitude larger than within (20% vs 3.5%). According the Reif and Rumler, about ¼ of the differences between the cross-country and within-country differences in retail prices can be explained by differences in "income levels, tax rates, consumption intensities, population densities and unemployment rates". The most important factor is differences in VAT rates which account for about 10% of the cross-country price differences. The authors do not refer to TSCs as a potential factor but caution that the empirical findings are subject to potential omitted variables effect, measurement error and unobserved heterogeneity across countries.

The econometric analysis investigates the impact of TSCs on consumer prices by using retail and purchase price data across various European Member States. Since the use of TSCs is non-public knowledge, the analysis must create an explanatory variable that indirectly quantifies the extent to which product categories are subject to TSCs across countries. To explore the robustness of the results, two different consumer price datasets are used in the analysis: product-level (Retailers' price data) and country-level data (Eurostat). Due to the uncertainty resulting from measuring TSCs indirectly, the analysis also uses two different methodologies to estimate the explanatory variable.

Product-level analysis (Retailers' price data)

Dependent variable

The dependent variable is constructed based on the product-level dataset described in Chapter 5.2.2. It consists of the retail prices of fast-moving consumer goods provided by Euromonitor. The econometric analysis draws on the cleaned version of the data that excludes own label products.

To identify price differences that are not driven by product characteristics, prices can only be compared between perfectly identical products. This means that the products must have the same brand, the same size, the same multi-pack, the same packaging and they must be sold in the same

outlet type. For this reason, the sample has been restricted to products, for which there is at least one perfect match in a different country.

The dependent variable has then been defined as the percentage difference between the price for product X in country A compared to the average price for product X across all EU Member States that are available in the final dataset. The sample includes 8 EU Member States.

Explanatory variable

Wholesale purchasing prices often vary for retailers across countries, which can give rise to arbitrage. However, TSCs prevent retailers from procuring products from other countries, in which they are sold at a lower price. This can mean that a retailer faces different prices when buying products for stores in two different countries even though they are bought from the same supplier. This cross-country price difference can be used as an indicator for the presence of TSCs: If purchase prices in Country A are more expensive compared to the same products from the same supplier in other countries, one can assume that Country A is affected by TSCs.

This reasoning has been used to create a variable based on product-specific purchase price data provided from one internationally operating retail chain[149]. This data contains information on the prices paid by retailers for the same product in different countries. It can therefore be used to determine:

d) whether the purchasing price for a product is particularly high in a country;

e) whether many products in this country particularly expensive; and

f) whether the number of expensive products differs from other countries.

In more technical terms, these questions can be expressed as:

d) Is Product X in Country A at least 50% more expensive compared to cheapest countries?[150]

e) What is the share of products in Country A that are at least 50% more expensive compared to other countries?

f) *By how much is the share of products in Country A that are at least 50% more expensive compared to other countries larger or smaller than the average share across all countries?*

The purchasing price data can be used to calculate questions a), b) and c). The result is a variable that measures the extent to which a particular country is affected by TSCs relative to all other countries. This proxy serves as explanatory variable in the regressions.

The data underlying these explanatory variables includes 829 price observations on 76 different products for 8 European Member States. The products belong to the categories 'Beauty and Personal Care', 'Beer', 'Canned Goods', 'Confectionery and Snacks', 'Dairy', 'Deep Frozen', 'Edible Grocery', 'Home Care', 'Hot Beverages', 'Non Alcoholic Drinks' and 'Spirits'.[151]

[149] Purchase price data has been collected from more than one retailer. However, this particular dataset is the most comprehensive one, as it contains more price observations, product categories and countries than all other sources. To ensure comparability across purchase prices, the explanatory variable for the product-level analysis is based on the information from one retailer only. However, the explanatory variable in the country-level analysis draws on all available sources of purchase price data. The different sources show a similar pattern of prices across countries.

[150] 50% has been set as a threshold to identify countries that are significantly more expensive compared to other countries.

[151] The product categories in the retailer's purchasing price data do not perfectly match the product categories in the Euromonitor retail price data. At this point, the assumption has been made that any country-specific findings on purchasing prices are independent of the specific product category.

Control variables

The econometric analysis draws on the explanatory variable derived above in order to explain cross-country differences in the Euromonitor retail price data (see Chapter 5 for a description of this data) with the variation in the relative presence of TSCs across countries. Regressing retail prices on the explanatory variable yields a positive coefficient (see Column 1 in Table 33), which suggests that prices are higher in countries that are subject to relatively more TSCs.

However, it is important to consider that retail prices are also influenced by several other variables. If these variables are also linked to the explanatory variable, results might be biased in regressions that do not control for these variables. For this reason, it is important to include any variable in the regressions that might be correlated with both, the dependent and the explanatory variable. For example, manufacturers point out that different market positions and differences in labour costs across countries can influence purchasing prices and retail prices (AIM, 2013; RBB Economics, 2013).

The control variables used in the analysis are based on the literature (see ECB (2015)). They include variables that control for the regional economy (e.g. GPD per capita, unemployment rate, labour costs), for the concentration of national owners (e.g. HHI of owners, number of large and small national owners, market share of the largest national owner, market size) and for the concentration of retailers in a market (e.g. HHI of retail chains, number of retail outlets, market share of largest national retailer, retailer's operating margin). Table 48 provides a list, description and the sources of the control variables employed in the econometric analysis:

Table 48: Source and description of control variables

Variable	Source	Description
GDP per capita	Eurostat (2017)	This is a measure of GDP per capita, measured in EUR.
Unemployment rate	Eurostat (2017)	This is a measure of the unemployment rate expressed in percentage.
Population	Eurostat (2017)	Population is expressed as an absolute value of the average population.
Labour cost	Eurostat (2017)	This is a measure of labour cost for LCI (compensation of employees plus taxes minus subsidies) for the sector 'Wholesale and retail trade; repair of motor vehicle and motorcycles'.
VAT	European Commission (2019); Bánociová and Ťahlová (2018); Avalara (2020)	This variable has been manually constructed. Food items have been assigned a reduced VAT, whereas non-food items have been assigned the standard VAT. The reduced VAT is the average of all the VATs that are applied to different kinds of food items.
HHI – national owners	Euromonitor (2017)	This variable has been created based on the sales volume of the different national owners per country.
Number of large national owners	Euromonitor (2017)	In addition to the retail prices, Euromonitor has provided a dataset on brands and national owners per product category and country. Based on the sales volume in this dataset, the number of national owners per product category, the overall market size and their market share have been calculated. National owners with a market share of at least 10% are defined as 'large', whereas national owners with less than 3% market share are defined as 'small'.
Number of small national owners (excl. others)	Euromonitor (2020)	
Market share of largest national owner	Euromonitor (2020)	
Market size	Euromonitor (2020)	
HHI – retail chains	Retail-Index (2018)	This variable has been created based on the sales volume of the different retail chains per country.
Number of retail chains	Retail-Index (2018)	Retail-Index[152] provides a table of 'Retailers' and 'Department stores and other retailers' on their website. The table also includes the turnover and the number of outlets. This information has been used to create measures for the number of outlets, retailers (retail chains) and their market share.
Number of retail outlets	Retail-Index (2018)	
Retailer's operating margin	Eurostat (2017)	The retailers' operating margin has been created by calculating 'Gross operating surplus' as a share of 'Turnover'.

Source: Elaboration of the contractor (2020)

Econometric specification

The analysis described in this section estimates the relationship between observed retail prices and purchase prices paid by retailers (as proxied by the variable TSC).

It is important to note that all the above variables (dependent, treatment and controls) are defined in relative terms. The data has been modified to measure the percentage difference between observations from each country and the average across all observed EU countries. By defining the variables in relative terms, price differences can be explained through cross-country differences in the independent variables. One unit refers to a one percent difference to the EU average. For

[152] Available at: www.retail-index.com

example, if the GDP per capita variable takes the value -15, it implies that the GDP per capita of this country is 15% lower than the EU average.[153]

Using percentages also allows one to combine price observations for different products that would otherwise have different magnitudes in terms of absolute price and absolute price differences. As a result, it is not necessary to control for the various products in the regressions.

The analysis draws on the methodology applied by ECB (2015). ECB (2015) analyse the determinants of cross-country grocery price differences in the EURO area. The study uses four types of explanatory variables:

a) Competition in the producer market;

b) Consumer attitudes;

c) Competition in the retail market; and

d) Other regional variables.

Like the data described above, ECB (2015) use a relative measure for the dependent and independent variables. However, they do not include a variable for the purchase price paid by retailers. The relative difference in purchase prices is a proxy for TSCs, as it identifies the cross-country price differences imposed by manufacturers.

The present study addresses this gap in the academic literature by relating the relative retail price of a particular product (SKU) i in country c (relative to the EU average retail price of that SKU) to the TSC measure in country c (relative to the EU average purchase price of that SKU). More precisely, the regression can be described as follows:

(3) $\Delta\, retail\ price_{i,c} = \alpha + \beta * \Delta\, TSC_{i,c} + \sum_{x=1}^{n} \gamma_x * \Delta\, regional\ variables_{c,x} + \sum_{v=1}^{n} \theta_v * \Delta\, brand\ owner\ market_{i,c,v} + \sum_{w=1}^{n} \pi_w * \Delta\, retail\ market_{c,w} + \varepsilon_{i,c}$

where:

- $\Delta retail\ price_{i,c}$ is the relative difference in the retail price for product i in country c (relative to its EU average[154]);
- $\Delta TSC_{i,c}$ is the relative difference in the measure of TSCs for product i in country c (relative to its EU average);
- $\Delta\, regional\ variables_{c,x}$ is a vector of variables controlling for the relative difference in regional socio-economic variables (e.g. GDP per capita, VAT[155], population, etc.) (relative to its EU average);
- $\Delta\, brand\ owner\ market_{i,c,v}$ is a vector of variables controlling for the relative competition in the brand owner[156] market (relative to its EU average)[157];

[153] The EU average does not refer to the average across all EU countries. Instead, it is measures across all countries, for which price information is available for a particular product. As a result, variables that are not product specific (e.g. population) can differ across products, as the relative measure of these variables depends on the countries in the sample.

[154] The EU average in the present analysis refers to the average of EU countries for which data are available for all variables in the final dataset.

[155] The VAT is product specific, as a reduced VAT has been assigned to all food items and the standard VAT has been assigned to all non-food items.

[156] The variables related to the national brand owner serves as a control variable for the competition in the producer market. An example for a national brand owner is Kellogg Co of Great Britain Ltd, which is the owner of various brands (e.g. Kellogg's Corn Flakes, Kellogg's Coco Pops, Kellogg's Special K, etc.). The structure of national brand owners can differ across countries.

[157] The regression on price level indices does not include variables on the brand owner market, as the available data from Euromonitor is specific to a few product categories only.

- $\Delta\ retail\ market_{c,w}$ is a vector of variables controlling for the relative competition in the food retail market (relative to its EU average); and
- $\varepsilon_{i,c}$ is the error term.

Due to the limited availability of data, the equation is estimated only cross-sectionally. It is important to note that the dependent, explanatory and control variables are expressed relative to the EU average. This means that a one unit refers to a 1% difference between the value of the variable in a country and the EU average.

Econometric results

Table 33 presents the output to the main regression specification when using product-level retail price data as dependent variable.

Column 1 presents the output for a parsimonious model that only includes the dependent and the treatment variable. The other regressions include different sets of control variables. Column 4 presents the output for the full regression specification and is the preferred model. For consistency and comparability, the samples are restricted to the same observations across all models.

The findings show that the coefficient on the explanatory variable is positive and statistically significant in all models. This suggests that a relatively higher presence of TSCs are associated with relatively higher retail prices. To be more specific, purchase prices that are 1% higher compared to the purchase prices for the EU average, are associated with retail prices that are 0.943% higher than the EU average (Column 4). The estimated effect is noticeably larger once the regression controls for retailer concentration.

From an economic perspective, a positive coefficient is not unexpected, as higher costs are passed on from the retailer to the customer. These findings are in line with the academic literature on industry-wide pass-through rates (OFT, 2014). However, it suggests that consumers are negatively impacted by suppliers using TSCs. By controlling for a wide range of variables, it has also been shown that this effect is not driven by other factors commonly mentioned by suppliers (e.g. labour cost and market position).

Comparing the adjusted R-squared in Column 4 to Column 5 also shows that the TSC variable explains a significant portion of the variation in the retail prices. This highlights the relative importance of the variable.

The estimated coefficients of the control variables are generally in line with economic theory and with the findings presented in ECB (2015).

Most of the variables controlling for regional socio-economic variation are significant, from a statistical perspective and in terms of their economic impact on the dependent variable. For example, higher GDP per capita, higher unemployment and a higher population (relative to the EU average) are generally associated with lower retail prices. For example, economies of scale can explain the negative coefficient for the population variable.[158]

The estimated coefficients for the national A-brand owner concentration and the retail concentration variables are less unambiguous. Some of them indicate that less concentration, which could be considered the same as more competition, is associated with lower retail price (e.g. the negative coefficient for the Retailer's operating margin and the HHI – national brand owners), while other variables indicate the opposite (e.g. the positive coefficient for the number of retail chains). However,

[158] The coefficients for these variables are not statistically significant in ECB (2015). For this reason, not too much importance is attributed to these coefficients.

many of these control variables are highly collinear. This means that part of the correlation is captured by other variables, which affects the coefficient and the level of statistical significance.

Furthermore, it should be noted that the findings cannot be interpreted as necessarily implying a causal relationship because it is not possible to control for unobserved determinants due to the cross-sectional structure of the data. For this reason, the results might be biased due to the omission of some variables. However, the range of control variables on socio-economic regional factors, national owner concentration and retail concentration are very exhaustive and in line with the academic literature.

Table 49: Regression results – product-level retail price data (8 countries)

		(1)	(2)	(3)	(4)	(5)
		Retail price	Retail price	Retail price	Retail price	Retail price
	TSC	0.269***	0.404***	1.015***	0.943***	
		(0.0444)	(0.117)	(0.293)	(0.311)	
Regional variables	GDP per capita		0.537	-2.109*	-2.004*	-1.780
			(0.397)	(1.209)	(1.184)	(1.246)
	Unemployment rate		0.133*	-0.756**	-0.855**	-0.779**
			(0.0735)	(0.352)	(0.349)	(0.366)
	Population		0.0174	-0.357**	-0.423**	-0.485***
			(0.0557)	(0.165)	(0.170)	(0.178)
	Labour cost - wholesale, trade, repair		-0.617	0.608	0.651	1.296
			(0.405)	(0.840)	(0.825)	(0.840)
	VAT		0.332**	-0.186	-0.248	0.240
			(0.136)	(0.276)	(0.288)	(0.252)
Retail concentration	HHI - retail chains			0.611	0.164	-0.388
				(0.588)	(0.609)	(0.613)
	Number of retail chains			1.854***	1.530**	0.330
				(0.679)	(0.678)	(0.580)
	Number of retail outlets			0.205*	0.276**	0.144
				(0.123)	(0.134)	(0.133)
	Retailer's operating margin			0.114	-0.233	-1.381***
				(0.532)	(0.548)	(0.417)
National owner	HHI - national brand owners				-0.0783	-0.150
					(0.108)	(0.111)
	Number of large national owners				0.110	0.113
					(0.0916)	(0.0966)
	Number of small national owners (excl. others)				-0.0295	-0.0627
					(0.0441)	(0.0450)
	Market size				-0.0826	-0.0365
					(0.0597)	(0.0609)
	Constant	-0.000166	-0.000188	0.000121	0.000130	-4.40e-05
		(1.861)	(1.758)	(1.687)	(1.640)	(1.729)
	Observations	88	88	88	88	88
	Adjusted R-squared	0.290	0.367	0.417	0.449	0.388

*Source: own elaboration of the contractor (2020), Standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1*

Country-level analysis (Eurostat)

Dependent variable

The above analysis is performed on product specific data collected by Euromonitor. As a result, the interpretation of the results is limited because the data is not representative. To identify the impact of TSCs on product categories more generally, broader price measures must be considered. The country-level analysis draws on country-wide price level indices (PLIs). These indices are indexed to the EU27 (EU27_2020 = 100) and, thus, provide information on the relative level across EU Member States. The price indices that make up the dependent variable are separate timeseries for:

a) Bread and cereal;

b) Other food;

c) Non-alcoholic beverages; and

d) Alcoholic beverages[159].

The data used in the analysis includes observations for 11 EU Member States.

Explanatory variable

The explanatory variable in the product-level analysis draws on the data provided by one retail chain only. To ensure that the findings are robust, another methodology has been used to measure TSCs for the country-level analysis. The two major differences in the approach are:

1. The variable draws on the purchasing price data provided by four internationally operating retail chains.
2. The variable is based on average prices rather than relying on a threshold to identify the share of expensive products.

To be more specific, the average purchasing price per country has been calculated for all products in each data source. The averages from the most comprehensive dataset have then been normalised so that the cheapest country takes the value 100. If the average price in a country is 25% higher than the lowest average price, it would take the value 125.

Each additional data source has then been added by linking one country that appears in both datasets. This means that the normalised average price for this country is the same in both datasets. All other prices are expressed relative to the linked country. As a result, some countries have multiple price points – one from each data source. The average across those observations yields the average price level per country based on all four data sources. Table 50 illustrates an example of these calculations.

Table 50: Exemplary calculation of explanatory variable (TSC)

	Country A	Country B	Country C
Data source A	Cheapest	25% higher than cheapest	40% higher than cheapest
	100	125	140
Data source B	---	Linked to Data source A	20% higher than cheapest
	---	125	150
Average price level	100	125	145

[159] Any product specific independent variables are matched to the corresponding price level index.

Like the explanatory variable in the product-level analysis, the average price level in each country is then expressed relative to the average across all countries. The result is the TSC variable that has been used for the country-level analysis.

Econometric specification

The econometric specification now takes the form[160]:

(4) $\Delta\, price\ level\ index_{p,c} = \alpha + \beta * \Delta\, TSC_c + \sum_{x=1}^{n} \gamma_x * \Delta\, regional\ variables_{c,x} + \sum_{w=1}^{n} \pi_w * \Delta\, retail\ market_{c,w} + \varepsilon_{p,c}$

where:

- $\Delta\, price\ level\ index_{p,c}$ is the relative difference in the price level index for product category p in country c (relative to its EU average).
- ΔTSC_c is the relative difference in the purchase price paid by retailers in country c (relative to its EU average);
- $\Delta\, regional\ variables_{c,x}$ is a vector of variables controlling for the relative difference in regional socio-economic variables (e.g. GDP per capita, VAT[161], population, etc.) (relative to its EU average);
- $\Delta\, retail\ market_{c,w}$ is a vector of variables controlling for the relative competition in the food retail market (relative to its EU average); and
- $\varepsilon_{i,c}$ is the error term.

The variables PLI, TSC and GDP per capita are log-transformed. The coefficients estimated in the regression represent a percentage change in the dependent variable in response to a one percent change in the TSC and the GDP variable.

Econometric results

Table 51 presents the output to the main regression specification when using country-specific price level indices as dependent variable.

The estimates for the treatment variable are consistently positive across the parsimonious model and the models including control variables. The coefficients are statistically significant in the parsimonious model (at the 5% level) and when controlling for retail concentration in addition to socio-economic regional variables (at the 10% level). The findings suggest that a 1% increase in the TSC variable (relative to the EU average), is associated with a 0.859% increase in the price level index (relative to the EU average). This highlights that TSCs affect consumers through a higher level of consumer prices.[162]

Some of the control variables display a coefficient different to the one in the product-level analysis (e.g. the coefficient for GDP per capita and the unemployment rate are positive). These differences

[160] This regression does not include any control variables for the brand owner concentration because the underlying data is not product specific.

[161] The VAT is product specific, as a reduced VAT has been assigned to all food items and the standard VAT has been assigned to all non-food items.

[162] These regressions provide evidence on the impact of TSCs in the 11 countries that are part of the sample. However, the results do necessarily apply to all EU Member States, as they do not seem to hold for a few other countries that are not part of the sample.

might arise from a different set of countries included in the sample or because the dependent variable captures prices for a different bundle of products. A positive coefficient for GDP per capita is in line with ECB (2015). However, these variables are not ascribed too much importance, as none of them are statistically significant in ECB (2015).

It should be noted that the regression findings are subject to similar caveats compared to the ones presented for the regressions on the product-level retail price data.

Overall, the results of the country-level analysis corroborate the findings in the product-level analysis. The exact coefficients cannot be compared because the dependent and explanatory variables are expressed differently. But the results in both analyses indicate that consumers face higher prices as a result from suppliers using TSCs. The fact that this finding emerges when using two different price datasets and two different measures for TSC highlights the robustness of the results. Furthermore, this relationship even holds when controlling for a wide range of other factors that could impact retail prices.

Table 51: Regression results – country-level price level index (PLI) data (11 countries)

		(1)	(2)	(3)	(4)
		Price level index (in logs)	Price level index (in logs)	Price level index (in logs)	Price level index (in logs)
	TSC (in logs)	0.507**	0.149	0.859*	
		(0.229)	(0.262)	(0.493)	
Regional variables	GDP per capita (in logs)		0.419***	0.300**	0.329**
			(0.123)	(0.143)	(0.147)
	Unemployment rate		0.249***	0.301***	0.317***
			(0.0404)	(0.0761)	(0.0778)
	Population		-0.0400*	-0.0565	-0.0590
			(0.0208)	(0.0796)	(0.0819)
	Labour cost - wholesale, trade, repair		-0.175	-0.243*	-0.0987
			(0.138)	(0.138)	(0.114)
	VAT		0.0688	0.0108	0.0494
			(0.0912)	(0.116)	(0.118)
Retail concentration	HHI - retail chains			0.368	0.180
				(0.225)	(0.203)
	Number of retail chains			0.369	0.0287
				(0.236)	(0.136)
	Number of retail outlets			-0.00628	0.0246
				(0.0424)	(0.0396)
	Retailer's operating margin			0.157	0.0653
				(0.163)	(0.159)
	Constant	-0.00924	-0.0691	-0.876	-0.484
		(0.0233)	(0.209)	(0.601)	(0.574)
	Observations	44	44	44	44
	Adjusted R-squared	0.083	0.663	0.697	0.679

Source: own elaboration of the contractor (2020)
Standard errors in parentheses
**** p<0.01, ** p<0.05, * p<0.1*

Publications Office
of the European Union